





Citizens Acting on Mitigation Pathways through Active Implementation of a Goal-setting Network

Final Technical Report Part B

Project Number: 101003815

Project Acronym: CAMPAIGNers

Project title: Citizens Acting on Mitigation Pathways

through Active Implementation of a Goal-

setting Network

Period covered: from 01.11.2022 to 30.04.2024

Version: 1.0

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1. Overview: WP, Deliverables, Milestones and Gantt

Table 1: Work packages in CAMPAIGNers

(incl. PM shifts as agreed between partners see chapter 2.3.1 Shift in Resources)

| WP# | WP title | Lead | РМ | Start | End |
|-----|---|--------|-------|-------|-------|
| 1 | Target Lifestyles and Scope of Policy | IUE | 52,5 | Ml | MIO |
| 1 | Action | IOE | 52,5 | IVII | IVIIO |
| 2 | Research and Engagement Tool | SBK | 85,5 | Ml | M26 |
| | Development | SDK | 65,5 | IVII | IVISO |
| 3 | Lifestyle Transformation Research Design | NTNU | 57,0 | Ml | M35 |
| 4 | Engaging Citizens with the Goal-Setting | ICLEI | 83,0 | м3 | M26* |
| 4 | Network | ICLEI | 03,0 | IVIO | IVISO |
| 5 | Continuous Data Analytics | FEEM | 60,0 | М5 | M36 |
| 6 | Modelling Mitigation Pathways under | E3M | 54,5 | м3 | M26* |
| | Lifestyle Transformation | ESIVI | 54,5 | IVIO | M36* |
| 7 | Multi-Level Policy Advice and EU Strategy | HEAS | 80,0 | М6 | M26 |
| _ ′ | Support | TILAS | 00,0 | | IVISO |
| 8 | Dissemination, Exploitation and | CANE | 55.0 | N 41 | M36 |
| | Communication | CAINE | 55,0 | Ml | IVISU |
| 9 | Project Management | EI-JKU | 36,0 | Ml | М36 |
| | | Total | 563,5 | | |

^{*}delayed compared to Grant Agreement

Table 2: Deliverables in CAMPAIGNers

Deliverables marked in green are due within reporting period (M19 – M36)

| WP | Del | Title | Lead | Subm | nission |
|-----|------|---------------------------------------|------|-----------------|----------------|
| WP | # | Title | Lead | Plan | Actual |
| | | Comprehensive mapping of | | 31 Dec 2021 | 29 Dec 2021 |
| | | individual behaviour to | | 17 Mar 2023 | 15 Mar 2023 |
| WP1 | D1.1 | anthropogenic GHG emissions | IUE | (rev. due date) | (receipt date) |
| | | | | 31 Dec 2021 | 29 Dec 2021 |
| | | Scope of actions to reduce GHG | | 17 Mar 2023 | 15 Mar 2023 |
| WP1 | D1.2 | intensity of daily life in Lighthouse | IUE | (rev. due date) | (receipt date) |

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| | | Cities | | | |
|-----|--|---|--------|---|---|
| WP1 | D1.3 | Report on Target lifestyles | HEAS | 28 Feb 2022 | 16 Mar 2022 |
| WP2 | D2.1 | The CO ₂ footprint model | LUT | 28 Feb 2022 | 10 Mar 2022 |
| WP2 | D2.2 | The impact of target behaviours on citizens' emissions | LUT | 31 Jan 2024 | 08 Apr 2024 |
| WP2 | D2.3 | The system specification of the CAMPAIGNers' app | SBK | 31 Dec 2021 | 16 Mar 2022 |
| WP2 | D2.4 | CAMPAIGNers' app software system | SBK | 31 May 2022 | 07 Nov 2022 |
| WP2 | VP2 D2.5 Administrator handbook and training materials | | | 30 Apr 2022 31 Oct 2023 (rev. due date) | 07 Nov 2022 28 Mar 2024 (receipt date) |
| | | | | 31 May 2022 | 07 Nov 2022 |
| | | | | 31 Oct 2023 | 27 Mar 2024 |
| WP2 | D2.6 | User guide for CAMPAIGNers app | SBK | (rev. due date) | (receipt date) |
| WP2 | D2.7 | Summary report on IT performance | SBK | 30 Apr 2024 | 30 Apr 2024 |
| WP3 | D3.1 | Multidisciplinary state-of-the-art in lifestyle transformation research | NUIG | 31 Mar 2022 | 05 Apr 2022 |
| WP3 | D3.2 | The initial set of #LifestyleChallenges - Confidential | NTNU | 30 Apr 2022 | 03 Aug 2022 |
| WP3 | D3.3 | The initial set of #LifestyleChallenges - Public | NTNU | 30 Apr 2023 | 25 Apr 2023 |
| WP3 | D3.4 | The ultima ratio of the goal-setting network | NTNU | 31 Mar 2024 | 08 Apr 2024 |
| WP4 | D4.1 | Plans to recruit citizens into the goal- setting network | Saints | 30 Apr 2022 | 04 Nov 2022 |
| WP4 | D4.2 | Plans to continuously engage citizens with the goal-setting network | Saints | 30 Apr 2022 | 04 Nov 2022 |
| WP4 | D4.3 | Report on participation and engagement with the goal-setting network | ICLEI | 29 Feb 2024 | 04 Apr 2024 |
| WP5 | D5.1 | Specifications of the CAMPAIGNers database | SBK | 28 Feb 2022 | 07 Sep 2022 |
| WP5 | D5.2 | Continuous data analytics protocols | EI-JKU | 30 Apr 2023 | 25 May 2023 |
| WP5 | D5.3 | Report on internal workshops and the process to define research questions | EI-JKU | 30 Apr 2024 | 30 Apr 2024 |
| WP5 | D5.4 | CAMPAIGNers Monitor and user guide | FEEM | 31 May 2022 17 Mar 2023 (rev. due date) | 13 Jul 2022 15 Mar 2023 (rev. due date) |

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| Report on the updated system WP6 D6.1 models in mobility and residential demand and their results WP6 D6.2 The impacts of lifestyle changes on climate change mitigation pathways WP7 D7.1 Policy files documentation Guidebook for incorporating lifestyle— WP7 D7.2 related pathways and actions into NDCs and long-term strategies Position paper: Statement from WP7 D7.3 CAMPAIGNers to the Conference of the Parties WP7 D7.4 Indicator report on lifestyle—related WP7 D7.4 Indicator report on lifestyle—related CANE 31 Oct 2023 29 Apr 202 | 24 24 33 | |
|--|----------------|--|
| demand and their results WP6 D6.2 The impacts of lifestyle changes on climate change mitigation pathways WP7 D7.1 Policy files documentation Guidebook for incorporating lifestyle-related E3M Guidebook for incorporating lifestyle-related Position paper: Statement from WP7 D7.3 CAMPAIGNers to the Conference of the Parties Indicator report on lifestyle-related | 24 24 33 | |
| WP6 D6.2 The impacts of lifestyle changes on climate change mitigation pathways WP7 D7.1 Policy files documentation Guidebook for incorporating lifestyle-related pathways and actions into NDCs and long-term strategies Position paper: Statement from WP7 D7.3 CAMPAIGNers to the Conference of the Parties Indicator report on lifestyle-related | 24 | |
| WP6 D6.2 climate change mitigation pathways WP7 D7.1 Policy files documentation Guidebook for incorporating lifestyle- related pathways and actions into NDCs and long-term strategies Position paper: Statement from WP7 D7.3 CAMPAIGNers to the Conference of the Parties Indicator report on lifestyle-related | 24 | |
| WP7 D7.1 Policy files documentation ICLEI 29 Feb 2024 09 Apr 2020 Guidebook for incorporating lifestyle- related pathways and actions into NDCs and long-term strategies Position paper: Statement from CAMPAIGNers to the Conference of the Parties Indicator report on lifestyle-related | 3 | |
| Guidebook for incorporating lifestyle- related pathways and actions into NDCs and long-term strategies Position paper: Statement from CAMPAIGNers to the Conference of the Parties Indicator report on lifestyle-related | 3 | |
| WP7 D7.2 related pathways and actions into NDCs and long-term strategies Position paper: Statement from CAMPAIGNers to the Conference of the Parties Indicator report on lifestyle-related | 3 | |
| NDCs and long-term strategies Position paper: Statement from WP7 D7.3 CAMPAIGNers to the Conference of the Parties Indicator report on lifestyle-related | 3 | |
| Position paper: Statement from WP7 D7.3 CAMPAIGNers to the Conference of the Parties Indicator report on lifestyle-related | | |
| WP7 D7.3 CAMPAIGNers to the Conference of the Parties CANE 31 Oct 2022 21 Nov 202 | | |
| the Parties Indicator report on lifestyle-related | | |
| Indicator report on lifestyle-related | 4 | |
| WP7 D74 Indicator report on lifestyle-related CANE 31 Oct 2023 29 Apr 203 | 4 | |
| TAIN TOTAL T | | |
| barriers and opportunities | 20 7.01 2024 | |
| Policy brief: Advice for a citizen- | | |
| WP7 D7.5 centred and climate-supportive HEAS 31 Mar 2022 15 Jun 202 | 2 | |
| utilisation of the COVID-19 Recovery | _ | |
| Fund | | |
| Addressing lifestyle transformation in | | |
| WP7 D7.6 climate related long-term policy HEAS 31 Mar 2024 30 Apr 202 | 4 | |
| strategies strategies | | |
| WP7 D7.7 Local policies, actors, and lifestyle ICLEI 31 Mar 2024 25 Apr 202 |) / | |
| transformation transformation | ,— | |
| WP7 D7.8 Summary report of policy maker HEAS 30 Apr 2024 30 Apr 202 |) /1 | |
| interactions interactions | .4 | |
| WP7 D7.9 Summary of the Workshop in the HEAS 31 Dec 2023 30 Apr 202 |) / | |
| European Parliament AFAS ST Dec 2023 30 Apr 20. | , 4 | |
| WP8 D8.1 Follower Cities Engagement and ECOLI 31 Mar 2024 22 Apr 202 | 1 | |
| WP8 D8.1 Networking Report SE 31 Mar 2024 22 Apr 202 | 4 | |
| 31 Oct 2021 12 Apr 202 | 2 | |
| WP8 D8.2 DEC Strategy & Operative Plan CANE 17 Mar 2023 16 Mar 202 | .3 | |
| (rev. due date) (rev. due da | e) | |
| WP8 D8.3 DEC Plan Update 1 CANE 31 Oct 2022 06 Jul 202 | 3 | |
| WP8 D8.4 DEC Plan Update 2 CANE 31 Oct 2023 14 Nov 202 | .3 | |
| WP8 D8.5 Website and social media accounts CANE 31 Aug 2021 25 Nov 20 | 21 | |
| WP8 D8.6 Fundraising Plan & Guidelines SBK 30 Apr 2024 30 Apr 202 | 4 | |
| WP8 D8.7 Press Releases CANE 30 Apr 2024 29 Apr 2024 | 4 | |
| WP8 D8.8 Visual Identity for Public Saints 31 Aug 2021 31 Aug 202 | | |

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| | | Communication | | | |
|-----|-------------------------|----------------------------------|---------------------------|-----------------|-----------------|
| | | | | 31 Jul 2021 | 30 Jul 2021 |
| WP9 | 9 D9.1 Project Handbook | | EI-JKU | 14 Feb 2024 | 09 Feb 2024 |
| | | | | (rev. due date) | (rev. due date) |
| WP9 | D9.2 | Data Management Plan | EI-JKU | 31 Oct 2021 | 13 Dec 2021 |
| WP9 | D9.3 | Consultations with National Data | EL 11/11 21 Maria 0000 10 | | 10 Apr 2022 |
| WP9 | D9.3 | Protection Agencies | EI-JKU | 31 Mar 2022 | 12 Apr 2022 |

Table 3: Milestones in CAMPAIGNers

Milestones marked in green are due within reporting period (M19 - M36)

| MS# | Milestone title | WP# | Lead | due | Verification | achie ved |
|-----|--|-----|------|-----|--|--------------|
| MS1 | Collection of the Lighthouse Cities' challenges and opportunities is completed | WP1 | HEAS | M10 | The Lighthouse Cities' challenges and opportunities regarding the carbon footprint of their citizens are analysed and listed. Achievement of the milestone is documented when the WP 1 leader informs about the availability of the respective information as input to WP 3 and submits the corresponding Deliverable D1.3. | Mll |
| MS2 | First 100 downloads of CAMPAIGNers app | WP2 | SBK | M13 | When the development of CAMPAIGNers app system is completed, the app will be made available for download from platform like Google Play, or Apple App Store. Milestone 2 is achieved, when the app is available on these platforms and the first 100 citizens downloaded and installed it. | M17 |
| MS3 | The initial set of #LifestyleChall enges is ready to go | WP3 | NTNU | M12 | The efforts of WP 1 and the first analysis in WP 3, 4 and 5 culminate in a list of #LifestyleChallanges to be sent to the participating citizens at the start of the goal-setting | M16 |

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| MS6 | The impacts of lifestyle changes on climate change mitigation pathways | WP6 | ЕЗМ | M32 | The Milestone is achieved, when the results of system models with enhanced representations of lifestyle changes with respect to future emissions, energy, economic and sustainability indicators become publicly available. This is demonstrated through the submission of Deliverable 6.2. The Milestone will be a major interdisciplinary | M36 |
|-----|--|-----|--------|-----|---|-----|
| MS5 | CAMPAIGNers Monitor goes online | WP5 | FEEM | M14 | CAMPAIGNers Monitor is an online resource for city administrators and the public to assess the growth of the goalsetting network and the engagement of the citizens with the #LifestyleChallanges. The Milestone is achieved, when the CAMPAIGNers Monitor goes online and is publicly available, which is demonstrated through submission of Deliverable 5.4. | M23 |
| MS4 | First 1000 registrations to the goal- setting network | WP4 | Saints | M15 | network. This Milestone is achieved, when the leaders of the involved WPs 3, 4, and 5 approve the list, which is included in Deliverable 3.2. After the software development in WP 2 is completed, and following the definition of the initial set of #LifestyleChallanges in WP 3, the recruiting of the citizens into the goal-setting is started. The Milestone is achieved, when the first 1000 citizens have signed up to the goal-setting network. | M18 |

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| | | | I | | | |
|-------|----------------|-------|--------|-------|-------------------------------------|-------|
| | | | | | scientific output of the project | |
| | | | | | and will form the basis of | |
| | | | | | academic publications. | |
| | | | | | This position paper will be | |
| | | | | | submitted to the UNFCCC as | |
| | | | | | CAMPAIGNers first input to the | |
| | Submission of | | | | Global Stocktake to point out | |
| MS7 | CAMPAIGNers | WP7 | CANE | M18 | current shortcomings in NDCs to | M31 |
| IVIO7 | position paper | VVI / | CANE | IVIIO | foster and take advantage of the | 10101 |
| | to the UNFCCC | | | | shift to low-carbon lifestyles. The | |
| | | | | | Milestone is achieved when the | |
| | | | | | Position Paper is officially | |
| | | | | | submitted to the UNFCCC. | |
| | | | | | CAMPAIGNers website will inform | |
| | CAMPAIGNers | | | | the public about the project and | |
| MS8 | website goes | WP8 | CANE | М6 | provides support to participating | MII |
| IVISO | online | VVFO | CAINE | IVIO | citizens. The Milestone is | IVIII |
| | Offilite | | | | achieved when the website goes | |
| | | | | | online and is publicly available. | |
| | | | | | Before the smartphone app is | |
| | | | | | rolled-out to citizens, the | |
| | | | | | consultations with National Data | |
| | | | | | Protection Agencies are carried | |
| | | | | | out and their recommendations | |
| | | | | | are implemented. This ensures | |
| | Conclusion of | | | | the highest possible level of data | |
| | the | | | | protection for the participating | |
| | consultation | | | | citizens and thereby increases | |
| MS9 | with National | WP9 | EI-JKU | M12 | the public acceptance of the | M12 |
| | Data | | | | app. The data protection | |
| | Protection | | | | agencies of at the non-EU | |
| | Agencies | | | | Lighthouse Cities in Turkey, South | |
| | | | | | Africa, Peru and Canada are | |
| | | | | | informed about the project and | |
| | | | | | its approach on data protection. | |
| | | | | | No consultations with the data | |
| | | | | | protection agencies of EU | |
| | | | | | countries are needed because of | |

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| | their obligations through the | |
|--|----------------------------------|--|
| | GDPR. D9.4 will inform about the | |
| | respective consultations. | |

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Table 4: GANTT Original Gantt

(without shifts of Deliverables)

| | | | | | | | | | | | | | | | | | | | _ | | | | | | | | | | | | |
|--|------------------|-------------|------|-------------|------|--------|----------|---------------|---------|----------|---------------|---------|---------------|-------|---------|----------|--------|--------|----------|---------------|--------|----------|---------|----------|----------|--------|----------|--------|---------------|---------------|---------------|
| | | w | | | | | | | | | | | | | | | | | Dura | tion | | | | | | | | | | | |
| | | /tas | 를 | | | SIII O | | | | | | | | | | | | | | | | | | | | | | Year 3 | | | |
| CLIMATE CAMPAIGNERS | - Pe | otal/ta | 8 | ő | ě | āš | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ង័ | H | ě | ž | 5 | 30 | | | | | | | 1 | | | | | | 1 | | | | | | Lan La | - 1 | Las | | Tarl | | Landar |
| WP 1: Target Lifestyles and Scope of Policy Actions | IUE | en 52.5 | 266 | 84 10.0 | 3.0 | 102,5 | 1 2 | 3 | 4 5 | 6 | 7 8 | 9 | 10 | 11 1: | 13 | 14 | 15 16 | 6 17 | 18 | 19 2 | 0 21 | 22 | 23 24 | 25 | 26 2 | 7 28 | 29 | 30 31 | 32 | 33 34 | 35 36 |
| WP 1: Target Lifestyles and Scope of Policy Actions Task 1.1 Assessment of current lifestyles and identif, of vulnerable groups | TUE | 11.0 | 9.0 | | 0.0 | 0.0 | | | | | DI | П | | | | | | _ | | | | | | | | | | | $\overline{}$ | $\overline{}$ | |
| Task 1.2 Opportunities to improve climate-harming lifestyles | TUE | 20.5 | 8,0 | 3,0 | 0,5 | 9,0 | | + | _ | + | Di | | + | - | + | + | + | + | + | \rightarrow | + | \vdash | + | + | \vdash | + | + | + | + | + | + |
| Task 1.3 Identification of target lifestyles and scope of policy action | HEAS | 21.0 | 5,0 | 5,0 | 2,5 | 8,5 | \vdash | $\overline{}$ | _ | + | - | | D1.3 | - | + | + | - | + | + | \rightarrow | + | \vdash | + | + | \vdash | + | + | + | ++ | + | + |
| WP 2: Research and Engagement Tool Development | SBK | 85.5 | | | 33.0 | 2.5 | | | | | | | Ditte | | | | | _ | | | | | | | | | | | | | |
| Task 2.1 Extending the CO2 footprint calculator | LUT | 24,0 | | | 1.0 | 0,0 | | | | | | | D2.1 | | | | | | | | | | | | | | | | I | 02.2 | |
| Task 2.2 System specifications | SBK | 13,0 | 7,0 | 1.0 | 4,0 | 1,0 | | | | + | D: | 2.3 | | | | | | | | | | | | | | | | | $\overline{}$ | | \vdash |
| Task 2.3 Development of the app software system | SBK | 23,0 | 9,0 | 0,0 | 14,0 | 0,0 | | $\overline{}$ | | + | - | | | | D2.4 | | \neg | \top | \vdash | \neg | \top | \vdash | \neg | \vdash | \vdash | \neg | \vdash | \neg | + | \top | \vdash |
| Task 2.4 Materials for training and user support | SBK | 13,5 | 6,0 | 1,0 | 5,0 | 1,5 | | \vdash | | \Box | | | | D2 | .5 D2.6 | | \neg | \top | \Box | \neg | \top | \vdash | \top | \top | \Box | \top | \vdash | \top | + | \top | \vdash |
| Task 2.5 Hosting, supervision, bug fixing and adding target behaviours | SBK | 12,0 | 3,0 | 0,0 | 9,0 | 0,0 | | \Box | \neg | \Box | | \top | | | | | | | | | | | | | | | | | | | D2. |
| WP3: Lifestyle Transformation Research Design | NTNU | 57,0 | 38,0 | 4,0 | 1,0 | 14,0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 3.1 Guidance from the cutting edge of behavioural science | NUIG | 15,0 | 13,0 | 2,0 | 0,0 | 0,0 | | | | | | | I | 03.1 | | | | | | | | | | | | | | | | | |
| Task 3.2 Designing and testing the first round of #LifestyleChallenges | NTNU | 18,0 | 9,0 | 2,0 | 0,0 | 7,0 | | | | | | | | D3 | .2 | | | | | | | | | | | | | | | | |
| Task 3.3 Continuous scientific input for the goal-setting network | NTNU | 24,0 | 16,0 | | 1,0 | 7,0 | | | | | | | | | | | | | | | | | D3. | 3 | | | | | | | D3.4 |
| WP4: Engaging Citizens with the Goal-Setting Network | ICLEI | 83,0 | 16,0 | 18,0 | 16,0 | 33,0 | | | | | | | | | | | | | | | | \equiv | | | | | | | | | |
| Task 4.1 Development of recruiting and engagement plans | Saints | 33,0 | 6,0 | 4,0 | 9,0 | 14,0 | I | | | | | | | D4 | .1 | | | | | | | | | | | | | | | | |
| Task 4.2 Implementation of the engagement and recruitment actions | ICLEI | 35,0 | 6,0 | 10,0 | 7,0 | 12,0 | | | | | | | | | | | | | | | | | | | | | | | | - | |
| Task 4.3 Continuous technical support for Lighthouse Cities | ICLEI | 15,0 | 4,0 | 4,0 | 0,0 | 7,0 | | \Box | \neg | \Box | | \top | \top | | | \Box | | | \Box | | | | | - | | | \Box | | | D4.3 | |
| WP5: Continuous Data Analytics | FEEM | 60,0 | 41,5 | 2,0 | 9,5 | 7,0 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Task 5.1 Data storage, transfer and query with GDPR compliance | SBK | 7,0 | 3,0 | 0,0 | 4,0 | 0,0 | | П | | | | | D5.1 | | | П | | Т | П | | | | | Т | | | П | | TT | \top | |
| Task 5.2 Data validation and statistical analysis protocols | EI-JKU | 18,0 | 16,0 | | 2,0 | 0,0 | | | | | | | | | | | | | | | | | D5. | 2 | | | | | | | |
| Task 5.3 Continuous research design and reporting of behavioral results | UCT | 22,0 | 13,0 | 2,0 | 0,0 | 7,0 | | | | | | | | | | | | | | | | | | | | | | | | | D5.3 |
| Task 5.4 CAMPAIGNers Monitor: An interactive dashboard of results | FEEM | 13,0 | 9,5 | | 3,5 | 0,0 | | | | | | | | | D5.4 | | | | | | | | | | | | | | | | |
| WP6: Modelling Mitigation Pathways under Lifestyle Transformation | E3M | 54,5 | _ | | 23,5 | -,- | | | | | | | | | | | | | | | | | | = | | | | | | | |
| Task 6.1 Gap analysis and modelling lifestyle changes | E3M | 14,0 | 6,0 | _ | 6,0 | 1,0 | \sqcup | | | | | | | | | | | | | | | | | | | | \perp | | \perp | \perp | $\perp \perp$ |
| Task 6.2 The impacts of lifestyle changes in mobility services | E3M | 13,0 | 7,0 | 0,0 | 6,0 | 0,0 | \vdash | \perp | \perp | \sqcup | \perp | \perp | \perp | _ | | | | | \perp | _ | | ш | | \perp | ш | D6.1 | | | \bot | \perp | \vdash |
| Task 6.3 The impacts of lifestyle changes in residential services and consumer goods | PIK | 13,0 | 9,0 | 0,0 | 4,0 | 0,0 | \perp | | | | | | | | | | | | | | | | | | | | | | \perp | | \perp |
| Task 6.4 Overall impacts of lifest. changes on climate mitigation pathways | E3M | 14,5 | 7,0 | 0,0 | 7,5 | 0,0 | | Ш | | \perp | | \perp | $\perp \perp$ | | | | | | | | | | | | | | | | D6.2 | \perp | $\perp \perp$ |
| WP7: Multi-Level Policy Advice and EU Strategy Support | HEAS | 80,0 | 28,3 | | 12,3 | | | - | - | | - | - | | | | | | _ | | | | | _ | _ | | | | _ | | | |
| Task 7.1 Continuous evaluation of knowledge gained - policies for each LC | HEAS | 29,0 | 6,0 | 5,0 | 3,0 | 15,0 | \vdash | + | + | + | + | + | + | | | | | | | - | | | | | | | \vdash | | | D7.1 | |
| Task 7.2 Operationalizing scientific support for lifestyles in NDCs | HEAS | 9,8 | 4,3 | 3,0 | 2,5 | 0,0 | \vdash | + | + | + | \rightarrow | + | | | | | | | | - | | | | | | | | | | D7.3 | 4— |
| Task 7.3 Tools for assessing the progress towards the Paris Agreement | CANE | 13,0 | 3,0 | 8,0 | 2,0 | 0,0 | \vdash | + | + | | | | | | | | | | D7.3 | - | | | | | | | 1 | D7.4 | | + | 77.6 |
| Task 7.4 The impact of lifest. transition for EU & non-EU GHG strategies | HEAS NUIG | 9,0 10.3 | 6,0 | 1,0 | 2,0 | 0,0 | \vdash | + | + | | | | I | 07.5 | | | | | | - | | | | | | | \vdash | | | + | D7.6 |
| Task 7.5 From global science to local action | NUIG HEAS | 9.0 | 2,5 | 2,0 | 0,8 | 0,0 | \vdash | + | + | + | + | + | + | + | + | \vdash | + | + | | - | | | | | | | \vdash | | D7.9 | + | D7.7 |
| Task 7.6 Policy maker interaction and workshop series WP8: Dissemination, Exploitation and Communication | CANE | 9,0 55,0 | 15.0 | 4,5 18.0 | 10.5 | 0,0 | | 4 | | | _ | | | | | | | | | | | | | | | | | | 07.9 | | D73 |
| Task 8.1 Activities with and for Follower Cities | ECOLISE | 20.0 | 6,0 | 9,0 | 0.5 | 4.5 | | | | | | | 1 | | | | | | | | | | | | | | 1 | | T | | DS.1 |
| Task 8.2 Set-up and update of the DEC Plan | CANE | 8.0 | 2,0 | 4,0 | 2.0 | 0.0 | \vdash | + | | D8.2 | | | | | | | | | DS 3 | | | | | | | | ١, | DS.4 | 7 | - | - |
| out of the opening of | CANE | | | | | | | | 08.5 | 2012 | | | | | | | | | 50.5 | | | | | | | | | | | | |
| Task 8.3 Multi-Channel Dissemination & Communication Activities | | 23,5 | 6,0 | 3,5 | 7,0 | 7,0 | | | 08.8 | | | | | | | | | | | | | | | | | | | | | | D8. |
| Task 8.4 Evaluation of Fundraising Options | SBK | 3,5 | 1,0 | 1,5 | 1,0 | 0,0 | | ш | | | | | | | | | | | | | | ш | | | | | | | | | D8.6 |
| WP9: Project Management | EI-JKU | 36,0 | | | 2,8 | 0,0 | | nc : | - | | | _ | , | | | | | | | | | | | | | | , | | | | |
| Task 9.1 Legal and Financial Management | EI-JKU | 8,0 14.5 | 8,0 | _ | 0,0 | 0,0 | | D9.1 | - | D9.2 | - | + | + | - | - | | - | - | | - | - | | - | | \vdash | _ | \vdash | | + | + | + |
| Task 9.2 Management of Project Execution | EI-JKU | | 14,0 | | 0,5 | 0,0 | | + | - | D9.2 | - | + | 1 | 20.2 | - | | - | - | | - | - | | - | | \vdash | - | + | - | + | + | \vdash |
| Task 9.3 Data Management Plan, Privacy and Ethical Issues | EI-JKU EI-JKU | 4,5 | 3,0 | 0,5 | 1,0 | 0,0 | | \vdash | _ | | - | - | I | 09.3 | | | | | | - | _ | | _ | | \vdash | _ | \vdash | | + | - | \vdash |
| Task 9.4 Management of networking activities with research initiatives | EI-JKU | 9,0 | 7,3 | 0,5 | 1,3 | 0,0 | | | | | | | | | | | | | | | | | | | | | | | | | |

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2. Explanation of the work carried out by the beneficiaries and Overview of the progress

The CAMPAIGNers project aims to make low-carbon lifestyles a major part of the solution to GHG mitigation and to revolutionise the way lifestyle transformation research is conducted and how it informs policies. The project started in May 2021. It is carried out by 30 institutions from 16 different countries that share a common goal – working together towards engaging and supporting citizens who want to join in and become #ClimateCampaigners

The central target of the project is to be the mechanism for citizen-driven change in a way that is fully immersed in behavioural research and integrated with local, national and EU level policy goals. This includes local and international policy research for climate friendly lifestyles as a base of the project work.

One core activity to accomplish this target was the elaboration of a phone app to set up a "goal-setting network" where over 100,000 citizens receive and create challenges to try out tailored adaptations to their daily routines via the app. In this final and 2nd reporting period, the app continued to be promoted intensively, including a second soft launch in July 2023. By the end of the project period, a total of number of over 6,000 active users (i.e. profiles created) out of 8,722 app downloads can be reported.

Chapter 2 of the report provides details of the project's objectives during the 2nd Reporting Period, and the respective expected outputs during the whole project duration, as well as the progress and results within the final 18 months.

2.1. CAMPAIGNers' Objectives

2.1.1. Objectives

The main aim of the 2nd Reporting Period was to further develop and strengthen the GSN and to develop and communicate recommendations and strategies for stakeholders and LCs to reduce GHG emissions by changing or adapting individual lifestyles which refers to the higher-order objectives **O#3** providing the best possible app user network (GSN) and attract Amplifier Cities as well. The output of these activities in the GSN is to serve **O#4** to provide the best possible data for assessing (modelling) the large-scale effects of lifestyle change. Another focus in the 2nd Reporting Period was the development of climate-related long-term policy strategies and recommendations by addressing lifestyle changes and are summarised under O#5. These recommendations were delivered at different governmental levels (local, national, and European levels) furthermore, the identification of possible pathways with regard to the NDCs were elaborated, thus including the output of **O#6 and O#7.**

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The objectives of CAMPAIGNers flow from the unsolved challenges as revealed in the existing lifestyle research:

O#1 Define target lifestyle and scope of action

Analyse the partner cities' short/long term challenges and assess their climate plans to include lifestyle changes in decarbonisation strategies. Define the conditions and auxiliary targets for the decarbonisation process and associated co-benefits. List the citizens' scope of target actions per city, accounting for current lifestyles, social, technical, spatial, infrastructure, governance and other barriers.

Output: Definition of city-specific target lifestyles, descriptive and quantitative (D1.3) and catalogue of achievable local and regional emission abatement knowledge gaps which can be addressed through the research activities of CAMPAIGNers (D1.2).

Progress: Objective #1 is linked with D1.1 and D1.2, and D1.3. All these three Deliverables were completed and submitted during the 1st Reporting Period (01.05.2021 – 31.10.2022).

- D1.1: Maps citizen characteristics to carbon emissions, highlighting regional differences and vulnerabilities as per UN definitions. It flags co-benefits and challenges for partner cities, identifying target actions considering current lifestyles and various barriers.
- D1.2: Lists policy levers from city experts to influence high-GHG lifestyles, helping meet
 Paris Agreement goals. It analyses challenges, climate plans, and conditions for decarbonization, including co-benefits.
- D1.3: Describes targeted carbon-neutral lifestyles for citizen clusters, discussing cobenefits and avoiding unintended consequences. It defines global and city-specific target lifestyles.

IUE (D1.1 and D1.2) and FEEM (D1.3) led the deliverables, which were submitted on time.

O#2 Derive replicable best-practices from relevant case studies

Define the framework conditions to make low-carbon lifestyles from intentional and 'model" communities **mainstream in cities**, **including replication at neighbourhood and district level.** CAMPAIGNers has excellent first-hand access to existing case studies including eco villages, transition towns, ... and car-free living communities through partners ECOLISE and ICLEI. This is in addition to the burgeoning literature in the behavioural science dealing with the adoption, and non-adoption, of climate efficient behaviours. We identify the most suitable cases to generate best practices in engaging citizens in climate-friendly lifestyles and assess effective upscaling strategies for existing success stories.

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Output: Catalogue of elements needed to mainstream community-level approaches for cities (D7.7) and catalogue of knowledge gaps from the perspective of intentional communities/community-led initiatives (D3.1).

Progress: The Objective #2 is linked with D3.1 and D7.1 and D7.7

Deliverable D3.1 Multidisciplinary state-of-the-art in lifestyle transformation research was completed, submitted and approved during the 1st Reporting Period (01.05.2021 – 31.10.2022)

The aim of Deliverables D7.1 Report on policy-related findings to support local authorities in fostering the adoption of climate-friendly lifestyles and D7.7 Local policies, actors, and lifestyle transformation was to provide generalized local policy options of how to foster the adoption of climate-friendly lifestyles, as well as to distil climate and behavioural science insights in relation to local actors. Deliverables 7.1 and 7.7 combined results from both Tasks 7.1 and 7.5. To elaborate on the Deliverables, we established a framework for regular dialogue with the local project partners (LCs). Following an initial meeting during the First General Assembly in Linz (May 2022) as detailed in the first periodic report, we conducted several online and in-person workshops. An online workshop took place in October 2022. It focused on public policies to promote household energy savings and the best practices for municipalities to encourage and assist citizens in reducing their energy consumption by adapting their lifestyles. Two physical workshops with LCs were organized during the second General Assembly held in Lahti in June 2023. One focused on urban mobility, while the other addressed dietary practices and the circular economy. Each workshop provided an opportunity to engage with the LCs and identify best practices based on their experiences and lessons learned from their public policies in various domains (both successes and failures). They also offered us the opportunity to discuss our analyses directly with the LCs and get their feedback. Moreover, a seminar co-organized with the Covenant of Mayors (CoM) in December 2023 also facilitated exchanges with local stakeholders and policy specialists on climate-related public policies. In addition, a series of three Focus Groups were conducted in November 2022 (online), in June 2023 (in person in Lahti) and in November 2023 (online) in order to support LCs and derive best practices for sustainable policies implementation at municipal level. All details regarding the organisation of these workshops and focus groups and their outcomes are compiled in report D7.1. All these activities were essential for refining recommendations to local stakeholders, detailed in D7.1 and D7.7.

O#3 Establish a lasting goal-setting network for experience-enhanced lifestyle change and consumer research

A smart phone app is developed. Its core functionality is sending citizens #CCchallenges, each addressing a specific knowledge gap and lifestyle targe defined by O#1 and O#2. The

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research approach aims at a twofold key objective: **1.** enable game-changing knowledge creation about decision-making processes of individuals in relation to specific climate-friendly lifestyles across a global test area and **2.** to kick-start a long-lasting goal-setting network where citizens from 13 countries are invited to co-create new climate-friendly lifestyles.

Output: a. A network of at least 100,000 citizens actively supporting our research through their participation in the goal-setting network, having the potential for becoming an EU-wide and global movement (WP4) and **b.** Multilevel data from experience-enhanced lifestyle-related decisions (Task 5.1), **c.** A ranking of lifestyle changes according to their feasibility from the citizens' perspective, i.e. defining "low hanging fruits", and estimating their impacts on reducing emissions and energy consumption (D2.2 and D3.4), **d.** Citizen feedback on local, regional and global supportive/hindering policies and infrastructures such as carbon taxes, SDGs, transit infrastructure or municipal/workplace incentives that influence personal climate-friendly lifestyle change (WP4), and **e.** To credibly identify the ability and willingness of citizens to change their lifestyle, and reduce environmental impacts; some #LifestyleChallenges will include randomized treatments, e.g. the provision of targeted information, to identify the most effective ways to incite lifestyle change.

Progress: The Objective #3 is linked with D3.4

LifestyleChallenges delivered to users of the CAMPAIGNers app can be categorized into six lifestyle domains: community action, consumer behaviour, diet, energy behaviour, transport, and waste management. Challenges in the "diet" domain had the highest average acceptance, as well as the highest average completion per Challenge (completion meaning that an accepted Challenge was successfully completed by the app user). This suggests significant interest in changing lifestyles in the area of diet/food, which can have a substantial impact on carbon emissions. Actions related to "waste management" had the lowest average acceptance per Challenge, suggesting lesser interest in this area. Challenges in the "community action" domain had the lowest average completion per Challenge, suggesting that taking action in this area is more difficult (see deliverable D3.4 for more details). These results are based on correlational data, as it was not feasible to implement randomized treatments. Nevertheless, in the analyses reported in D3.4, we carefully control for participants' background characteristics, including age, income, education, and consumer habits, which ensures that the observed differences between acceptability of and successful engagement in lifestyle changes are not driven by these individual differences. In terms of the raw number of accepted Challenges, over 27,000 Challenges were accepted and over 16,000 of them were successfully completed prior to

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¹ Ivanova, D., Barrett, J., Wiedenhofer, D., Macura, B., Callaghan, M., & Creutzig, F. (2020). Quantifying the potential for climate change mitigation of consumption options. Environmental Research Letters, 15, 093001.





15th January 2024, suggesting significant positive impacts achieved during the project runtime (more details can be found in D3.4).

Furthermore, Objective #3 is linked closely with Task 4.1, in which plans to recruit citizens into (Subtask 4.1.1) and then support their continuous engagement in (Subtask 4.1.2) the goal-setting network are developed; followed by Task 4.2, which implements the recruitment and engagement plans developed in Task 4.1. Subtasks 4.1.1 and 4.1.2 correspond to Deliverables 4.1 and 4.2, respectively, which were submitted on 4 November 2022. The outcomes of Tasks 4.2 and 4.3 are captured in Deliverable 4.3, which was timely submitted on April 4th 2024.

In particular, recruitment (and supportive engagement) strategies underlie the foreseen Objective #3 output of "[a] network of at least 100,000 citizens actively supporting our research through their participation in the goal-setting network, having the potential for becoming an EU-wide and global movement." The output corresponds to Milestone 4: First 1000 registrations to the goal-setting network (lead beneficiary: Saints), originally envisioned for M15 (i.e., 2 months after the original app launch date). The Milestone was achieved in M18, with over 1,430 active Climate Campaigners using the app at that time.

This upward trend has continued: as of April 2024, there were **6,010 active users** (i.e. profiles created), out of **8,722 app downloads**. While this falls far short of having 100,000 citizens using the app, by comparing the CC app's growth rate with one of our lead competitor's, Earth Hero's, figures show that the CC app is recruiting users significantly faster than Earth Hero this early after their release (Earth Hero, 2024). The CC app retention rate is also higher than the industry standard. These results suggest that the original target set out by CC to reach 100,000 citizens did not correlate with current industry trends. In this regard, the target was not set based on app download rates, but rather on general previous engagement in research activities. For example, to have met this high target, the CC app would have had to achieve a similar download rate to Tinder to hit 100,000 downloads (D4.3 provides more details).

Nevertheless, through supporting citizens' uptake of new challenges (and subsequent participation in short follow-up questionnaires), effective engagement strategies enable the anticipated output: "citizens' feedback on local, regional and global supportive/hindering policies and infrastructures such as carbon taxes, SDGs, transit infrastructure or municipal/workplace incentives that influence personal climate-friendly lifestyle changes coordinated measures across". Specifically, Deliverable 4.2 details the key measures to promote continuous engagement within the app through strategic design elements, the provision of information through app interventions including #CCchallenges,

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and direct user communication through the in-app community feature, a specially-built native social media platform with many features similar to Instagram. The design and implementation of these measures are done in close coordination between all Work Packages (particularly 2, 3, 4, 5, and 7) and build on the foundation established through Work Package 1 and insights from Deliverable 3.1.

Below is a quick summary of the results of the engagement measures implemented. A comprehensive overview can be found in Deliverable 4.3.

Overall user retention:

App deletions: Please note that this data is available for Apple devices only – 482 deletions out of 2600 downloads (18.5%). This is a good result considering that in 2023, the average uninstall rate of apps after 30 days was about 45%, i.e., just shy of half of users will have deleted most apps after a month of downloading it. This suggests that, even if users do not make regular use of the app, they are still somewhat interested in the initiative long-term.

Challenge engagement: About half of all users accept at least one challenge, but engagement declines over time, with only about 8.1% of users having done a challenge within the last 3 months. Still, there is a decided cohort that is very active in challenges, with 18.9% of users having accepted at least 20 challenges.

Native community feature use: overall low. The community features (the Instagram-like social feed and direct messaging) either need to be more visible, more incentivized, or the lack of use might be indicative of user preference for more anonymity.

Other app feature engagement:

Rewards: Results so far suggest this has been an effective means of driving engagement. For example, 149 T-Shirts have been claimed so far. To get enough coins to qualify for a T-Shirt, a user would have to do a bare minimum of 10 high-difficulty challenges (many more if the challenges are easier); and a lot of limited-offer local rewards sell out soon after they go live.

User-generated challenges: Since the app launch in September 2023, there were 90+ submissions in the beginning of 2024.

Direct citizen and stakeholder engagement in Lighthouse Cities:

Over the course of the project implementation, the cities reported 29 events they organized or had sessions/interventions with local or national audiences (even more

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with regional or European audiences).

Section 2.2.3 of Deliverable 4.3 adds further detail, by providing one specific example from each Lighthouse City that reflects a more substantive interaction between the city and at least one stakeholder group.

O#4 Assess the large-scale effects of lifestyle changes on the energy system, economy & climate

CAMPAIGNers will shed light on the consequences of lifestyle changes in the implementation of climate targets, the economy and the energy system and relevant SDGs in different time horizons up to 2030, 2050 and 2011 for the EU countries and globally. This objective requires a new and unprecedented approach for consistently incorporating lifestyles and behaviours into leading large system-level energy-economy and Integrated Assessment Models (e.g. PRIMES,...) building on data and information from O#1, O#2 and O#3. Hence, achievable lifestyle change pathways will be developed, and their emissions, energy and socio-economic impacts will be assessed using the enhanced state-of-the-art models to provide cutting-edge insights and feed into concrete policy recommendations for national and EU level NDCs and the Green Deal, and relevant policy measures for their implementation and influencing low-carbon lifestyle changes.

Output: Quantified impact of lifestyle and behavioural changes on the future development of the energy system, GHG emissions and economic indicators under different climate policy settings and different levels of adoption of lifestyle changes (D6.2) and assessment of the interlinkages of lifestyle changes with climate policies and their co-benefits for the SDCs (WP6).

Progress: The Objective #4 is linked with D6.1 and D6.2

The project has achieved the objective O#4 through the development of multiple tasks and activities. This objective is linked with two CAMPAIGNers deliverables, which were both finalised and submitted on time:

- D6.1: Report on the updated system models in mobility and residential demand and their results. This report incorporates the results of Tasks 6.1 - 6.3 and includes an explanation of how the models are improved through empirical data and social science insights, scenario results, and an interpretation of the results. Additionally, the gap analysis internal report is included as an appendix.
- D6.2: The impacts of lifestyle changes on climate change mitigation pathways.
 Deliverable 6.2 is the outcome of Task 6.4 and includes the results of system models with enhanced representations of lifestyle changes with respect to future emissions, energy, economic and sustainability indicators. Crucially, the quantified Impacts rely

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on the empirically-verified, observed changes in lifestyles that are realizable under the goal-setting network. This deliverable comes out in M32 to allow WP7 to include its results in subsequent policy analyses.

The research work has first focused on the development of the gap analysis, based on a thorough and structured literature review aiming to identify the main weaknesses in the representation of lifestyle changes in energy system and Integrated Assessment Models (published in a scientific journal, Andreou et al 2022). Through the detailed gap analysis, the key lifestyle changes that should be considered in the modelling tools have been specified (focusing on the transport and residential services sector). This analysis directly informs the prioritisation of lifestyle changes to be included in the modelling tools available (PRIMES, REMIND, PRIMESBuildings, EDGE, PROMETHEUS, GEM-E3) and the selection of lifestyle challenges to be explored through the CAMPAIGNers app. In addition, we focused on the modelling advancements to improve the representation of lifestyle changes in the system models with a particular focus on private transport and residential energy end-uses (as part of tasks 6.2 and 6.3). The new enhanced modelling versions – with their methodological enhancements and integrating new data sources- are then used to assess the emissions, energy system, and economic impacts of lifestyle changes in the context of NDCs and lowcarbon transition pathways towards Paris Agreement goals with a specific focus on the EU's pathways towards climate neutrality. Continuous interactions, workshops, and dialogue with other WPs have been established, e.g., to ensure that the data analytics from WP5 provide relevant info for the WP6 systemwide models or that the most relevant lifestyle changes for the WP6 models are prioritised in WP3 lifestyle challenges. We have published an article in a peer-review journal (Andreou et al, 2022), we have developed and shared with a consortium an internal working document on WP6 research, we have finalised two deliverables (as explained above D6.1 and D6.2) and we have presented our work in the European Climate and Energy Modelling Platform conference in 2021, 2022 and 2023, while two relevant manuscripts are currently under review in scientific journals.

O#5 Supporting cities to accelerate the shift towards low-carbon lifestyles

The project has a continuous workflow together with its partner cities, from identifying short and long-term challenges, to jointly developing #CCchallenges for gaining deeper insights into their citizens' needs and expectations, to deriving targeted policy measures for immediate and/or long-term adoption. The objective is to trigger a continuous process rather than a one-time intervention, where lifestyles are regularly assessed and city-level supporting measures for improvement are updated and implemented.

Output: a. Co-creation processes with Lighthouse Cities to support climate-friendly lifestyles (in Task 7.1), and **b.** Catalogue of limitations for regional policy measures and

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documented call for actions to higher levels of policy making (e.g. a carbon tax needs national or EU-level legislation) (in D7.6).

Progress: The Objective #5 is linked with D71., D7.6 and D7.7

Objective #5 was associated with Deliverable 7.6 addressing lifestyle transformation in climate related long-term policy strategies (from Task 7.4) and Deliverables D7.1 and D7.7 (from Tasks 7.1 and 7.5). These deliverables 7.1, 7.6 and 7.7 were scheduled for submission at the project's end and were respectively submitted in M36. These Deliverables compile all the policy recommendations at various levels of governance (local, national, and European). Elaborating policy recommendations for European and national policymakers was essential for them to design a framework allowing municipalities to best implement policies in favour of sustainable lifestyles. The recommendations were elaborated also thanks to the interaction with policy stakeholders through various workshops organized throughout the project duration. This allowed to maintain constant engagement and dialogue with relevant policymakers. The purpose of these workshops and focus groups was twofold: to exchange with policymakers on the best initiatives taken at all levels to promote the adoption of sustainable lifestyles and to identify the obstacles encountered by decision-makers. The aim was also to submit our recommendations gradually throughout the project timeline to refine them based on their feedback. All interactions with policymakers are detailed in Deliverables 7.8 (Summary report of policy maker interactions) and 7.9 (Summary of the Workshop in the European Parliament). All this effort helped to support cities in accelerating the transition towards low-carbon lifestyles by offering a set of targeted policy measures for immediate and/or long-term adoption. These policy recommendations are detailed in Deliverables 7.1, 7.6 and 7.7.

O#6 Support the EU's long-term strategy for GHG reductions at multiple level

CAMPAIGNers will interact continuously with political decision makers (local, national and EU levels) on the research activities. Feedback on the project and critical research areas will be used to formulate policy-ready recommendations for actions within related domains. Using leading modelling tools, the project will directly inform the EU's long-term strategy for climate neutrality by assessing the role, potential and synergies of achievable lifestyle changes with systemic decarbonisation. Interacting with political decision makers will come in the form of interviews, written communication and tailor-made workshops. These activities will culminate in a workshop at the European Parliament (First Vice-President of European Parliament, Mairead McGuiness, has accepted to take the patronage to ensure the needed attention of EU policy makers (see formal letters of commitment from her and of 9 other MEPs).

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Output: Catalogue of policy-ready recommendations for different levels of regulations and decision making, partly country-specific (D7.6, D7.7) and documentation of interactions/workshops (D7.8).

Progress: The Objective #6 is linked with D7.1, D7.5, D7.6 and D7.7

Objective #6 was primarily associated with Deliverables D7.1, D7.5, D7.6, and D7.7, which are the main documents compiling all recommendations to policymakers at local, national, and European levels of decision. Deliverable 7.5 Policy brief: Advice for a citizen-centred and climate-supportive utilisation of the COVID-19 Recovery Fund was submitted in June 2022, as described in the first periodic report. D7.1, D7.6 and D7.7 constitute reports containing the final recommendations made to policymakers to encourage, support, and accelerate the transition towards sustainable lifestyles among European citizens. These recommendations were developed in direct collaboration with the LCs throughout the project. In June 2023, a conference organized by the partners of WP7 took place in Bonn on the sidelines of the preparatory discussions for COP28. This conference allowed us to exchange with representatives of European and international negotiators, present our research to them, and receive their feedback. The final set of key recommendations directed towards European decision-makers was presented to a group of MEPs during a workshop held at the European Parliament in February 2024. The exchanges during this publicly open workshop, attended by representatives from the Commission and various stakeholders, allowed us to refine our recommendations, as they appear in D7.6. Deliverable D7.8 provides a comprehensive overview of all interactions with policymakers at local and national levels, while D7.9 outlines the proceedings and outcomes of the workshop held at the European Parliament.

O#7 Accelerate progress towards the Paris Agreement by transforming NDCs and their monitoring

Policy experts with decades long experience of advising high-level policy makers will transform the project's scientific outputs into policy-ready information packages. Together with Ministries and Governmental Departments directly involved in the preparation of their countries' NDCs, the generated knowledge will be exploited to inform the next round of NDCs. Experts involved in the informal monitoring of progress towards the Paris Agreement since the start of its implementation will elaborate indicators for measuring countries' framework conditions for climate-friendly lifestyles. Together with quantitative pathways regarding how countries' emission will develop under currently lifestyle-related policies, significant input will be provided to the UNFCCC Global Stocktake 2023.

Output: a. Guidance on how to exploit elaborated scientific results for preparing targeted NDSc (D7.2) and **b.** accumulated knowledge on how to measure lifestyle-related

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decarbonisation is transformed into an indicator report and a Position Paper for the Paris Agreement's Conference of the Parties (D7.3).

Progress: The Objective #7 is linked with D7.2 and D7.3

Objective #7 was associated with D7.2 Guidebook for incorporating lifestyle-related pathways and actions into NDCs and long-term strategies and D7.3 Position paper: Statement from CAMPAIGNers to the Conference of the Parties. D7.2 has been submitted in M36. The work plan for the D7.2 was outlined in the first periodic report. The preliminary results of D7.2 were discussed with national policymakers in an ad-hoc Campaigners workshop in Bonn on the sidelines of the UNFCCC preparatory meeting for the COP28 in June 2023. Moreover, an online Campaigners side-event to the COP28 was organised in December 2023 which allowed us to exchange with representatives of European and international negotiators, present our research to them, and receive their feedback. This event is described in D7.8, which details the interactions with policymakers. D7.3 was originally due in October 2022 but could not be published on time due to health issues faced by the lead expert involved. It was therefore decided to postpone the submission of this Deliverable to coincide with COP28, which took place in December 2023 in Dubai. D7.3 was thus submitted in October 2023, prior to COP28.

2.2. Main work carried out in the reporting period

In the final 18 months (01/11/2022 - 30/04/2024), the project has focused on the following 4 main activities which will be described in the following subsections:

- 1. Activities to recruit citizens for the goal-setting network (GSN) incl. the second soft launch (WP4)
- 2. CC app development new functionalities, performance enhancement and CAMPAIGNers Monitor (dash board) elaboration (WP2 + WP5)
- 3. Development of modelling results and new mitigation pathways for the EU and globally integration lifestyle changes (WP6)
- 4. Policy recommendations and target group specific dissemination (WP7)

Below the activities and progress in these four main areas of the project during the final reporting period are explained.

2.2.1. Activities to recruit citizens for the goal-setting network (GSN) incl. the second soft launch

The main activities in WP4 revolved around the development and implementation of plans to recruit and engage with citizens with the goal-setting network, through which CAMPAIGNers supports them to adopt more climate-friendly lifestyles.

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Recruitment and engagement plans are captured in Deliverables 4.1 and 4.2, which elaborate on **key outputs** including:

- Integrated global campaign, including communications strategy and brand development
- Citizen-oriented social media
- CAMPAIGNers Project Website & (citizen-oriented) Action page
- Rewards concept and status of planned rewards from each Lighthouse City
- Local campaign materials specially tailored for each Lighthouse City:
 - o 2 Press Kits (copy text and branded images) for 1st and 2nd launches
 - o PR-stunt package (e.g. sidewalk chalk and stencils)
 - o Out of Home (e.g., billboards, posters for city lamps, digital screens)
 - Online content (e.g., local Action Page, city website banner, city newsletter graphics, 2 short app & 1 challenge explainer video clips)
 - o Print materials (e.g. Infoflyers, indoor posters)
 - Event materials (e.g., roll-ups)
 - Social Media app launch package & guidelines, and an influencer email outreach template
 - o Reward implementation template and Rewards Primer editable template
- Online tailor-made advertising campaign

A key campaign within WP4 activities was the Second Soft Launch of the Climate Campaigners App. The campaign took place the week of July 17th 2023, and was carried out by Lighthouse Cities with the objective of boosting downloads and app activity through a heavy focus on the challenges promoted through the app. The campaign was co-designed with Lighthouse Cities and resulted in the development of a Communications kit for each city to tailor to their needs. As a result of the campaign, the number of registrants increased by several hundreds; by the end of the campaign 3,898 people had registered profiles. The number of completed challenges and challenges in progress also increased following the campaign.

Combined with the above products and guidance, the WP4 team provided continuous technical support to cities, and coordinated closely with other work packages to schedule and design sessions to support their capacity. Detailed information around the support, including the materials and processes carried out, are summarised in D4.3, specifically in

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section: "CAMPAIGNers recruitment & engagement strategy reflection & sensemaking process".

D4.3 also provides valuable analysis and benchmarking data for future Climate Campaigners communication managers and for other initiatives involving large-scale communications campaigns to promote more sustainable lifestyles, particularly through digital tools.

Related deliverables: D4.3 - refer also to D4.1 and D4.2 if needed

2.2.2. CC app development – new functionalities, performance enhancement and CAMPAIGNers Monitor (dash board) elaboration

During the final Reporting Period, the key output of WP2, D2.5 "CAMPAIGNers' app software system," showcases the complete frontend and backend of the Climate Campaigners app. With adjustments made to the backend based on new features and required improvements, the system leverages Strapi, a content management system, to create new challenges, define the footprint calculator, and ensure multilingual content, now including Norwegian.

A significant development in this period is the CAMPAIGNers Monitor – dash board, launched in cooperation with WP5. This feature allows users to download predefined and custom graphs, enhancing data accessibility. Additionally, public APIs have been improved to include more critical data, and a new API for weekly challenge assignments has been introduced, ensuring comprehensive data sharing.

The administrator handbook (D2.5) details using Strapi, user roles, and challenge setup. The user guide for the CAMPAIGNers app (D2.6) has been updated with specific instructions on installation, account creation, and app usage, ensuring a seamless user experience.

Continuous improvements have been made to address bugs and enhance functionality. Deliverable 2.7 reflects this commitment, highlighting key improvements like the dashboard monitor and weekly challenge assignments that drive user engagement. User-generated challenges have also been introduced, fostering a more interactive platform and to engage users to create their own challenges and as well to present more local challenges.

These enhancements and our ongoing efforts to refine the app underscore our dedication to providing a comprehensive, user-friendly tool for climate action.

The CAMPAIGNers Monitor (dash board) has been accessible online since March 2023 through the following link: https://climate-campaigners.app/dashboard-monitor. As described in deliverable D5.4, it provides a tool for querying APP user data, offering fundamental statistics on environmentally friendly behavior of APP users along with key user

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contextual information, such as age, gender, income, education, and working status. The platform is GDPR compliant.

Related deliverables: D2.4, D2.5, D2.6, D2.7, D5.3, D5.4

2.2.3. Development of modelling results and new mitigation pathways for the EU and globally integrating lifestyle changes

In the second project period, E3M and PIK developed major modelling advancements to improve the representation of human behaviour and lifestyle changes in their energy system (ESMs) and Integrated Assessment Models (IAMs).

Deliverable 6.1 incorporates the results from CAMPAIGNers Task 6.1, 6.2 and 6.3, which aim to improve the representation of behavioural change in the mathematical framework of sectoral energy models (focusing on residential buildings and transport) and develop scenarios exploring the implications of lifestyle transitions for these sectors. The deliverable builds on the findings of a literature review performed to identify the lifestyle changes with the highest mitigation potential in buildings and transport, as well as the methodological/data limitations of representing behavioural shifts in state-of-the-art ESMs and IAMs. The gap analysis, whose findings have been published in a scientific journal, together with interactions with other CAMPAIGNers WPs resulted in the final list of lifestyle changes which were included in the scenarios for transport and residential buildings. The improved sectoral models were used to devise scenarios for the evolution of energy use and emissions in the European transport and residential sectors.

The review of common methodologies and assumptions in IAM and ESM-based assessments of lifestyle changes in decarbonisation pathways demonstrate the need for modelling frameworks which better accommodate (1) the drivers, potentials, and costs of demand-side transitions, (2) the heterogeneous energy-use preferences and behaviours of different consumer groups, and (3) the impacts of lifestyle transitions on economy-wide indicators. The gap analysis also highlighted the richness of information on behaviours and preferences which can be extracted with big-data techniques, as it is the case with the CAMPAIGNers project.

For transport's sectoral modelling, the final list of lifestyle changes includes shifts to public and active modes of transport, carpooling and car-sharing schemes, and measures curtailing passenger aviation demand. Additional mitigation measures explored by the scenarios, include the reduction in overall demand for private vehicles in urban areas and a decrease of total freight activity. For buildings' sectoral modelling, the list of lifestyle challenges covers mainly measures decreasing heating and cooling energy needs (e.g., thermostat temperature set-point adjustments, limiting hot water use and opting for ecomode laundry and dishwashing programmes). The list is complemented with measures

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aiming to reduce residential floor space area and increasing the rate and deepness of building envelope renovation.

Major improvements to participating sectoral models (PRIMES and REMIND/EDGE buildings modules) comprise an advanced method developed to disaggregate energy demand to the contribution of different end-uses for residential buildings. Improved quantification of useful energy demand in households was achieved mainly through updated bottom-up calculations which distinguish between the effect of behavioural and non-behavioural (e.g., climatic, building-level) parameters on heating and cooling demand. An advanced calibration method was also applied in the case of PRIMES-BuiMo to ensure consistency between the bottom-up engineering-based calculations and official energy statistics for the historical years. In doing so, we have improved the estimation of energy savings stemming from lifestyle changes with different intensities and adoption rates.

Improvements to models focusing on the transport sector involved a refined method to derive modal split of passenger and freight transport under different lifestyle change scenarios. This was mainly achieved through the re-calibration of Constant Elasticity of Substitution (CES) functions or re-adjustment to the preference factors of logistic functions to reproduce the modal shifts which result from changes in consumer behaviour. Additionally for PRIMES-Tremove, a mechanism was developed for deriving average occupancy rates for private vehicles in accordance with exogenous assumptions about the adoption rate of car-pooling and ride-sharing schemes.

Analysis of modelling results and scenarios for transport and residential buildings highlighted the synergies between decarbonisation policies and lifestyle changes, as in both sectors the scenarios which feature both drivers achieved the strongest reductions in final energy consumption and carbon emissions by 2050. In both sectors, the impacts of lifestyle change are more pronounced in a current policy context, rather than a climateneutrality case. Lifestyle change is therefore an essential complementary measure in a decarbonisation context for reducing the pressure on electricity and heat supply sectors, in a future energy system dominated by low-carbon fuels.

In addition to energy and emission savings, reduced demand for heating and cooling services due to lifestyle change leads to lower fuel bills for energy consumers, thereby reducing the risk of energy poverty for vulnerable European households. In the case of transport, changes in activity ultimately lead to a notable reduction in investment costs, showcasing the financial benefits of lifestyle changes for green transportation.

Deliverable 6.2 incorporates the results from CAMPAIGNers Task 6.4 which aims to (a) enhance the representation of behavioural change in sectoral energy models, (b) devise scenarios exploring the implications of lifestyle transitions for the transport and residential sector, and (c) assess the systemic effects of lifestyle changes on energy use, emissions,

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transport, housing and economy systems, and SDGs. This Deliverable explores in depth the full-system EU and global-level mitigation scenarios, which assess the impacts of lifestyle changes on key policy indicators including final energy use and emissions, electricity generation and primary energy, energy system costs, as well as their influence on macroeconomic variables such as GDP, production and employment by economic sector.

In the case of buildings, major improvements to participating sectoral models (PRIMES and REMIND/EDGE modules) comprise an advanced method to disaggregate energy demand to the contribution of different end-uses, as well as to examine the effects of behavioural and non-behavioural parameters. An advanced calibration method was applied in the case of PRIMES-BuiMo to ensure consistency between bottom-up calculations of heating and cooling demand and official Eurostat statistics. In the case of transport, a refined method was developed to derive the modal split of passenger and freight transport under lifestyle change scenarios, by re-calibrating model functions to reproduce the anticipated modal shifts. A mechanism was developed (in PRIMES-TREMOVE) for deriving occupancy rates of private vehicles based on the adoption rate of carpooling and ride-sharing schemes. Similarly, the global energy system model (PROMETHEUS) and macroeconomic (GEM-E3-FIT) model were improved to better represent the effects of lifestyle changes in the transport and residential sector.

The developed scenarios integrate a comprehensive list of lifestyle changes for the transport (e.g. reduced car use, shift to public and active modes of transport, reduced number of flights) and residential sector (e.g. thermostat temperature set-point adjustment, conservation of hot water, higher eco-mode use). The most important lifestyle changes from a mitigation potential and future adoption likelihood perspective were selected based on a gap analysis, continuous interactions with other WPs, and input from two stakeholder workshops organised over the course of the project. Additionally for Deliverable 6.2, data concerning the success rates in lifestyle challenges from the CAMPAIGNers app was used to re-define the level of ambition for modelling assumptions considering the adoption of different lifestyle changes in the future. In this direction, this deliverable presents an additional lifestyle change variant, of lower ambition compared to the other variants concerning the intensity and adoption rate of lifestyle changes in transport and residential buildings (which is more aligned with results from the CAMPAIGNers app).

Results from the EU- and global-level scenario analysis demonstrated the significant impact of lifestyle changes on energy use and associated carbon emissions, especially under an existing climate policy framework. CO₂ emissions aggregated over the full energy system were shown to decrease in 2050 by 8-13% for the EU and by 7% for the global case under the Medium Ambition Lifestyle Change variant, compared to the baseline scenario without lifestyle change. The majority of CO₂ emission savings is attributed to the transport

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sector due to its larger size compared to residential buildings, while the contribution from the power supply sector is also significant Moreover, the analysis showed that the potential for demand-side savings is higher for developed economies, as they currently consume more energy for transportation and heating purposes and thus are more susceptible to lifestyle changes.

Decarbonisation policies towards ambitious climate targets in the EU and globally are the key drivers of CO₂ emission reductions, while lifestyle changes had overall a complimentary role. The additional CO₂ emission savings from lifestyle changes in 2050 in the decarbonisation context are only marginal as a big part of the energy system is already decarbonised. Nevertheless, evidence shows that lifestyle changes can accelerate the transition towards the EU climate neutrality and 1.5 °C global climate target, through additional carbon emission reductions in the medium-term. In this regard, lifestyle changes can be a safeguard to prevent departing from climate targets in case that less ambitious decarbonisation policies are implemented.

In addition to accelerating energy and CO₂ savings, lifestyle changes can also help to reduce the pressure placed on electricity and heat supply sectors, especially in a highly electrified system. Through lowering the demand for electricity, medium-ambition lifestyle changes were shown to decrease power generation in 2050 by 5-14% at the EU level and by 6% at the global level, below the levels of the basic decarbonisation scenario. As power generation drops with more ambitious lifestyle changes, so are the investments in new electrical capacity and power grid expansion. This would be effective in lowering the costs incurred by electric utilities, and transmission and distribution network operators as well as the prices paid by final electricity consumers.

Similar to limiting electricity and heat supply, the analysis indicated that reduced demand from lifestyle changes can lead to lower primary energy consumption levels and consequently to less demand for energy imports in the EU. EU-level scenarios showed that the decrease in net energy imports from medium-ambition lifestyle changes in 2050 could be 6-14% down from baseline levels. Lifestyle changes could therefore lower the energy import bill of EU27 and other regions, especially in a baseline policy context, thus reducing the susceptibility and vulnerability of the economies to uncertain energy import prices.

Furthermore, the analysis highlighted the important role of lifestyle changes in lowering energy system costs and reducing reliance on carbon removal technologies. In the presented analysis, the Medium Ambition Lifestyle Change scenarios achieve a 5-6% and 7-8% reduction in total energy system costs in 2050 under the two policy cases, respectively for the EU and global study. Most of the reduction in energy system costs is attributed to reduced fuel expenses and to a lesser extent to lower capital expenditure. As a result, lifestyle changes could be highly beneficial for final consumers as they lead to reduced fuel bills, thereby partly mitigating the risk of energy poverty for low-income vulnerable households.

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At the same time, the deployment of carbon removals in the EU over the 2021-50 period can be reduced by 4-11% in the medium-ambition LC variant, showing that lifestyle changes could reduce the dependence on immature and expensive CDR options and help the EU achieve its climate neutrality goal.

Finally, the analysis of socio-economic indicators, showed that lifestyle changes in the transport and residential sector can have a small, but positive effect on GDP, resulting from increased private consumption and investment in the EU economy. Small positive employment impacts are observed in the public transport and commercial sector, due to increased production levels. On the other hand, negative employment effects are found in the energy supply sectors, as well as in air transport and manufacturing of transport equipment, due to reduced activity levels.

Related deliverables: D6.1, D6.2

2.2.4. Policy recommendations and target group specific dissemination

Several reports compile policy recommendations, particularly Deliverables D7.1, D7.2, D7.3, D7.6, and D7.7. All these Deliverables were submitted on time, except for D7.3 as explained in Objective #7. These recommendations target various levels of governance, including local, national, and European, and focus on actions that public policymakers should undertake in terms of investment, fiscal policies, or the establishment of appropriate regulatory frameworks to encourage citizens to adopt sustainable lifestyles. These recommendations have benefited significantly from ongoing exchanges with decision-makers at all levels and many interactions with the LCs (including workshops and focus groups), as well as from different workshops: a workshop for municipalities was organised with the Covenant of Mayors (CoM), two workshops with national policymakers were organized in the framework of the COP28 (one in Bonn at the sidelines of the UNFCCC preparatory meeting for the COP28, and another one as a side-event to the COP28), and a last one with MEPs at the European Parliament. These interactions with policymakers were crucial for receiving feedback on our policy recommendations proposals from relevant stakeholders, allowing us to fine-tune the final recommendations. The interactions with policymakers allowed us also to tailor the recommendations to the specific needs of municipalities, while also considering the strong interconnection of different levels of governance and the need to coordinate them for maximum political impact.

Related deliverables: D7.1, D7.2, D7.3, D7.6 and D7.7

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2.3. Main deviations of the Workplan compared to Grant Agreement AMD-101003815-15

2.3.1. Shift in Resources

The project's progress in the 2nd Reporting Period was regularly compared to the project plan, and no further shifts were made in PM during this reporting period.

As already reported in the 1st Periodic Technical Report a re-assignment of software-related duties in Task 5.4 (CAMPAIGNers Monitor: An interactive dashboard of results from the goal-setting network) and Task 8.3 (Multi-Channel Dissemination & Communication Activities) were made. The re-assignment led to the following shifts in duties and resources:

Task 5.4: The software development part of the task was assigned to partner SBK, and 2.5 PMs of resources were transferred from FEEM to SBK to facilitate the work.

Task 8.3: The software development part of the task was transferred from partner CANE to partner SBK, and the design part of the task was transferred to partner Saints, who in return received 2 PM (SBK) and 2.5 PM (Saints), respectively.

2.3.2. Shift in Timeline

As already reported in the 1st Reporting Period, the release of the smartphone app has been postponed for three months to September 2022 (M17). The delayed roll-out had an impact on the subsequent and dependent work steps. These include, in particular, all activities that use the data collected via the app. In accordance with the project's risk management plan, efforts were made to make up some of the lost time. However, this postponement naturally affected the completion and submission of some deliverables. These are listed below. A more detailed description and the actions taken in order to deliver the corresponding deliverables as soon as possible can be found in the corresponding tasks under chapter 3. All deliverables were completed and submitted by the end of the project.

Delay in submission of deliverables:

- D2.5 Administrator handbook and training materials due 30 April 2022 review due date
 31 Oct 2023 submission 28 March 2024
- D2.6 User guide for CAMPAIGNers app due 31 May 2022 review due date 31 Oct 2023 submission 27 March 2024
- D7.4 Indicator report on lifestyle-related barrier and opportunities due 31 Oct 2023submitted April 2024
- D7.9 Summary of Workshop in the European Parliament due 31 Dec 2023 submitted April
 2024
- D8.3 DEC Plan Update 1 due 31 Oct 2022 submitted July 2023

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Slight delay in submission of deliverables:

- D2.2 impact of target behaviours on citizens emissions due 31 Jan 2024 submitted 08
 April 2024
- D6.1 Report on the updates system models in mobility and residential demand and their results due 31 Aus 2023 – submitted 02 Nov 2023
- D6.2 The impacts of lifestyle changes on climate change mitigation pathways due 31 Dec
 2023 submitted 22 April 2024
- D7.1 Report on policy-related findings to support local authorities in fostering the adoption
 of climate-friendly lifestyles und D7.2 Guidebook for incorporating lifestyle-related
 pathways and actions into NDCs and long-term strategies due 29 Feb 2024 submitted
 9 April 2024 and 22 April 2024

Others

The D9.1 Project Handbook is an ongoing document and will be updated whenever required. This was the case in early 2024 with the description of the strategic process for publications and was agreed with the PO accordingly.

2.3.3. Shift in Budget

The budget shift refers only to the shift of other direct costs between project partners and does not affect any PM or direct personnel costs.

ICLEI, the partner primarily responsible for supporting the Lighthouse Cities and establishing and strengthening the GSN, was able to transfer budget from the other direct costs category to interested Lighthouse Cities. This enabled them to carry out further activities to boost the CC app for recruitment and/or stakeholder engagement activities up to € 1,000 e.g. printing promotional material or other promotional activities (e.g. social media).

The following Lighthouse Cites have agreed to this budget shift:

- City of Lahti (P:18) overreport € 961.--
- LIBERTAD (P:29): overreport € 950.--

In addition, a transfer of € 4,500 was made to the EI-JKU coordinator to cover travel (of speakers only) and catering costs for the final conference in Brussels (13th March 2024).

In addition, partner E3M (P:14) has changed its legal status and is no longer an SME. A transfer of direct personnel costs has been made from category A.4 SME owners without salary to category A.2 Natural persons under direct contract. A clarification of the partner is included here: After the acquisition by Ricardo plc (01/2023), E3M cannot be considered as SME therefore SME unit costs are not applicable for E3M anymore. Before the acquisition E3M was

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declaring the personnel cost related to Horizon projects of its SME owners (without receiving a salary through an employment contract) as unit cost (not actual) using the unit cost rate fixed by Decision C(2020) 71155. However, until end of 2022, E3M's SME owners hadn't been involved in the CAMPAIGNers project, therefore no cost for SME owner declared under section A – A.4 After the acquisition (01/2023) they are no longer be seen as the owners of a SME therefore their personnel costs have been declared as actual personnel costs (for natural persons under a direct contract with E3M, not owners) using an individual rate not the fixed unit cost rate.

2.4. Conclusion for the reporting period of the project

The 2nd Reporting Period of CAMPAIGNers was highly successful in many of the originally defined objectives. In particular, the smartphone app as developed in WP2 could be released in more than 300 countries worldwide, and has more functionalities as originally planned (e.g. user-generated challenges). As a second strain of successful work was the development of the CAMPAIGNers Monitor – dash board (querying APP user data) which pushed forward the visualisation of data from the app as well as the elaboration of hands on policy recommendations.

However, in one objective CAMPAIGNers fell short: the number of citizens actively engaging in the GSN did not reach the expected number of 100,000 citizens. We see primarily two reasons for the lower level of engagement achieved, i.) the project start was in the first wave of Covid-19 in May 2020, which has temporally decreased the interest in climate change significantly, and has hampered the physical engagement activities, like gatherings in many of the lighthouse cities substantially; ii. At the time of the submission of the project, the GSN was a revolutionary idea for engaging citizens. However, at the time when the app was rolled-out, a number of solutions was available and interested citizens may have signed-up for only one of these, conditional on their specific preferences. Nevertheless, the number of engaged citizens is higher than for many of the competing solutions, so that we consider CAMPAIGNers' recruiting activities as success. In addition, the app and the GSN will be services for 3 more years even after the end of the project, and we already see that new citizens sign up the GSN and engage with the app at the same rate as during the project. This makes us confident, that the solution developed in CAMPAIGNers has a lasting impact and provides support for many citizens on their journey to a more climate-friendly lifestyle.

Besides the successfully completed first reporting period, the health issue of the work package manager of W8 has posed some challenges for the development and execution of the project's dissemination and exploitation plan. It took some months to cope with the adjustments needed in light of the incapacity to work, as the work package leader continued engaging and coping with the situation, despite the reduced working time. This led to

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significant delays in the project's dissemination and exploitation activities. Although the project management team cannot undo the delay, they have developed back-up plans for future activities. These plans consider the potential resignation of key personnel and include mechanisms to regularly assess work capability in relation to their duties.

3. Explanation of the work carried per WP

The following chapter is dedicated to give an overview of the project progress within the WPs giving details of the work carried out by each beneficiary as well as deviations to explain differences between work expected to be carried out and actually carried out. This refers to the final 18 months of the project runtime, starting in November 2022 (M19) to April 2024 (M36). Furthermore, it documents the resources used in the second reporting period. It details the status of the individual WPs and the Person Months (PMs) used by each partner in these WPs.

Note: WPI is not listed since it was completed in the 1st Reporting Period.

In the following explanation of each work package, the respective description is divided into three subchapters.

<u>Subchapter 1 "Administrative Information":</u> gives a short overview of the timeline of the WP and the involved partners.

<u>Subchapter 2 "Use of Resources":</u> visualizes the staff effort in PMs as documented in the financial reports. The table includes the information for the planned PMs over the runtime of the project as well as the actual PMs in the reporting period. Both values are provided on each WP-level.

<u>Subchapter 3 "Objectives, Progress and Deviations":</u> gives brief information about the objectives, the progress as well as the deviations in each WP structured on its tasks. Milestones are also included. This subchapter closes with concluding remarks on the WP.

3.1. WP 2: Research and Engagement Tool Development

3.1.1. Administrative Information

Table: Administrative Information WP2

| Title: | Research and Engagement Tool Development | | | | | | |
|---------------|---|--|--|--|--|--|--|
| Lead Partner: | SBK | | | | | | |
| Involved | EI-JKU, NUIG, NTNU, IUE, LUT, BEU, CANE, ICLEI, ECOLISE, Saints, MILAN, | | | | | | |
| Partner: | LAHTI, VILNIUS | | | | | | |

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| Start: | Plan: M1 |
|---------|-------------|
| start. | Actual: M1 |
| End: | Plan: M36 |
| Elia. | Actual: M36 |
| Status: | completed |

3.1.2. Resources

Table: Staff effort in the reporting period per partner and in total WP2

| Staff effort in person*month Plan vs. Actual | Plan (M1-M36) | Actual (M1-M18) *incl. adjustment | Actual (M19-M36) |
|--|------------------|---|---------------------|
| EI-JKU | 1.00 | 0.44 | 0.18 |
| NUIG | 3.00 | 2.00 | 1.00 |
| NTNU | 2.00 | 0.14 | 0.00 |
| IUE | 4.00 | 0.85 | 2.82 |
| LUT | 22.00 | 5.60 | 12.35 |
| BEU | 12.00 | 5.00 | 7.00 |
| CANE | 1.00 | 0.40 | 0.69 |
| ICLEI | 2.00 | 0.41 | 2.33 |
| ECOLISE | 3.00 | *0.94 | 2.08 |
| SBK | 31.00 | 35.00 | 1.18 |
| Saints | 2.00 | 2.00 | 0.00 |
| MILAN | 0.50 | 0.00 | 0.50 |
| LAHTI | 1.50 | 0.14 | 0.83 |
| VILNIUS | 0.50 | 0.63 | 0.00 |
| Total | 85.50 | 53.55 | 30.96 |

3.1.3. Objectives, Progress and Deviations

The key objective of WP 2 is to provide the smart phone app as the user interface of the IT ecosystem that forms the central communication facility and data generating tool of CAMPAIGNers

goal-setting

network.

The CAMPAIGNers app will be available on iOS and Android platforms with > 99% market share for smartphones and tablets, and can as well be used on desktop PCs and laptops. It will be available in all languages of the partner Lighthouse Cities, and the app is required to comply with the highest standards of Data Protection (national and EU regulations), while emphasizing user-friendliness in the design.

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- ▶ Objective 2.1: include a CO₂ footprint calculator in the CAMPAIGNers' app system that is tuned to the geographical scope of the Lighthouse Cities, including the data and functionality to quantify the impact of #LifestyleChallenges on individual CO₂ footprints.
- ▶ Objective 2.2: provide the technical specifications of the app system i) for the frontend to be user-friendly, motivating and fun to use, ii) for the administrator interface, to provide #LifestyleChallenges and moderate the built-in forums (operated by the WP 3 and the WP 4 teams), and iii) for the backend and database to process and store the data on citizens' interactions with the #LifestyleChallenges, including an API endpoint to enable automated access to the data for WP 5.
- ▶ Objective 2.3: produce the CAMPAIGNers app system, utilizing code and algorithms of existing apps whenever possible to be efficient and rely on well-tested software modules.
- ▶ Objective 2.4: test a live version of the app system, so as to ensure full usability and stability under real-life high-data traffic.

| Task 2.1 | Extending the CO₂ footprint calculator | | |
|---|---|--------------------|--|
| Runtime | Start (planned): M3 | End (planned): M33 | |
| | Start (actual): M2 | End (actual): M36 | |
| Lead and involved partners | Lead: LUT Partner: IUE, BEU, ECOLISE, SBK, ICLEI | | |
| Status | completed | | |
| Related deliverables | D2.1, D2.2 | | |
| | Task description & Status | | |
| Goal of the task as described in the GA | Briefly stated, the primary objective of this task was to expand and customize the CO ₂ footprint model developed by LUT for integration with CAMPAIGNERS. The calculator was designed to be flexible, allowing each formula to be tailored to specific geographical regions using parameters. | | |
| Description and progress of work | Initially, we defined the core structure and terminology of the carbon footprint calculator in collaboration with LUT. Following this, implementation began, and we swiftly integrated the geographically specific data as it became available. All | | |

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| | calculations regarding the impact of lifestyle challenges and the carbon footprint are continuously updated in the system to reflect any necessary changes. |
|------------|--|
| | Related deliverable (D2.1) has been submitted in M10. Deliverable (D2.2) has been submitted M36. |
| Deviations | In the 1st Reporting Period, we noted a minor deviation: some test users suggested reducing the number of questions in the calculator to enhance the user experience. This feedback has been addressed to improve overall usability. Additionally, a few small adjustments were needed during the task; however, there were no major deviations from the planned work. |

Task 2.2 has been completed and reported during the 1st Reporting Period.

| Task 2.3 | Development of the app software system | |
|---|--|-------------------|
| Runtime | Start (planned): M5 End (planned): M13 | |
| | Start (actual): M5 | End (actual): M36 |
| Lead and involved partners | Lead: SBK Partners: LUT, BEU | |
| Status | The main part of the task has been finished during the 1 st Reporting Period. Nevertheless, the need for additional features, fixes etc. required this task to run till end of the project. | |
| Related deliverables | D2.4 | |
| | Task description & Status quo | |
| Goal of the task as described in the GA | The main goal was to build an application ready for release/public download in coordination with other partners. | |
| Description and progress of work | This task started as planned, but its duration was extended due to the introduction of new functionalities (e.g. user-generated challenges). | |

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| | Related deliverable (D2.4) has been submitted in M19 and has been approved in M22. |
|------------|--|
| Deviations | The main deviation was the extension of the time required to perform this task (mainly due to introduction of new functionalities) which was already reported in the 1st Reporting Period. |

| Task 2.4 | Materials for training and user support | | |
|---|---|-----------------------|--|
| Runtime | Start (planned): M11 | End (planned): M13 | |
| | Start (actual): M17 | End (actual): M35 | |
| Lead and involved partners | Lead: SBK Partner: NUIG, LUT, BEU, ICLEI, Saints, | MILAN, LAHTI, VILNIUS | |
| Status | completed | | |
| Related deliverables | D2.5, D2.6 | | |
| | Task description & Status | | |
| Goal of the task as described in the GA | The objective of this task was to provide comprehensive materials that explain both the user-facing functionalities of the application and the administrator interface, aimed at individuals responsible for managing the app's content. | | |
| Description and progress of work | The progress on this task proceeded as anticipated. Any obstacles encountered were promptly addressed and resolved, ensuring a smooth workflow. The creation of the necessary materials was significantly aided by continuous feedback, enabling us to produce clear and comprehensible documentation for all users, including non-technical individuals. This effort will remain ongoing as long as the app is in use. Related deliverables (D2.5 and D2.6.) were updated and submitted in M35. | | |

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Deviations

Despite encountering some issues since the app went live, there were no major deviations from the planned course of action. The problems encountered were typical of software and app development processes, and we were well-prepared to address them. Each bug, error, or problem was promptly and effectively handled, ensuring that the app remained functional and met our quality standards. D2.5 and D2.6 were meant to describe the final and fully functional version of the app. Hence, the provision of these deliverables was postponed along the pathway for resolving the aforementioned issues and were finally released in M35, where they now related to the most recent version of the app.

In addition to the deviations already described above, there has been an adaptation of D2.5 in relation to the production of training materials: While we acknowledge the request for a video explaining the backend implementation of our app, we must highlight that certain intricate aspects of our backend cannot be disclosed publicly or to respective partners. This is primarily because these components are integral to our proprietary solution, involving highly specialized and complex logic developed during the app's creation. Importantly, these de-tails do not directly impact the research outcomes but rather pertain to our unique integration methods. Additionally, our written deliverable has been meticulously crafted to include all essential information tailored for non-technical users who have access to Strapi. We have prioritized clarity and comprehensibility to ensure that stakeholders can grasp how the backend functions. This understanding is crucial for them to implement new challenges, enhance the footprint calculator, and adjust corresponding formulas independently. However, the administrator interface can potentially cause harm to #Life-styleCahallenges that were already successfully implemented if a user failure happens. This led us to the decision not to grant access to all consortium partners. Instead, we created a group of researchers from EI-JKU, LUT and NTNU who were to only people in the consortium to use the interface. Respectively, the tutorial and administrator handbook were designed to provide a general overview of the ininterface, but detailed guidance was only provided to the

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responsible group. By this decision with respective impact on D2.5, we ensured the highest level of reliability of the IT system.

| Task 2.5 | Hosting, supervision, bug fixing and adding target behaviours | |
|---|--|--------------------|
| Runtime | Start (planned): M10 | End (planned): M36 |
| | Start (actual): M10 | End (actual): M36 |
| Lead and involved partners | Lead: SBK Partner: LUT | |
| Status | completed | |
| Related deliverables | D2.7 | |
| Task description & Status | | |
| Goal of the task as described in the GA | This objective of this task was to ensure the successful hosting of the CAMPAIGNers app system. This involves installing the app on servers that comply with GDPR regulations and continuously supervising the system's functionality. The task also includes providing regular security updates as needed, especially for the iOS and Android operating systems, and making necessary improvements when issues, such as slow operation during high data traffic, are reported. Additionally, it encompasses the development and integration of new algorithms to quantify the impact of #LifestyleChallenges on citizens' CO ₂ footprints, which will evolve under Task 2.1 until M33. | |
| Description and progress of work | All requirements for this task have been met, and the app is running live. We are committed to promptly addressing any bugs, continuously working on improvements, and exploring new potential features to enhance user experience. This includes fixing any issues as soon as they are identified and implementing ongoing enhancements to ensure optimal performance and user satisfaction. | |

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| | Related deliverable (D2.7) has been submitted in M36. |
|------------|---|
| Deviations | No deviation. |

Milestones

Milestone M2 was achieved in M17 (1st Reporting Period).

Concluding remarks on WP

Throughout the project, our focus remained on continuously improving the CAMPAIGNers app to enhance user experience and engagement. A key addition was the user-generated challenges feature, which significantly boosted overall success by increasing user interaction with the app. This feature enabled us to gather valuable feedback directly from users, fostering a sense of community and encouraging active participation.

Furthermore, we introduced Norwegian as a new language option, broadening the app's accessibility and inclusivity. Another major feature added was the weekly challenge assignments, which addressed a primary requirement for the research component of the project. This feature not only enriched the app's functionality but also provided structured and engaging content for users on a regular basis.

Our ongoing efforts to refine and expand the app's capabilities have led to a robust, user-centric platform that effectively supports the goals of the CAMPAIGNers project. The learnings and achievements from the first reporting period were meticulously implemented and enhanced, contributing to the app's overall success and sustainability.

3.2. WP 3: Lifestyle Transformation Research Design

3.2.1. Administrative Information

Table: Administrative Information WP3

| Title: | Lifestyle Transformation Research Design |
|---------------|---|
| Lead Partner: | NTNU |
| Involved | EI-JKU, NUIG, UCT, PIK, LUT, CANE, ECOLISE, MILAN, IZMIR, LAHTI, DAFNI, |
| Partner: | LINZ, SKOPELOS, FREISTADT, VILNIUS, PESARO, GRENOBLE, DUBLIN, MALMÖ, |
| Partiler. | LIBERTAD, ASOIU, HEAS |
| Start: | Plan: M1 |
| sturt. | Actual: M1 |

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| End | Plan: M35 |
|---------|-------------|
| End: | Actual: M35 |
| Status: | completed |

3.2.2. Use of Resources

Table: Staff effort in the reporting period per partner and in total WP3

| Staff effort in | Plan | Actual | Actual |
|-----------------|-------|-----------------|------------|
| person*month | (M1- | (M1-M18) *incl. | (M19-M36) |
| Plan vs. Actual | м36) | adjustment | (WIS WISS) |
| EI-JKU | 2.00 | 3.34 | 2.21 |
| NUIG | 9.00 | 4.14 | 1.97 |
| NTNU | 21.00 | 9.45 | 21.10 |
| UCT | 4.00 | 4.87 | 0.70 |
| PIK | 1.00 | 0.00 | 0.00 |
| LUT | 1.00 | 1.00 | 0.00 |
| CANE | 1.00 | 0.50 | 0.69 |
| ECOLISE | 3.00 | *3.04 | 0.00 |
| MILAN | 1.00 | 0.30 | 0.70 |
| IZMIR | 1.00 | 1.01 | 0.54 |
| LAHTI | 1.00 | 0.38 | 0.37 |
| DAFNI | 1.00 | *0.63 | 0.47 |
| LINZ | 1.00 | 0.14 | 0.54 |
| SKOPELOS | 1.00 | 0.50 | 0.50 |
| FREISTADT | 1.00 | 0.33 | 0.00 |
| VILNIUS | 1.00 | 0.56 | 1.00 |
| PESARO | 1.00 | 0.60 | 0.70 |
| GRENOBLE | 1.00 | 1.00 | 0.00 |
| DUBLIN | 1.00 | 0.60 | 0.40 |
| MALMÖ | 1.00 | 0.40 | 0.70 |
| LIBERTAD | 1.00 | 0.03 | 0.05 |
| ASOIU | 1.00 | 0.40 | 0.60 |
| HEAS | 1.00 | 0.49 | 0.32 |
| Total | 57.00 | 33.71 | 33.56 |

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3.2.3. Objectives, Progress and Deviations

Objectives

Objectives: Achievement of the overall objective of WP3 requires achievement of three specific objectives:

- ▶ Objective 3.1: Providing a state-of-the-art multi-disciplinary review of lifestyle and behavioural change research, including an assessment of promising policy interventions. STATUS: Objective 3.1 has been achieved in the 1st Reporting Period (see deliverable D3.1).
- ▶ Objective 3.2: Developing and pilot testing an initial set of #LifestyleChallenges for each of CAMPAIGNers' Lighthouse Cities based on the priority list from Task 1.3, and informed by the state-of-the-art review and analysis of previous research. <u>STATUS: Objective 3.2 has been achieved the 1st Reporting Period (see deliverable D3.2).</u>
- ▶ Objective 3.3: Providing new #LifestyleChallenges. To do so, quantitative outcomes of the continuous data analysis in WP 5 are interpreted from the behavioural science perspective and the Lighthouse Cities' engagement strategies are continuously evaluated and adapted in a trans-disciplinary process. <u>STATUS</u>: <u>Objective 3.3 has been achieved</u> (see deliverable <u>D3.4</u>).

Tasks

Tasks T3.1 and T3.2 were completed in the 1st Reporting Period.

| Task 3.3 | Continuous scientific unput for the goal-setting network | |
|---|---|--------------------|
| Runtime | Start (planned): M12 | End (planned): M35 |
| | Start (actual): M12 | End (actual): M35 |
| Lead and involved partners | NTNU and NUIG, FEEM, PIK, all Lighthouse Cities | |
| Status | completed | |
| Related deliverables | D3.4 | |
| Task description & Status | | |
| Goal of the task as described in the GA | This task develops consortium-created LifestylesChallenges throughout the project, and scrutinizes LifestylesChallenges | |

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| | submitted by the citizens before these are open for public voting, or when they are flagged by members of the goal-setting network. |
|---------------------|--|
| Description of work | We developed LifestylesChallenges throughout the project, and scrutinized LifestylesChallenges submitted by citizens before these were implemented in the CAMPAIGNers app. We analysed and interpreted Challenge acceptance and completion data. |
| | D3.4 was submitted in M36. |
| Deviations | There are no substantial deviations to this task, it was produced and delivered on time. |

Milestones

Milestone M3 was achieved in M16 (1st Reporting Period).

Concluding remarks on WP

The objectives of WP3 have been met and all deliverables have been submitted. The procedures for (a) the design of Challenges, (b) delivery of Challenges to app users, and (c) analysis of Challenge data form an excellent basis for subsequent research on sustainable lifestyle changes. We see several opportunities for further enhancing the approach utilized during the project in subsequent work, including the implementation of randomized controlled trials run on the app platform.

3.3. WP 4: Engaging Citizens with the Goal-Setting Network

3.3.1. Administrative Information

Table: Administrative Information WP4

| Title: | Engaging Citizens with the Goal-Setting Network and Low-Carbon |
|---------------|--|
| Title. | Lifestyles |
| Lead Partner: | ICLEI |
| | Saints, EI-JKU, NUIG, NTNU, UCT, IUE, BEU, MILAN, IZMIR, LAHTI, DAFNI, LINZ, |
| Involved | SKOPELOS, FREISTADT, VILNIUS, PESARO, GRENOBLE, DUBLIN, MALMÖ, |
| Partner: | LIBERTAD |
| Start: | Plan: M3 |
| Sturt. | Actual: M3 |

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| | Plan: M34 |
|---------|--|
| End: | Actual: M36 (though some cities are still implementing local actions |
| | in March and April, i.e. M35 and M36) |
| Status: | completed |

3.3.2. Use of Resources

Table: Staff effort in the reporting period per partner and in total WP4

| Staff effort in person*month Plan vs. Actual | Plan (M1-M36) | Actual (M1-M18) *incl. adjustment | Actual (M19-M36) |
|--|------------------|-----------------------------------|---------------------|
| EI-JKU | 2.00 | 1.97 | 1.04 |
| NUIG | 3.00 | 0.94 | 1.72 |
| NTNU | 2.00 | 0.02 | 0.00 |
| UCT | 3.00 | 3.02 | 0.85 |
| IUE | 3.00 | 1.90 | 1.01 |
| BEU | 3.00 | 1.50 | 1.50 |
| ICLEI | 18.00 | 9.77 | 14.90 |
| Saints | 16.00 | 16.00 | 6.30 |
| MILAN | 2.50 | 1.00 | 1.90 |
| IZMIR | 2.00 | 6.76 | 0.73 |
| LAHTI | 3.50 | 0.86 | 9.81 |
| DAFNI | 1.50 | *1.07 | 0.59 |
| LINZ | 2.00 | 2.01 | 1.92 |
| SKOPELOS | 1.50 | 0.60 | 0.90 |
| FREISTADT | 2.00 | 0.64 | 0.70 |
| VILNIUS | 3.50 | 1.53 | 3.50 |
| PESARO | 2.00 | 1.00 | 1.30 |
| GRENOBLE | 2.00 | 2.00 | 1.80 |
| DUBLIN | 2.00 | 1.00 | 1.00 |
| MALMÖ | 2.00 | 0.70 | 1.40 |
| LIBERTAD | 4.50 | 1.56 | 5.23 |
| ASOIU | 2.00 | 0.40 | 1.60 |
| Total | 83.00 | 40.25 | 59.70 |

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3.3.3. Objectives, Progress and Deviations

Objectives

▶ Objective 4.1: develop recruitment plans with each Lighthouse City of how to approach their citizens, motivate them to join the goal-setting network using specific elements and influencers within the city or culture.

This objective was fulfilled in the 1st Reporting Period through Task 4.1 Subtask 1. D4.3 reports on the results of recruitment and engagement activities submitted in M36.

▶ Objective 4.2: develop an engagement plan with each Lighthouse City of how to excite their citizens to use the goal-setting network to the fullest extent, give incentives to engage with the #LifestyleChallenges, and ultimately empower them to move towards low-carbon lifestyle.

This objective was fulfilled in the last Reporting Period through Task 4.1 Subtask 2. D4.3 reports on the results of recruitment and engagement activities through M36.

▶ Objective 4.3: continuously support Lighthouse Cities in the monitoring and execution of the engagement and recruitment plan and adjust the plans accordingly and exchange with Follower Cities how best to engage their citizens in the goal-setting network (cooperation through Task 8.1 – subtask 1).

ICLEI and Saints supported Lighthouse Cities in using and regularly monitoring each city's living Media & Cooperation form, which they used since Spring 2022 to update all details of planned and upcoming activities as they become available, and the project's central Communications & Dissemination tracker. This feedback complemented regular e-mail communication with the Lighthouse Cities and additional bi-lateral support calls as needed to provide continuous planning and implementation support. In parallel, Saints and ICLEI centrally monitored the Climate Campaigners Action Page (a citizen-oriented content hub with all important information from the Lighthouse Cities) and the citizen-oriented social media campaign by using Google Analytics and Meta insights. These insights then were used to coordinate with partners in WPs 2, 3, and 5 to monitor app data. Key metrics were compiled and regularly shared and discussed with Lighthouse Cities: bi-laterally to support city-specific plan adjustments, and in workshops to facilitate group reflection and creative brainstorming. For example, a report summarising data from the first wave of the campaign was used as a main component in Focus Group meetings with Lighthouse Cities (led by Task 7.5, with support from 7.1), as well as in select bi-lateral technical support meetings. An updated report was also used as a basis of a full Lighthouse City workshop that took place in mid-December 2022.

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Likewise, through their roles as part of the CAMPAIGNers Amplifier City committee (led by ECOLISE / Task 8.1), ICLEI and Lahti supported linkages between the Lighthouse City and Amplifier City (formerly "Follower City") programme. This included participation in regular coordination meetings, co-facilitating a workshop with Lighthouse Cities to inform the Amplifier City strategy (M13), supporting Lighthouse Cities with prospective Amplifier City outreach through their local networks, and contributing to the "Amplifier City Intro Webinar" (November 2022). ICLEI continued providing input into the design of Amplifier Cities activities throughout the course of the project. Please refer to input for Task 8.1 for further information about the Amplifier City strategy and activities.

Moreover, thanks to the work of WPs 5 and 2, getting a quick overview of key stats around app use is now possible through the dashboard monitor available on the CC website (https://climate-campaigners.app/dashboard-monitor). More detailed data can be downloaded by exporting the following html report, which is automatically updated every week: https://drive.google.com/drive/folders/lg62m62Xn6pqP958TLE2DFnlwNP0u_4U_?us <a href="percentage

Tasks

Task 4.1 and related Deliverables D4.1 and D4.2 has been completed, submitted and approved in the 1st Reporting Period.

| Task 4.2 | Implementation of the engagement and recruitment actions to grow the translocal goal-setting network | | | | |
|----------------------------|--|--|--|--|--|
| Runtime | Start (planned): M12 End (planned): M34 | | | | |
| | Start (actual): M17 End (actual): M36 | | | | |
| Lead and involved partners | ICLEI, Partners: all Lighthouse Cities (P16-P29), Saints, NUIG, NTNU, EI-JKU, IUE, UCT, BEU | | | | |
| Status | Completed | | | | |
| Related deliverables | D4.3 | | | | |
| | Task description & Status | | | | |

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Goal of the task as described in the GA

This task was the direct implementation of the plans from Task 4.1 for recruiting and engaging citizens in the goal-setting network, and subsequent monitoring and revision of the plans according to the outcomes of a continuous monitoring. ICLEI supported the Lighthouse Cities to carry out the multi-channel promotion activities, backed up by Saints and relevant partners of the consortium.

After the initial implementation of the recruitment and engagement plans, this task was also responsible for the monitoring, and improvement of these plans over the project lifetime and beyond, and for interfacing with the LCs to take into account their evolving needs and interests.

Description and progress of work

Throughout the reporting period, Lighthouse Cities ran the three waves of media efforts summarized in the graphic, below:



The first wave started with the app launch on 15 September 2022, and served to pique the interest of citizens to join Climate Campaigners and persuade them to download the app. The app was available only in Lighthouse City countries at that time. While ongoing recruitment and engagement is critical to growing the goal-setting network, particular attention was focused on initial launch activities in each Lighthouse City to establish a strong local first impression of the app. Where possible, Lighthouse Cities' launch activities were strategically planned to leverage existing opportunities such as established local events. This wave served as a prelude and has provided first learnings about effective measures and those which need to be optimised. A full breakdown of the LHC activities implemented between their launches and February 2024, and their results is provided in D4.3

Results from media waves activities

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Local launch activities

12 out of 13 Lighthouse Cities carried out local launches within the reporting period (Milan, Skopelos, Freistadt, Linz, Lahti, Trois-Rivières, Vilnius, and Dublin, Pesaro, the region of La Libertad, and Grenoble). Cape Town had a delayed launch, which happened in March 2023, due to student protests at the UTC campus and a related ethics-clearance process. The city of Izmir was never able to launch due to legal and administrative GDPR-related issues. A full explanation for this can be found in D4.3.

Overview of recruitment and engagement measures implemented by Lighthouse Cities, as of 15 February, 2024.

| Activity | Volum e | Implemented in Lighthouse Cities including |
|--|------------|--|
| PR Stunt ("Green Path") | 8 | Cape Town, Dublin, Freistadt, Grenoble, Linz, Milan, Skopelos, Vilnius |
| Special launch event, exhibition, or session organized | 45 | Cape Town, Dublin, Freistadt, Grenoble, Lahti, Linz, Milan, Pesaro, Skopelos, Trois-Rivières, Vilnius |
| Press releases and Web Articles | 35 | Cape Town, Dublin, Freistadt, Grenoble, La Libertad, Lahti, Linz, Milan, Pesaro, Trois-Rivières, Vilnius |
| Media articles or radio spots | 47 | Cape Town, Dublin, Freistadt, Grenoble, Lahti, Linz, Milan, Pesaro, Trois-Rivières, Vilnius |
| Social media posts | 92 | Cape Town, Dublin, Grenoble, La Libertad, Lahti, Linz, Milan, Pesaro, Skopelos, Vilnius |
| Out of Home spaces (billboards, posters in public spaces, city lights, | 18 | Grenoble, Linz, Lahti, Vilnius |

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| and digital screens including on public transport) | | |
|--|---------------------------|---|
| Flyers | 15,893 distribu ted | Cape Town, Dublin, Freistadt, Grenoble, La Libertad, Lahti, Linz, Milan, Pesaro, Skopelos, Trois- |
| | | Rivières, Vilnius |

Climate Campaigners recruitment campaign: performance indicators

The table below (as extrapolated from Table 1 in D4.3) presents an overview of key metrics identified to monitor performance around recruitment activities between February 2023 and February 2024. For further detail on the metrics and related activities, please refer to Section 2 of D4.3

| Metric | February 2023 | Feb. 2024 | % change |
|---|---------------|------------------|-----------------|
| Combined reach of central Facebook & Instagram accounts | 272,670 | 1,459,569 | 435% |
| Lighthouse City media reach potential | > 6,067,384 | >7,149,107 | 17.83% |
| Action Page visitors | 7,362 | 19,787 | 169% |
| App store visitors | 987 (Apple) | 4,396 (Apple) | 133.94% (Apple) |

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| actual data | 20,517 | Actual data |
|----------------|--|---|
| unavailable | (Android) | unavailable |
| (Android) | = 24,917 | (Android) |
| Est. (Android) | (total) | Est. 265% |
| 4,608 / 5,595 | | (Android) / |
| total based on | | 277% (total) |
| current Apple- | | |
| to-Android | | |
| ratio | | |
| | | |
| | | |
| 2,300 | 8,281 | 260% |
| | | |
| | | |
| 1,850 | 5,483 | 196% |
| · | , | |
| | | |
| 678 | 19,961 | 2,844% |
| | | |
| | unavailable (Android) Est. (Android) 4,608 / 5,595 total based on current Apple- to-Android ratio 2,300 | unavailable (Android) = 24,917 Est. (Android) 4,608 / 5,595 total based on current Appleto-Android ratio 2,300 8,281 1,850 5,483 |

Social media reach

Although CC social media accounts never reached a massive following (albeit still significant if compared with the majority of other similar EU projects), the number of followers grew steadily over the course of the Project duration. Likewise, thanks to effective management of the CC social media accounts, in terms of well-paced content and quality content creation, the central paid social media campaigns were successful – they achieved high reach and drove a significant portion of the Action Page traffic (D4.3 provides examples of content and good practices). A number of promising influencer collaborations were established, although later and at a higher fee than originally expected.

In addition to social media efforts driven centrally by the CC team, the LHCs' social media efforts drove a lot of traffic to the app – most notably the paid campaigns implemented by Vilnius (D4.3 provides an analysis of this).

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Traditional media

Overall, the relatively low proportion of non-social media referrals to the Action Page suggests that traditional media and press played a secondary or indirect role in promoting app uptake. D4.3 explores this more in detail.

Action page visitors

As of February 2024, the Action Page had 19,787 visitors. One year previously, the page had 7,362 visitors. A/B testing confirmed that people were slightly more likely to download the app if they visited the Action Page first, instead of directly being taken to the app store. About a quarter of Action Page traffic was from direct sources – this high of a proportion suggests that physical media (OOH, Flyers, Posters) and/or in-person activities have a significantly higher conversion rate than online ones.

App store visitors

As of February 2024, the Android and Apple stores combined had received 24,917 visitors. The overall conversion rate of downloads to store visitors is slightly above industry standard, suggesting that overall, the app store pages are optimized.

Registered profiles

There were 5,160 profiles created as of February 2024. In the previous months, the % of profiles created of total downloads has been between 65 and 71%. This exceeds industry standards (A Pew research study found that about 43% of Google Play store users abandon the onboarding process and uninstall an app when they realize how much personal information they need to provide when they start using it alone – other reasons not considered).

Challenge completion

As of February 2024, there were 19,898 challenges completed (average of 3.84 challenges per user with a profile). While it's hard to benchmark precisely because of how unique this kind of challenge model is, in February 2023, there were just 678 challenges completed, or an average of 1/3 of a challenge per user with a profile.

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Continuous monitoring, optimisation, and plan adjustment

In addition to continuing to implement the currently-established plans, Lighthouse Cities played a central role in leveraging new opportunities and critically assessing recruitment and engagement approaches, and updating, adapting, and implementing plans accordingly. This was enabled by the project's continuous monitoring and optimisation procedures (elaborated in D4.1 and D4.2). In the second media wave, the media pressure (i.e. reach and frequency) was significantly increased to the end of recruiting more participants.

An initial reflection with the Lighthouse Cities on their experience and impressions since the launch took place as part of a series of Focus Group discussions in mid-November 2022 (led by Task 7.5, "From global science to local action"), as well as a full Lighthouse City WP4-led workshop in mid-December 2022 (with supplementary bi-lateral support calls in between with select cities as needed). The full results of the Focus Groups are included in Annex I of D7.1. Supporting continuous technical assistance through Task 4.2, the second stage of the Lighthouse City engagement programme that followed throughout 2023 included bi-monthly online workshops (alternating with those envisioned as part of the Amplifier City programme, coordinated under Task 8.1) with a fixed evaluation and monitoring agenda item. Thorough monitoring and reflection processes are captured in D4.3.

New Lighthouse City inspired to join Climate Campaigners Following a successful app launch in nearby Trois-Rivières, partners in Victoriaville, Canada, have expressed interest in joining the goal-setting network as a Lighthouse City. Prospective representatives have a previously-established close working relationship with Trois-Rivières' CAMPAIGNers team. As such, a close collaboration between the two Lighthouse Cities is foreseen, through which their common ambitions, networks, and existing recruitment and engagement resources developed for Trois-Rivières can be fully leveraged. An introductory meeting with the prospective Victoriaville committee took place on 17 October 2022, and onboarding including activity planning began in November 2022.

D4.3 has been submitted in M36.

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| Deviations | The start of this task was delayed until M17, corresponding to the |
|------------|--|
| | postponement of the app launch. |

| Task 4.3 | Continuous technical support for Lighthouse Cities in managing the goal-setting network | | | | |
|---|--|--------------------------------|--|--|--|
| Runtime | Start (planned): M12 | End (planned): M34 | | | |
| | Start (actual): M17 | End (actual): M36 | | | |
| Lead and involved partners | ICLEI, Partners: all Lighthouse Cities | (P16-P29), NUIG, IUE, UCT, BEU | | | |
| Status | Completed | | | | |
| Related deliverables | D4.3 | | | | |
| | Task description & Status | | | | |
| Goal of the task as described in the GA | Task description & Status This task supports the monitoring and implementation of engagement and recruitment actions by offering tech support to the Lighthouse Cities and the opportunity to redifficulties and share best practices. This involves: • training to enable the Lighthouse Cities to operate Administrator Interface for launching city—#CCChallenges • training to use the app to collect citizens' opinions or treatments of interest through random treatment prov (in coordination with Task 3.3 social scientists). • offering support from scientific and technical partner running the Administrator Interface in the case complications are identified by the LCs. • organizing workshops for the Lighthouse Cities to contogether and jointly evaluate and share experiences the recruiting and engagement of citizens administration of the goal-setting network | | | | |
| | ICLEI, with additional key partners from WPs 2, 5, 6, 7, and 8, contributed to the work led by NTNU (Task 3.3) to build a challenge | | | | |

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Description and progress of work

development protocol and toolkit that was beta tested in February 2023. All Lighthouse Cities received training with the toolkit in March 2023. The development of the toolkit included a central challenge database. ICLEI supported WP3 in implementing the regular LHC reviews and translations of new challenges, and in creating standardised challenge review guidelines for the cities. ICLEI was among the partners who have been trained in administering Strapi, app's Content Management System, where the #CCchallenges administered are from the back end.

The CAMPAIGNers Monitor provides a user interface to access anonymised data collected through the app and results in an intuitive and user-friendly manner. Its development began in M17 following the logic and specifications provided by the CAMPAIGNers Monitor and User Guide (Farnia et al., 2022). ICLEI supported WPs 2 and 5 to get initial feedback from LHCs on features to be developed as part of the Monitor in December 2022. Once the Monitor went live, and to the end of contributing to the LHCs direct monitoring capacity, ICLEI supported WPs 2 and 5 in organising a walkthrough session (held in February 2023) to train LHCs on how to tune in to the progress of the goal-setting network and access their own unique insights, supporting feedback loops to enhance engagement use as described in the progress update for Task 4.2.

D4.3 has been submitted in M36.

Deviations

The start of this task was delayed until M17, corresponding to the postponement of the app launch.

Originally, Lighthouse Cities were foreseen to directly operate an Administrator Interface for launching city-level #CCChallenges. However, early in the app development stage, the Consortium, including Lighthouse Cities, decided instead to streamline backend administration through a smaller number of non-Lighthouse City partners, and for WP3 to instead support an independent challenge development protocol with cities. First, this was done to ease the burden on Lighthouse Cities' capacities, allowing them to focus efforts on the content of prospective local challenges rather than on technical administration. This was also done to mitigate

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| risks to security and to app system malfunctions due to technical | | | | | | | |
|---|------------|------------|----|------------|-----|------|----------|
| errors, | which | increase | in | likelihood | the | more | back-end |
| adminis | strators 1 | there are. | | | | | |

Milestones

Milestone #4 was achieved in M18 (1st Reporting Period). The current number of users is displayed live within the app at all times, under the "Global Community" tab. Upon submission of the report, the current number (April 2024) of users is 6,010.

Concluding remarks on WP

This reporting period saw the continuous development and implementation of plans to recruit citizens into and engage citizens with the goal-setting network, through which CAMPAIGNers supports them to adopt more climate-friendly lifestyles.

Since the start of the project, Lighthouse Cities played an active role in shaping the integrated Climate Campaigners campaign (including recruitment and engagement plans), app, and #CCchallenges through a close engagement process coordinated through WP4 with partners across all work packages. First, an initial knowledge-building process clarified Lighthouse City's communication landscape and resources, which shaped the development of the integrated global communications concept. In preparation for the app launch, Lighthouse Cities continuously worked with Saints in campaign production, and with partners across the project to inform the initial #CCchallenges and app development, including through app beta testing. Then, the global integrated campaign and communication measures were created and customised for each Lighthouse City based on their Recruitment and Engagement Plan. This was captured in two deliverable reports developed in the reporting period: D4.1, "Plans to recruit citizens into the goal-setting network", and D4.2, "Plans to continuously engage citizens with the goal-setting network."

The majority of Lighthouse Cities carried out local launches within the project period. The Lighthouse Cities' local launches – with activities ranging from PR stunts, specially-organized events and exhibitions, placing Out of Home media, liaising with press and media outlets, to handing out flyers directly to citizens and local businesses – helped lay a solid foundation for the initiative by attracting a first burst of widespread visibility, as well as establishing first contact directly with citizens and key local stakeholders. The successful app launch in Trois-Rivières even inspired partners in nearby Victoriaville, Canada to express interest in joining the goal-setting network as a Lighthouse City. An introductory meeting with the prospective Victoriaville committee took place in October 2022, and onboarding including activity planning began in November 2022.

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Deviations

- The following deviations all relate to the postponement of the app launch until M17:
 - Task 4.1 remained ongoing until M18 rather than the planned M12. However, detailed media and cooperation plans were continuously formulated and updated with each city starting in M10, following a discovery phase and collaborative process to establish the guiding global communications concept and possible local opportunities (M3 M10).
 - The submission of Deliverables 4.1 and 4.2 (which correspond to Subtasks 4.1.1 and 4.1.2 respectively) were delayed due to the subsequent need for cities to adjust planned activities.
 - The start of Tasks 4.2 and 4.3 were both delayed until M17.
- The Grant Agreement refers to 16 Lighthouse Cities. At the time of the app launch, there were functionally 13 Lighthouse Cities, as:
 - The City of Malmö, originally foreseen to assume the role of a Lighthouse City, also ultimately was unable to do so due to conflicting interest with a competing national app. While the municipality initially indicated interest in engaging with CAMPAIGNers as a Lighthouse City, in coordination with local partner UrbanIsland AG, a similar app developed by a Swedish company came onto the market, and local regulations prioritise public partnerships with local developers. The local project partner, however, still contributed to the development of the app content, provided critical local policy expertise throughout the project, and contributed substantially to project dissemination through pitch meetings and speaking engagements with critical stakeholders across the European urban sustainability sphere.
 - Izmir was also ultimately unable to release the app locally. In order to officially launch the app in Türkiye, the municipality was required to get approval from a national authority as a local legal data representative for the app. Such approval requires an intense assessment process that could only be initiated once the full version of the app was released publicly in Turkish. This assessment ultimately was delayed indefinitely, in part exacerbated by the government needing to prioritise an emergency response to the devastating earthquakes of 2023 and recovery following their aftermath. Despite this setback, the Municipality remained committed to supporting the app development, including by enabling the possibility in Turkish, which is a major native or second language in many European countries, and to exploiting the project's outputs to promote engagement around sustainable lifestyles across municipal departments and with other local stakeholders.

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- For communications purposes, Skopelos and the DAFNI network partners are coupled as one Lighthouse City, as Skopelos is part of the DAFNI network, and DAFNI provides them with close continuous support in the project. Additional cities within the DAFNI network also joined as Amplifier Cities. The DAFNI network also planned a series of events on three Greek islands between the end of February and early March 2024 to engage with a range of stakeholders implementing projects aiming to reduce their carbon footprints and enhance local resilience to climate change impacts.
- o CAMPAIGNers has a strong partnership with BEU and ASOIU, but is not engaged in a partnership with the Municipality of Baku. As such, Baku is not presented as a Lighthouse City. Nonetheless, BEU and ASOIU's efforts have enabled recruitment and engagement activities in Baku. The app has been available in Azerbaijan since its launch, and BEU and ASOIU have carried out multiple local communications and dissemination activities promoting the app in their communities, and provided translations for the Azerbaijani language version of the app.
- Originally, it was foreseen that Lighthouse Cities would publish press releases at the
 very beginning of the project. In citizen-oriented campaigns in particular, however, it
 can be counter-productive to push communications without the key anchoring call
 to action (downloading the app). As such, partners adhered to a public
 communications embargo until the launch period.
- Originally, Lighthouse Cities were foreseen to directly operate the Administrator Interface for launching city-level #CCchallenges. However, early in the app development stage, the Consortium, including Lighthouse Cities, decided instead to streamline back-end administration through a smaller number of non-Lighthouse City partners, and for WP3 to instead support an independent challenge development protocol with cities. First, this was done to ease the burden on Lighthouse Cities' capacities, allowing them to focus efforts on the content of prospective local challenges rather than on technical administration. This was also done to mitigate risks to security and to app system malfunctions due to technical errors, which increase in likelihood the more back end administrators there are. As such, WP3's challenge design toolkit, the development of the user-generated challenge app feature, and the challenge review guidelines developed with WP3 all sought to make new challenge design and reviewing challenges easier for city partners.
- In the Grant Agreement, a target of 15 total social media channels is specified, particularly because of the following: "For each language an individual Facebook fan page for the respective participants of the goal-setting network is created".
 Following further cost-benefit assessment after the start of the project, however, WP4

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partners found alternative options to support targeted engagement with citizens speaking different languages, while better streamlining communication channels and using resources more efficiently than would be possible creating and maintaining multiple new Facebook groups:

- The new in-app community feature, like all app content, is available in every main local language in Lighthouse Cities. Posts include a location tag, which allows users to easily filter posts from others in their community.
- Users are able to create their own groups within the app.
- o ICLEI administered an alias "CC Official" profile within the app, and acts as a community manager via the central Campaigners accounts on the citizen-oriented social media channels (Facebook and Instagram). The brand alias engaged with users' posts, with comment messaging that emphasises making progress in users' journeys and encourages challenge uptake. Each Lighthouse City translated a key list of common reaction phrases (e.g., "Congratulations!", "Ready for the next [lifestyle] challenge?") that the alias used for swift reactions to non-English language posts. Lighthouse Cities are also able to create city-specific alias accounts, through which they can post feed content in local languages, with targeted reach enabled through geographic tags.
- Lighthouse Cities received social media cards with content in their respective local languages.

Future outlook

Throughout the project, local partners stressed the vital importance of being able to provide localized content such as challenges that speak to real and current local issues as well as reference local resources to fulfil challenges (see: Focus Group analysis in D7.1). This is an important consideration for securing public authority partnerships in the app's future, if that's the model that's going to continue.

The user-generated challenge feature and monitoring dashboard are two features that can make it easier for future cities to benefit from exploiting the app, as they can propose locally-specific challenges and directly monitor the app's progress and access all of the anonymized data. While the funded project structure provided us the benefit of being able to give each Lighthouse City partner a tailored media package, the future campaign could consider providing a more general if simpler communications package for new city partners (similar to what was made for Amplifier Cities, for example) that would allow them to easily promote the app locally. Refer to D4.3 for more insights specific to communications strategy recommendations.

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3.4. WP 5: Continuous Data Analytics

3.4.1. Administrative Information

Table: Administrative Information WP5

| Title: | Continuous Data Analytics | | |
|---------------|--|--|--|
| Lead Partner: | FEEM | | |
| Involved | EI-JKU, NUIG, NTNU, UCT, IUE, BEU, ICLEI, SBK, E3M, MILAN, IZMIR, LAHTI, | | |
| Partner: | DAFNI, LINZ, SKOPELOS, FREISTADT, VILNIUS, PESARO, GRENOBLE, DUBLIN, | | |
| Partner: | MALMÖ, LIBERTAD | | |
| Start: | Plan: M5 | | |
| Start: | Actual: M5 | | |
| End: | Plan: M36 | | |
| ena. | Actual: M36 | | |
| Status: | completed | | |

3.4.2. Use of Resources

Table: Staff effort in the reporting period per partner and in total WP5 (incl. PM shifts as described in chapter 2.3.1 Shift in Resources)

| Staff effort in person*month Plan vs. Actual | Plan (M1-M36) | Actual (M1-M18) *incl. adjustment | Actual (M19-M36) |
|--|------------------|-----------------------------------|---------------------|
| EI-JKU | 12.00 | 6.94 | 9.60 |
| NUIG | 3.00 | 1.06 | 1.46 |
| NTNU | 1.00 | 0.12 | 0.00 |
| UCT | 11.00 | 5.18 | 5.52 |
| FEEM | 9.50 | 4.49 | 4.90 |
| IUE | 2.00 | 0.20 | 1.45 |
| BEU | 3.00 | 1.50 | 1.50 |
| ICLEI | 2.00 | 0.24 | 2.39 |
| SBK | 7.50 | 0.00 | 4.80 |
| E3M | 2.00 | 0.42 | 2.83 |
| MILAN | 0.50 | 0.30 | 0.20 |
| IZMIR | 0.50 | 0.05 | 0.55 |
| LAHTI | 0.50 | 0.13 | 0.04 |
| DAFNI | 0.50 | *0.33 | 0.13 |
| LINZ | 0.50 | 0.06 | 0.05 |

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| SKOPELOS | 0.50 | 0.20 | 0.50 |
|-----------|-------|-------|-------|
| FREISTADT | 0.50 | 0.00 | 0.00 |
| VILNIUS | 0.50 | 0.00 | 0.50 |
| PESARO | 0.50 | 0.20 | 0.40 |
| GRENOBLE | 0.50 | 0.00 | 0.30 |
| DUBLIN | 0.50 | 0.00 | 0.50 |
| MALMÖ | 0.50 | 0.00 | 0.60 |
| LIBERTAD | 0.50 | 0.00 | 0.00 |
| ASOIU | 0.50 | 0.30 | 0.20 |
| Total | 60.00 | 21.72 | 38.42 |

3.4.3. Objectives, Progress and Deviations

Objectives

The overall objective of WP 5 is to provide statistical tools and the related IT infrastructure for analysing the data from the goal-setting network:

- ▶ Objective 5.1: Establish an IT data transfer and storage back end in compliance with GDPR.
- ▶ Objective 5.2: Develop automated data validation and statistical analysis protocols.
- ▶ Objective 5.3: Contribute continuous efficacy reporting that feeds outcomes and user-experiences back to the app developers (WP 2), and the socio-economic research teams tuning the #LifestyleChallenges (WP 3) and for monitoring citizens engagement (WP 4).
- ▶ Objective 5.4: Synthesize findings from the various field trials to identify over-arching best practices for the CAMPAIGNers approach and calculate the potential effects of lifestyle changes to climate mitigation pathways as input to WP 6 and policy inputs to WP 7.

Tasks

| Task 5.1 | Data storage, transfer and query with GDPR compliance | |
|----------------------------|---|--------------------|
| Runtime | Start (planned): M5 | End (planned): M10 |
| | Start (actual): M5 | End (actual): M19 |
| Lead and involved partners | Lead: SBK Partners: EI-JKU, FEEM | |
| Status | completed | |

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| Related deliverables | D5.1 Specifications of the CAMPAIGNers database | |
|---|--|--|
| Task description & Status | | |
| Goal of the task as described in the GA | The first Task in establishing a continuous data analytics system is to ensure comprehensive data storage, transfer and query that is GDPR compliant. Based on the existing database structure of SBK's IT backbone, this task essentially requires the creation of two webbased outputs: | |
| | 1. A database, likely based on SQL data storage and query language, that is accessible via the web and secured with GDPR compliant authentication systems. | |
| | 2. A REST API, which is a web endpoint that allows for data transfer over the web in an automated way, with GDPR compliant authentication systems, including access and usage documentation. | |
| | These two outputs will be fully assessed for GDPR compliance by the legal experts at partner EI-JKU, who specialize in data and GDPR topics (Task 9.3). This task will run past the initial release of these two outputs to give support and bug fixes in the context of the WP 5 work plan. | |
| Description of work | Pushed LSCs have been implemented in the APP to elicit the 'natural' propensity of APP users for environmentally friendly behaviours. Following the LSC popup, users are required to either accept or reject the signalled LSC. This strategy was deemed the most appropriate for estimating some of the parameters needed by WP6 as inputs for the mathematical models. | |
| | Deliverable D5.1 has been submitted in M17 and approved in the 1st Reporting Period. | |
| Deviations | Except for the delay in submitting the corresponding deliverable, no deviation was observed. | |

| Data validation and statistical analysis protocols | Task 5.2 | Data validation and statistical analysis protocols |
|--|----------|--|
|--|----------|--|

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| Runtime | Start (planned): M6 | End (planned): M24 |
|----------------------------|--|--------------------|
| | Start (actual): M6 | End (actual): M24 |
| Lead and involved partners | Lead: EI-JKU Partners: FEEM, UCT, BEU, E3M | |
| Status | completed | |
| Related deliverables | D5.2 Continuous data analytics protocols | |

Task description & Status

Goal of the task as described in the GA

This task will develop (semi) automated data science protocols that interact with the database developed under Task 5.1. The purpose of these data protocols is twofold:

- 1. Data validation to run tests on the data sets to ensure consistency and quality in data reporting. This constitutes a test of the IT system developed in WP 2, and of the database in Task 2.1. These tests will be run at regular intervals during data collection (daily or weekly), to ensure that no bugs or issues enter the IT and data systems.
- 2. Data analysis A critical feedback loop in CAMPAIGNers is between the implementation teams (WPs 3 and 4) and the policy (WP 7) and mitigation pathway (WP 6) teams. The constant data analysis represents the tangible link between these teams, by generating quantitative and qualitative results from the field trials in an accessible format. Qualitative results will take the form of graphics, displaying e.g. the stated levels of interest in a tested #LifestyleChallenge. Quantitative results will follow the big data treatment effect estimation techniques developed in the PEAKapp (#695945) project, among others. Statistical methods will be used to estimate the effects of #LifestyleChallenges and associated treatments on the stated actions/choices of users to establish quantitative relationships between policy and environmental, financial, information and social stimuli. These quantitative results will then be fed as inputs to energy economy modelling in WP 6 and policy analysis in WP7.

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The first step is to use the database queries developed in Task 5.1, to access the database created in 2.1. This will be accomplished via a REST API endpoint described in Task 5.1. The second step is data validation, which will be accomplished through automated tests and alert systems. For example, new data will be tested for missing values, missing values in unexpected fields will generate email alerts to WP 5 teams who can then check for exceptions. A similar criterion can be developed for the number of zeros in the data, or for error string codes, e.g. "9999". The third step is data analysis. A number of cutting-edge data science techniques will be tested here, such as automated model search and iterative testing. Ultimately the statisticians in the WP 5 team will establish 'best fit' categories of models that i) are theoretically sound ii) are capable of identifying the factors behind the decision to accept the challenge and 3) have the potential to predict the successful achievement of the challenge goals. This will allow the results generated after each #LifestyleChallenge or treatment to be comparable. The final step is report generation, which will be created using open source and reproducible markdown scripting and produce either static PDF reports or dynamic HTML markdown where the results can be viewed and explored from external sources via a graphical user interface. These protocols will be developed based on mock-up data at the beginning of this task and move to using data from the field after the roll-out of the goalsetting network in M13. In M12 the first version of the working system will be provided. This system will be updated during the task's runtime with the final version provided in M24 as D5.2. The entire system will be open source, accessible on Github or a comparable repository, and developed under the FAIR principles of research practice and data sharing. The system will be developed in Python or R scripting language, which are free, easily accessible, popular coding languages.

Description and progress of work

At the core of this task, an R package was developed to generate automated HTML or R Shiny reports. R is a free and open-source statistical programming language that allows the development of extensions and share them with the open-source community. The package is publicly available on GitHub and the related deliverable contains a step-by-step guide to accessing the

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package and generating reports. The package includes functions to retrieve the app data from the public API endpoints, and to clean and prepare the datasets. The report shows methods to visualise and handle missing values, visualises app user data, gives an overview of the variables used to calculate the CO₂ footprints of app users, contains an interactive overview-table of all challenges, and provides an exemplary descriptive evaluation of the top 10 challenges. The package allows all data to be saved as an Excel file, which was regularly uploaded to the shared project folder on Google Drive for further analysis.

This is hence a useful and complementary tool to the CAMPAIGNers *Monitor* developed in Task 5.4.

In addition, regression analysis was conducted for all the LSCs in the APP to model users' behaviour in succeeding (and/or accepting) LSCs. Key parameters and conclusions were derived, providing additional info for WP6 and some key messages for WP7.

Deliverable D5.2 has been submitted in M25.

Deviations

As described in the deliverable, a quantitative assessment using econometric analysis was only partially feasible due to data availability and for this reason accomplished at the end of the reporting period. Additionally, the asymmetric distribution of APP users (with one third located in Lithuania alone) necessitated splitting the database between Lithuania and the rest of the world and conducting the analysis separately (instead of bootstrapping proportionally the data). Regression analysis was applied specifically to model and understand APP users' behaviour in succeeding (and/or accepting) LSCs, considering fundamental regressors such as age, educational background, and working status.

| Task 5.3 | Continuous research design and reporting of behavioural results | |
|----------|---|--------------------|
| Runtime | Start (planned): M10 | End (planned): M36 |
| | Start (actual): M10 | End (actual): M36 |

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| Lead and involved partners | Lead: UCT Partners: EI-JKU, NUIG, NTNU, FEEM, ICLEI, all Lighthouse Cities |
|----------------------------|--|
| Status | completed |
| Related deliverables | D5.3 Report on internal workshops and the process to define research questions |

Task description & Status

Goal of the task as described in the GA

While Tasks 5.1 and 5.2 set up the technical requirements and back-end for continuous analytics, Task 5.3 defines the scope of the analytics by specifying research questions and designing data analysis and reporting tools. Research questions will be co-defined through the collaboration with partner cities and policy-makers to ensure that the analytics meet the needs of the various stakeholders, as well as meeting needs of other WPs, e.g. Task 4.3 requirements and WP1 and 3 research interests. This will involve an internal trans- and inter-disciplinary process, including internal surveys, participation to the virtual coordination meetings organised by Task 7.1 and culminating with a dedicated workshop for co-creating research questions (in M14) with local, national and EU level policy makers that will follow the best practices for multistakeholder collaboration as defined in other large-scale research projects. Research questions will include the assessment of lifestyle change, engagement, and estimating citizen preferences, willingness to engage, information effects, and the potential for lasting engagement. This task will provide the research and analytical support to updating and designing new #LifestyleChallenges in Task 3.3.

Data collection tools will be designed throughout the runtime of this task to answer the defined research questions, respond to changes within the app system, and address new areas of interest that come up during the runtime. Data tools include surveys given to citizens upon completing a challenge or downloading the app, and analysis of app usage and engagement data.

This is an iterative and co-creative process that involves the municipal stakeholders, and the citizens who are recruited into the study. This is one outstanding and innovative aspect of

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CAMPAIGNers, that the citizens using the app will also have the ability to participate through citizen science initiatives, by developing their own #LifestyleChallenges, suggesting research questions, and survey items through the app interface. Likewise, the municipalities and urban planner partners will be continuously involved.

Description and progress of work

Over the course of Task 5.3, all partners worked to collaboratively identify and co-create research questions. These questions, over the course of the project, were then used to direct further research effort by related partners to report on aspects related to these questions, which were largely behavioural in nature (continuous reporting of behavioural results).

While in the first reporting period priority areas of concern have been identified, in the second reporting period a series of small workshops have been organized, to co-create research questions, and prioritise them, building on a priority framework developed in the earlier ICLEI work. This was followed by workshops with WP5.3 partners to identify which of the priority research questions could be answered, and how that might be possible. The second inperson GA allowed a focused group of WP5.3 and any other interested partners to interrogate efforts so far and offer refinements to research questions. A final round of consultation was held with all partners (scientific, implementation, and cities) in August 2023 to elicit any further refinements to research questions in light existing work against research questions, and, especially in light of low uptake of the app, and thus much less-than-expected data with which to work. This work is summarised in Deliverable 5.3. Research work delivered by various partners to address research questions arising from this process (reporting behavioural results continually over the project) include the following:

- Dashboard of challenges taken up and completed by city (FEEM & SBK)
- Monthly reports (automated) providing results of challenge uptake, completion by demographic and geographic subpopulations of interest which were repeatedly noted as important research questions by partners in the co-creation process. (EI-JKU)

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| | Pragmatic assessment of advertising and marketing strategies to see if low-uptake could be countered (ICLEI, Saints) Acceptance and Completion of Challenge econometric analysis by sub-populations of interest (FEEM) Periodic overviews at online and in-person consortium meetings. In response to Research Questions raised about behavioural aspects of the project, NTNU provided periodic updates of how the app was performing among various groups of challenges (such as those related to transport or requiring the same level of effort). Qualitative interviews with Lighthouse City partners on the role of this sort of app in municipal management (NUIG) Attempted RCT. To further attempt to identify framing effects, especially around ecological and social motivations, NTNU designed an RCT that was partially implemented. However, due to unforeseen constraints in the app, the RCT was unable to be implemented completely, and identification was not achieved. |
|------------|---|
| | Deliverable D5.3 Report on internal workshops and the process to define research questions has been submitted in M36 |
| Deviations | No deviations. However, the progress of analysis, and the detail to which partners could develop research questions through cocreation was slowed down by the lower than anticipated uptake of the app, with related diminished sample size to work with in order to answer research questions related to sub-populations, many of which were of interest to partners. |

| Task 5.4 | CAMPAIGNers Monitor: An interactive dashboard of results from the goal-setting network | |
|----------------------------|--|--------------------|
| Runtime | Start (planned): M7 | End (planned): M36 |
| | Start (actual): M7 | End (actual): M36 |
| Lead and involved partners | Lead: FEEM | |
| partiters | Partners: EI-JKU, NUIG, UCT, IUE, SBK | |

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| Status | completed |
|----------------------|---|
| Related deliverables | D5.4 CAMPAIGNers Monitor and user guide |

Task description & Status

Goal of the task as described in the GA

Tasks 5.2 and 5.3 will produce a wealth of data, results and process related reflections that will need to be synthesized for dissemination and communication, in addition to being used for the publication of scientific papers. Task 5.4 will manage this process providing a user interface to access the collected data and results in an intuitive and user-friendly manner. The purpose of this tool is to enhance and facilitate the participation of stakeholders, and especially local administrators, allowing them to get sense of the ongoing work made by the scientific partners and, based on that, provide feedback for the continuous development of the project. To achieve this goal, the tool will be organised in two sections. The first section will allow exploring the aggregate data collected through the app usage in a manner that allows comparison over time and across space. A group of dynamic tabs will show the aggregate data based on the user changes in preferences of visualisation. That will serve the purpose of comparing app usage data across cities and regions. The second section will allow the user to explore the results of the data analysis reports in Task 5.3 in a comparative way. In particular it will focus on how users react to policy, environmental and behavioural stimuli and which factors are capable of influencing the acceptance and success of behavioural change and showing how the influence of these factors changes across cities and, within cities, among age, gender, income or other relevant category groups, and also in relation to the specific #LifestyleChallenges. These insights will be synthesized, summarized, and used to define best practices for the CAMPAIGNers system, and tips for adopting the system that are tailored to specific geographies and nations, as well as to elaborate place-based policy recommendations at the municipal and regional levels that are shown to lead to lowcarbon lifestyle adoption under WP7. Finally, observed and potential changes in lifestyles will be exported by this task as inputs

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| | to energy and climate pathway modelling in WP 6. These items will |
|------------------|--|
| | be included in D3.5 and the Monitor. |
| Description and | Due to a delay in the implementation of the Campaigners Monitor |
| progress of work | and its online access, deliverable D5.4 has been slightly modified from its initial submission and the web link to access the monitor (https://climate-campaigners.app/dashboard-monitor) has been included in the revised deliverable. To provide additional information to WP7 and WP6, regression analysis, specifically the Logit model, was applied within tasks 5.2 and 5.3 to model and understand APP users' behaviour in succeeding (and/or accepting) LSCs. |
| | D5.4 CAMPAIGNers Monitor and User Guide was originally submitted in M15 but was revised and resubmitted in March 2023 with the inclusion of the web link to access the monitor. |
| Deviations | None |

Milestones

Milestone 5 - CAMPAIGNers Monitor goes online:

With a slight delay the Campaigners Monitor went online in March 2023 (M23) and can be accessed through the following weblink https://climate-campaigners.app/dashboard-monitor. Deliverable 5.4 has been revised to include such link in the report.

The monitor has been implemented as described in deliverable D5.4, it provides a tool for querying APP user data, offering fundamental statistics on environmentally friendly behaviour of APP users along with key user contextual information, such as age, gender, income, education, and working status. The platform is GDPR compliant.

Concluding remarks on WP

The aforementioned milestone is not the only key component of WP5; the database developed in Task 5.1 and the R Cran tool for automated reporting and data processing in Task 5.2 are fundamental inputs for research design and reporting of behavioral results (Task 5.3). These contributions have, in turn, provided valuable information for WP6 and WP7.

Unquestionably, the results obtained depend not only on sample size, a common issue in statistical research, but also on the specific manner in which data has been collected, which could foster the so-called *selection bias* statistical issue.

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Regarding the first point, during the second reporting period, additional efforts were made to increase the participation rate (through municipality involvement, marketing strategies, etc.) of APP users; however, the participation rate was lower than desired. The only exception was Lithuania, where municipalities successfully implemented reward mechanisms (free tickets to swimming pools, cinemas, buses, etc.), resulting in a high enough participation rate to derive robust statistical analysis (however conditional to a reward system).

Regarding the second point, WP6 and WP7 were informed that collecting data through a freely available app created a selection bias, hence a non-random sample: environmentally conscious users are more likely to be included in the sample, while non-technological users are likely to be excluded. Consequently, it is unclear whether we are overestimating or underestimating environmentally friendly behaviors based on the participation and success rates in LSCs.

3.5. WP 6: Modelling Mitigation Pathways under Lifestyle Transformation

3.5.1. Administrative Information

Table: Administrative Information WP6

| Title: | Modelling mitigation pathways under Lifestyle Transformation | | |
|---------------|--|--|--|
| Lead Partner: | E3M | | |
| Involved | EL JULI LICT DIV FEEM ILIF CANE LAUTI | | |
| Partner: | EI-JKU, UCT, PIK, FEEM, IUE, CANE, LAHTI | | |
| Start: | Plan: M3 | | |
| | Actual: M3 | | |
| End: | Plan: M32 | | |
| | Actual: M36 | | |
| Status: | completed | | |

3.5.2. Use of Resources

Table: Staff effort in the reporting period per partner and in total WP6

| Staff effort in person*month / Plan vs. Actual | Plan (M1-M36) | Actual (M1-M18) | Actual (M19-M36) |
|--|------------------|--------------------|---------------------|
| EI-JKU | 2.00 | 0.00 | 1.94 |
| UCT | 5.00 | 1.18 | 5.88 |
| PIK | 19.00 | 0.00 | 22.62 |

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| Total | 54.50 | 12.06 | 48.63 |
|-------|-------|-------|-------|
| HEAS | 0.50 | 0.00 | 0.49 |
| LAHTI | 1.00 | 0.00 | 0.34 |
| E3M | 23.00 | 10.18 | 14.34 |
| CANE | 1.00 | 0.40 | 0.59 |
| IUE | 3.00 | 0.30 | 2.43 |

3.5.3. Objectives, Progress and Deviations

Objectives

The overall objective of WP6 is to is to develop new attainable decarbonisation pathways, which, for the first time, include in the most realistic and scientifically robust way possible the important dimension of citizens' lifestyles. By exploiting data and insights from the CAMPAIGNers goal-setting network, the largest source for collecting citizens' lifestyle-related preferences, decisions, opinions, obstacles and ideas, WP6 will develop and quantitatively assess the relationship between realistic lifestyle transformation and carbon mitigation pathways in European countries, the EU, and globally. It will do so by fully taking into account COVID-19 impacts on the economy, energy system, behavioural changes (e.g., remote working) and greenhouse gas emissions. These pathways will provide measurable support to the EU's Green Deal and its long-term strategy towards climate neutrality and will be directly used to inform WP7 on Multi-Level Policy Advice and EU Strategy Support. The key objective requires several sub-objectives:

- ▶ Objective 6.1: Improve capabilities of leading energy-economy and Integrated Assessment models to represent lifestyle changes and calculate the impacts of lifestyle changes.
- ▶ Objective 6.2: Develop an improved understanding of the implications of radical consumer-driven transformations and lifestyle changes in the transport and residential sectors.
- ▶ Objective 6.3: Assess the potential for upscaling of changes in social norms, behaviours and consumer lifestyles and their systemic impacts for energy, transport and food systems, greenhouse gas emissions and broader sustainability impacts to support the EU's strategy to climate neutrality by mid-century.
- ▶ Objective 6.4: Synthesise findings from model-based decarbonisation pathways under lifestyle transformations to identify policy recommendations to accelerate climate action progress and provide input to WP7 and support the EU long-term strategy.

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Tasks

| Task 6.1 | Gap analysis and modelling lifestyle changes | | |
|----------------------------|---|--------------------|--|
| Runtime | Start (planned): M3 | End (planned): M22 | |
| | Start (actual): M3 | End (actual): M22 | |
| Lead and involved partners | Lead: E3M Partners: EI-JKU, PIK, FEEM, UCT, CANE, LAHTI | | |
| Status | completed | | |
| Related deliverables | D6.1 has been submitted in M31. Internal working document of the gap analysis (delivered in M18) | | |
| | | | |

Task description & Status

Goal of the task as described in the GA

While setting up quantitative modelling and scenarios for lifestyle changes, there will be gaps, both in empirical data and in the structure of energy-economic models used to analyse mitigation pathways. These gaps will be identified in this task. The analysis will be informed by a detailed literature review on the interlinkages of behavioural lifestyle changes with energy and climate policy instruments and mitigation pathways (Tasks 1.1 and 3.1). The gap analysis will include methodological limitations in current state-of-the-art models used for climate policy analysis, data limitations on quantifying consumer behaviour and low-carbon practices to suggest and implement concrete and practical enhancements to leading modelling frameworks to better capture the barriers, potentials and impacts of lifestyle changes in a realistic and coherent manner. This may include more complete representations of consumer energy choices in e.g., electric mobility adoption, transit mode choice, energy efficiency in buildings, and behavioural demand response, based on data from CAMPAIGNers (WP 5) and past empirical projects (e.g., ECHOES and PEAKapp). Leading modelling tools will be further improved to consistently represent lifestyle changes, e.g., by separating different consumer groups (as current models commonly represent one representative household) based on

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their characteristics and by including improved and detailed representations of behavioural and investment decisions of consumers, with a special focus on the transport and residential sectors. To avoid duplication of work and ensure maximum synergies with ongoing modelling efforts in openENTRANCE, NAVIGATE, NewTrends and INNOPATHS projects, an open line of communication through consortium channels will be kept with these projects (facilitated by the direct involvement of EI-JKU, PIK, E3M) including public channels such as participation in EMP-E meetings. Updated data and representations of lifestyles will be integrated in state-of-the-art modelling tools covering EU countries (PRIMES, REMIND, EDGE) and global PROMETHEUS, EDGE). Detailed validation and assessment of models' behaviour integrating lifestyle changes will be conducted to ensure that models produce realistic results through the design and implementation of detailed diagnostic scenarios.

Description and progress of work

During M3-M22, the work in this task focused on the identification of the current gaps in the methodologies adopted when representing lifestyle changes or shifts in consumer behaviours within the framework of energy-economy models or Integrated Assessment models (IAMs). These gaps relate to the current capacity of large-scale ESMs and IAMs to represent the wide range of possible lifestyle transitions in demand-side sectors, as well as their drivers and costs. We conducted a detailed and structured literature review on the gaps regarding the mathematical structure of these models (i.e., assess the actual mechanisms based on which lifestyle changes are represented in the model) and data availability (i.e., focus on the scarcity of detailed data on observed consumer behaviours). The gap analysis is informed by a detailed review of the academic and scientific grey literature on consumer-driven transitions, based primarily on IAM and ESM-based mitigation pathways. This outcome of the gap analysis comprises the key findings from the detailed literature review and suggestions on how largescale energy system models can improve the representation of lifestyle changes, with a specific focus on the mobility and residential services sectors. These suggestions will form the basis

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to improve the modelling tools available in the consortium (PRIMES, REMIND, EDGE, PROMETHEUS, PRIMES-Buildings, GEM-E3) with an enhanced representation of lifestyle and behavioural changes to be conducted in subsequent WP6 tasks. The gap analysis results have also links to the tasks of other WPs such as the one responsible for the aggregation and statistical analysis of big data on energy and transport preferences obtained through the CAMPAIGNers app (tasks 5.3 and 5.4). It also provides input to the design and refinement of #LifestyleChallenges which will be given to app users from the lighthouse cities (task 3.3). This report therefore highlights the important synergies which exist between the work performed in WP6, WP5 and WP3. Finally, informed by the gap analysis and the interactions with other works streams of the project, WP6 team has developed a prioritisation of the most important lifestyle changes that have the highest emission impacts and can be included in large-scale models, focused on the mobility and residential sector and has provided it for the design of #LifestyleChallenges in WP3.

Deliverable D6.1 has been submitted in Month 31 (in line with the DoA). A scientific article has been published in a peer-reviewed journal, including the analysis of the main gaps in the representation of lifestyle changes in energy system and Integrated Assessment models (Andreou et al. 2022). In addition, an internal working document of the gap analysis has been developed and circulated within the consortium in Month 18, to be used to inform further refinements of #LifestyleChallenges in Task 3.3 to try to fill the identified gaps related to the modelling of lifestyle transformations. Finally, the work on gap analysis has been selected and presented as a poster in the annual conference of the European Climate and Energy Modelling Platform 2022.

Deviations

There are no deviations in the implementation of this task.

| Task 6.2 | The impacts of lifestyle changes in mobility services | |
|----------|---|--------------------|
| Runtime | Start (planned): M15 | End (planned): M28 |

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| | Start (actual): M15 | End (actual): M28 |
|---------------------------|---|-------------------|
| Lead and involved | Lead: E3M | |
| partners | Partners: PIK, EI-JKU, UCT, IUE | |
| Status | completed | |
| Related deliverables | D6.1 has been submitted in M31. | |
| Task description & Status | | |
| Goal of the task as | In this task, quantitative results from Tasks 5.3 and 5.4 will be | |

Goal of the task as described in the GA

integrated into transport sector modelling tools updated in Task 6.1. The impacts of lifestyle changes on the transport sector and interactions technology deployment their with decarbonisation policies will be analysed with a specific focus on the potential for modal shifts to public transportation (in urban and rural areas), deployment of electric vehicles, mobility-as-aservice, car sharing and 'light' transport modes (cycling, walking, electric scooters, etc.). Using the effects identified in WP5, combined with advanced consumer choice modelling for personal transport, the PRIMES-Transport and REMIND-EU models will be enhanced to assess the impacts and synergies among different consumer-driven changes and disruptive innovations in person and freight transport in order to develop achievable mitigation pathways integrating lifestyle changes.

The enhanced modelling tools will test the energy system and climate impacts of the CAMPAIGNers solution in transport service demand and mobility trends under various assumptions of uptake, taking into account possible differentiations among consumer groups based on income, location, age etc. The task will also evaluate gradual strategies to greatly improve efficiency in the transport sector but also disruptive lifestyle changes, such as car-sharing schemes.

Description and progress of work

The work in task 6.2 started by defining the research questions and lifestyle changes that are most relevant for the transport and mobility sectors. A workshop has been conducted with all task partners to discuss the current capabilities of the transport-

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focused models (of E3M, PIK and UCT) on the representation of alternative lifestyle and behavioural changes. Following the workshop, a concrete planning on how to improve the modelling tools covering the transport sector and how to integrate big data from the CAMPAIGNers app related to mobility. In collaboration with partners, we have developed a detailed plan to implement the required modelling developments and enhancements (e.g. to improve the simulation of consumer choice between private and public transport, to better integrate active transport modes, to capture the potentials for modal shifts by region and country) and finalise them on time.

In the absence of usable CAMPAIGNers app data, a workshop with Lighthouse city experts was also designed to identify the lifestyle changes with the highest adoption probability in the transport sector for their city/country and under different policy contexts.

We then developed a scenario design protocol focusing on the role of lifestyle changes in the transport sector towards meeting the EU NDC for 2030 and ambitious decarbonisation pathways until 2050. The scenarios explored the interactions between ambitious climate policies and lifestyle changes in the transport sector and showed that behavioural changes can lead to reduced emissions especially in the medium term by inducing modal shifts from private to public or active transport modes in all EU countries. However, lifestyle changes should be accompanied with ambitious climate policies to ensure a smooth and cost-efficient transition towards net-zero emissions by 2050.

D6.1 has been submitted in M31. Since data from the CAMPAIGNers app were not available during the preparation of this deliverable, the focus of D6.1 was shifted towards demonstrating the modelling improvements integrated in sectoral models through scenario analysis.

Deviations

There are no deviations in the implementation of this task.

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| Task 6.3 | The impacts of lifestyle changes in residential services and consumer goods | |
|----------------------------|---|--------------------|
| Runtime | Start (planned): M12 | End (planned): M28 |
| | Start (actual): M12 | End (actual): M28 |
| Lead and involved partners | Lead: PIK Partners: E3M, UCT, IUE | |
| Status | completed | |
| Related deliverables | D6.1 has been submitted in M31. | |

Task description & Status

Goal of the task as described in the GA

This task will analyse the emission-reduction potentials and climate impacts of a wide range of novel consumer facing innovations and lifestyle changes in the residential sector. To do this, we develop scenarios for demand side transformations, focused on a selection of these lifestyle changes informed by Tasks 5.3 and 5.4 results and data, including consumer goods, heating behaviours, retrofit strategies, digitalization etc. Leading models covering the buildings sector in detail (PRIMES-BuilMo, EDGE) will be enhanced with a disaggregated representation of consumer groups and integrate evidence from WP5 on the achievable potential for lifestyle changes in these groups (differentiated by income, age, location, urban/rural, gender) as well as discount rates by consumer type and income class, hidden and intangible costs by income class and building type, household preferences for deep renovation. This information will be used to improve the representation of lifestyle changes and consumer behaviour in residential energy modelling in leading Integrated Assessment Models (REMIND, PRIMES, PROMETHEUS, GEM-E3). The effectiveness of policy instruments to trigger lifestyle changes in the residential sector will be explored with the enhanced modelling tools in order to quantify their impacts on emissions, energy consumption and mix, technology uptake and energy costs based on the empirical findings in Task 5.2, among others.

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Description and progress of work

The team defined the research questions and lifestyle changes that are most relevant for the residential services sector. A workshop has been conducted with all task partners to discuss the current model capabilities on the representation of lifestyle changes and define concrete steps on how to integrate big data from the CAMPAIGNers app and how to improve the models covering the building sector. In collaboration with partners, we have developed a concrete plan to implement the required modelling developments and finalise them on time.

These modelling developments included an improved split of energy consumption to specific end-uses in buildings, the integration of changes in lifestyles in the models, the enhanced representation of human behaviour (split into consumer classes) and the incorporation of various environmentally-sustainable lifestyle changes emerging from the project app and data analysis.

In the absence of CAMPAIGNErs app data, a workshop with Lighthouse city experts was also designed to identify the lifestyle changes with the highest adoption probability in the residential sector for their city/country and under different policy contexts

We then developed a scenario design protocol focusing on the role of lifestyle changes towards meeting the EU NDC and ambitious decarbonisation pathways until 2050. The scenarios explored the interactions between ambitious climate policies and lifestyle changes in the buildings sector and showed that behavioural changes can lead to reduced emissions especially in the medium term by inducing energy savings especially in space heating and cooling uses (e.g. through changes in thermostat set-points or the increased uptake of heat pumps). However, lifestyle changes should be accompanied with ambitious climate policies to ensure a cost-efficient transition towards net-zero buildings by 2050.

D6.1 has been submitted in M31. Since data from the CAMPAIGNers app were not available during the preparation of this deliverable, the focus of D6.1 was shifted towards demonstrating the modelling improvements integrated in sectoral models through

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| | scenario analysis. One manuscript based on this work is under review in a scientific journal. |
|------------|---|
| Deviations | There are no deviations in the implementation of this task. |

| Task 6.4 | Overall impacts of lifestyle changes on climate mitigation pathways | |
|----------------------------|---|--------------------|
| Runtime | Start (planned): M12 | End (planned): M32 |
| | Start (actual): M12 | End (actual): M36 |
| Lead and involved partners | Lead: E3M Partners: PIK, UCT, IUE | |
| Status | completed | |
| Related deliverables | D6.2 has been submitted in M36 | |

Task description & Status

Goal of the task as described in the GA

This task will integrate the improved representation of lifestyle changes across sectors and consumer groups developed in leading models in the preceding Tasks 6.1-6.3, and will assess the wider systemic implications towards the development of a new 'lifestyle-related' generation of GHG mitigation pathways to meet the Paris Agreement. These scenarios incorporate consumer changes in mobility and residential goods and services (from Tasks 6.2 and 6.3) and will be quantified with the leading energy system and Integrated Assessment Models (PRIMES, REMIND, EDGE, PROMETHEUS), which are further developed with a consistent integration of behavioural insights in Task 6.1. The developed mitigation scenarios will cover in detail the impacts of lifestyle changes on energy and food consumption for EU Member States and key major emitters outside EU aiming to reassess and improve (based on the achievable lifestyle changes) the latest European and international energy, climate and economic development pathways (e.g., those used in EU Green Deal assessment, Clean Planet for all strategy, IPCC AR6). Broader implications on energy, transport, industrial and

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agriculture systems as well as impacts on sustainability will be assessed with the state-of-the-art models and integrating the high-resolution representation of mobility and buildings from Task 6.2 and 6.3 model runs, fully taking into account COVID-19 impacts. The new mitigation pathways consistently integrating lifestyle changes will provide practical support to the EU's longterm strategy towards climate neutrality and advice on how to accelerate climate action in non-EU countries, comprehensively assessing the potential system-wide SDGrelated co-benefits of lifestyle changes (e.g., reduced investment requirements on the supply side, lower mitigation costs, improved air quality etc).

Using the comprehensive multi-sectoral multi-regional GEM-E3 model based on general equilibrium and input-output supply-chain framework, indirect effects of changing (through consumption patterns lifestyle changes) socioeconomic and environmental outcomes will be calculated, combined with analysis of changes in trade patterns. The task will provide cutting-edge, novel insights on the role and synergies of lifestyle changes with climate policy instruments and feed into the derivation of policy recommendations for national and EU policies and NDCs (Tasks 7.2 - 7.4). The relevance of the results for initiatives relating to health and other co-benefits for Sustainable Development Goals will also be explored.

Description and progress of work

This is the final task of WP6, and its implementation depends on the previous tasks, especially tasks 6.2 and 6.3. So, in the first reporting period, limited activities have been implemented in this task. However, WP6 has provided input for the policy papers of WP7 related to EU policies, recovery packages and NDCs. This activity will continue and further enhanced after M24 when the results of the new mitigation scenarios integrating lifestyle changes will gradually become available.

In the second reporting period, the modelling enhancements in the sectoral modules have been integrated in the core versions of the full-scale models that are used to explore the system-wide effects of lifestyle changes related to transport (e.g. reduced car use, shift to public and active modes of transport, reduced

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number of flights) and residential sector (e.g. thermostat temperature set-point adjustment, conservation of hot water, higher eco-mode use). The most important lifestyle changes from a mitigation potential and future adoption likelihood perspective were selected based on a gap analysis, continuous interactions with other WPs, data from the CAMPAIGNers app and input from two stakeholder workshops. In particular, results from the CAMPAIGNers app were used to develop a new scenario for full-system analysis, which lowers the overall ambition level of modelled lifestyle changes.

Results from the EU- and global-level scenario analysis demonstrated the significant impact of lifestyle changes on energy use and associated carbon emissions, especially under an existing climate policy framework. CO₂ emissions of the entire energy system were shown to decrease in 2050 by 8-13% for the EU and by 7% for the global case under the Medium Ambition Lifestyle Change variant, compared to the baseline scenario without lifestyle change. The majority of CO₂ emission savings is attributed to the transport sector due to its larger size compared to residential buildings, while the contribution from the power supply sector is also significant.

Decarbonisation policies in the EU and globally are the key drivers of CO₂ emission reductions, while lifestyle changes had overall a complimentary role. The additional CO₂ emission savings from lifestyle changes in 2050 in the decarbonisation context are only marginal as a big part of the energy system is already decarbonised. Nevertheless, the model-based analysis shows that lifestyle changes can accelerate the transition towards the EU climate neutrality and 1.50C global climate target, through additional carbon emission reductions in the medium-term. In this regard, lifestyle changes can be a safeguard to prevent departing from climate targets in case that less ambitious decarbonisation policies are implemented.

In addition to accelerating energy and CO₂ savings, lifestyle changes can also help to reduce the pressure placed on electricity and heat supply sectors, especially in a highly electrified system. Through lowering the demand for electricity, medium-ambition lifestyle changes were shown to decrease

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power generation in 2050 by 5-14% at the EU level and by 6% at the global level, below the levels of the basic decarbonisation scenario. This can lead to reduced investment and costs incurred by electric utilities, and network operators as well as to lower prices paid by final electricity consumers. The analysis indicated that reduced demand from lifestyle changes can lead to lower primary energy consumption levels and consequently to less demand for energy imports in the EU. Lifestyle changes could therefore lower the energy import bill of EU27 and other regions, thus reducing the susceptibility and vulnerability of the economies to uncertain energy import prices.

Furthermore, the analysis highlighted the important role of lifestyle changes in lowering energy system costs and reducing reliance on carbon removal technologies. The Medium Ambition Lifestyle Change scenarios achieve a 5–6% and 7–8% reduction in total energy system costs in 2050 under the two policy cases, respectively for the EU and global study. As a result, lifestyle changes could be highly beneficial for final consumers as they lead to reduced fuel bills, thereby partly mitigating the risk of energy poverty for low-income households. At the same time, the deployment of carbon removals in the EU can be reduced by 4–11% in the medium-ambition LC variant, showing that lifestyle changes could reduce the dependence on immature and expensive CDR options and help the EU achieve its climate neutrality goal.

Finally, the analysis of socio-economic indicators showed that lifestyle changes in the transport and residential sector can have a small, but positive effect on GDP, resulting from increased private consumption and investment in the EU economy. Small positive job impacts are observed in the public transport and commercial sector, due to increased production levels. On the other hand, negative employment effects are found in the energy supply sectors, as well as in air transport and manufacturing of transport equipment, due to reduced activity levels.

D6.2 has been submitted in M36. One manuscript based on this work is under preparation.

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| tions in the implementation of this task. | Deviations |
|---|------------|
|---|------------|

Milestones

Milestone 6: The impacts of lifestyle changes on climate change mitigation pathways

The Milestone has been achieved by M36 in line with the Grant Agreement. This is based on the finalisation and submission of Deliverables 6.1 and 6.2 including the results of sectoral and system-wide models with enhanced representations of lifestyle changes with respect to future emissions, energy, economic and sustainability indicators. The scenarios presented in D6.2 were also informed with insights gathered through the analysis of CAMPAIGNers app data on lifestyle challenge success rates. The Milestone is a major interdisciplinary scientific output of the project and forms the basis of two academic publications, with one manuscript being currently under review in a scientific journal and another one being currently under preparation.

Concluding remarks on WP6

During the CAMPAIGNers project, WP6 has progressed in line with the Description of Work, without any major deviations and has already produced a scientific publication (Andreou et al 2022) and an internal working document while two manuscripts are currently under review in scientific journals. The work in WP6 has focused on the development and finalisation of the gap analysis, the identification of the most important lifestyle changes to be included in large-scale energy system and Integrated Assessment Models and the prioritisation of these challenges to inform the selection of Lifestyle challenges through the CAMPAIGNers app. In addition, modelling advancements have been consistently integrated in sectoral and system-wide ESMs and IAMs to improve their representation of lifestyle changes (focused on the transportation and residential sectors) and the integration of big data from the CAMPAIGNers app. These modelling enhancements have been finalised during the second reporting period with the enhanced modelling tools being then used to develop a new generation of lifestyle-informed mitigation pathways for the EU and globally aiming to provide scientific and relevant recommendations to policymakers.

3.6. WP 7: Multi-Level Policy Advice and EU Strategy Support

3.6.1. Administrative Information

Table: Administrative Information WP7

Title: Multi-Level Policy Advice and EU Strategy Support

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| Lead Partner: | HEAS |
|-------------------|--|
| Involved Partner: | EI-JKU, NUIG, NTNU, UCT, PIK, FEEM, IUE, BEU, CANE, ICLEI, ECOLISE, E3M, MILAN, IZMIR, LAHTI, DAFNI, LINZ, SKOPELOS, FREISTADT, VILNIUS, PESARO, |
| Start: | GRENOBLE, DUBLIN, MALMO; LIBERTAD, ASOIU Plan: M7 Actual: M7 |
| End: | Plan: M36 Actual: M36 |
| Status: | completed |

3.6.2. Use of Resources

Table: Staff effort in the reporting period per partner and in total WP7

| Staff effort in person*month Plan vs. Actual | Plan (M1-M36) | Actual (M1-M18) *incl. adjustment | Actual (M19-M36) |
|--|------------------|-----------------------------------|---------------------|
| EI-JKU | 5.00 | 2.24 | 4.12 |
| NUIG | 6.00 | 1.69 | 7.48 |
| NTNU | 2.00 | 0.04 | 0.06 |
| UCT | 2.00 | 0.07 | 0.48 |
| PIK | 3.00 | 0.00 | 10.67 |
| FEEM | 2.25 | 0.56 | 1.80 |
| IUE | 6.00 | 2.30 | 3.24 |
| BEU | 2.00 | 1.00 | 1.00 |
| CANE | 9.00 | 4.30 | 4.12 |
| ICLEI | 8.50 | 1.40 | 9.46 |
| ECOLISE | 6.00 | *2.13 | 5.36 |
| E3M | 4.00 | 2.00 | 2.31 |
| MILAN | 2.00 | 0.10 | 1.90 |
| IZMIR | 1.00 | 0.05 | 0.17 |
| LAHTI | 0.50 | 0.03 | 0.35 |
| DAFNI | 0.50 | *0.35 | 0.17 |
| LINZ | 1.00 | 0.04 | 0.08 |
| SKOPELOS | 0.50 | 0.10 | 0.40 |
| FREISTADT | 1.00 | 0.03 | 0.33 |
| VILNIUS | 2.00 | 0.00 | 2.00 |
| PESARO | 1.00 | 0.50 | 0.90 |
| GRENOBLE | 1.00 | 0.00 | 0.60 |

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| Total | 80.00 | 22.48 | 66.11 |
|----------|-------|-------|-------|
| HEAS | 8.25 | 2.92 | 6.47 |
| ASOIU | 1.00 | 0.40 | 0.60 |
| LIBERTAD | 2.50 | 0.03 | 0.14 |
| MALMÖ | 1.00 | 0.20 | 0.90 |
| DUBLIN | 1.00 | 0.00 | 1.00 |

3.6.3. Objectives, Progress and Deviations

Objectives

This WP7 aims at transferring and distilling the scientific results of CAMPAIGNers into policy prescriptions at three- levels: the municipal, national and EU levels, and to communicate these prescriptions to policymakers and stakeholders.

The following sub-objectives will be achieved to meet the global objective outlined above:

- ▶ Objective 7.1: develop a policy plan for each LC. Use the knowledge generated through the #LifestyleChallenges as well as of LC reflexive workshops and design new, or adapt existing, city-level policies and strategy plans based on the new insights of the drivers and barriers to citizens' moving towards low-carbon lifestyles. Implement and test the policy plans where possible, and utilise the results as further input to amending policy plans.
- ▶ Objective 7.2: develop a policy guidebook that national governments can exploit in their preparation of the next (and future) NDCs.
- ▶ Objective 7.3: support the Global Stocktake Exercise by providing an indicator of supportive conditions for adopting climate-friendly lifestyles and a related position paper.
- ▶ Objective 7.4: provide measurable support to the EU and international strategies on GHG emission reductions, by providing a long-term vision and general recommendations for various policy levels, from regional, to national, and EU.
- ▶ Objective 7.5: provide specific advice to FCs and local actors of how to incentivize the adoption of low-carbon lifestyles and use behavioural/climate science in the local context.
- ▶ Objective 7.6: bring local, regional and EU policy makers together and facilitate a process of mutual exchange for policy action that can accelerate citizens' transition towards more climate-friendly lifestyles.

The first Deliverable (D7.5) has been submitted in June 2022 and was described in the 1st Periodic Report. All the other Deliverables were submitted during the 2nd Reporting Period.

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Tasks

| Task 7.1 | Continuous evaluation of knowledge gained and derivation of policies for each Lihthouse City | | |
|----------------------------|--|--------------------|--|
| Runtime | Start (planned): M12 | End (planned): M34 | |
| | Start (actual): M12 End (actual): M34 | | |
| Lead and involved partners | Lead: HEAS Partners: EI-JKU, ICLEI, NUIG, UCT, IUE, BEU, all Lighthouse Cities | | |
| Status | completed | | |
| Related deliverables | D7.1, D7.7 | | |

Task description & Status

Goal of the task as described in the GA

In this task the outcomes of the goal-setting network, provided by Task 5.3 and interpreted through the behavioural science lens by Task 3.3, are regularly assessed from a policy perspective, i.e., taking into account knowledge gained and its value for designing specific policy plans and roadmaps for each LC. The ultimate objective of this task is to co-create with the LCs specific policy solutions for the opportunities identified in D1.2 that result in a higher share of citizens showing the (city-specific) target behaviours defined in D1.3. The following activities ensure achievement of this objective:

a. prepare the initial version of the living document Policy files documentation, starting by listing the prioritized target behaviours (from D1.3) and respective questions/knowledge gaps for targeting policy

b. organize bi-monthly virtual coordination meetings between Task 3.3, Task 5.3 and Task 7.1, critically assess the information and (behavioural science) interpretation of Task 3.3, regarding its value for adjusting existing policies and developing new ones. Judge which questions are resolved and which are still open and update the Policy files documentation accordingly.

c. when open questions from D1.2 are marked as 'resolved' under step b. for a particular LC, then a policy for addressing the target behaviour can be designed. Such proposals for policies are included in the living

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document Policy files documentation and LCs assess the needed preparatory steps and political procedures for implementing the new policy.

d. for those policies with (relatively) low complexity, which can be installed in a reasonably short period (e.g. change in the public transport timetable, no-meat days in cafeterias of municipal buildings, etc.), the Lighthouse Cities aim for implementation within the project runtime. The impact of the new policy on the behaviour of affected citizens can then be tested in a robust pre-, post-intervention framework with targeted #LifestyleChallenges.

Description and progress of work

The Task 7.1 originally aimed at creating a living document which was intended to detail specific city-level policy solutions for the opportunities identified through WP 1's work for each LCs, based on the results generated from the app data.

However, at the Task 7.1. kick-off meeting, local actors' feedback overwhelmingly indicated the initially proposed approach would offer limited practical value given the real pace of local policy changes in the relevant domains. Instead, an approach shifting towards experience and good practice exchange between city practitioners and policy experts, alongside recommendations for policy pathways that cities could apply to a variety of policies and documents, rather than the initially envisioned more narrow and prescriptive approach, was encouraged.

The adapted work plan for Task 7.1 still envisioned the initiation of the foreseen interactions between Tasks 3.3, 5.4, and 7.1 and the LCs to share policy-relevant insights that would emerge from app data generated, and ultimately inform the recommendations of Deliverables D7.1, D7.6 and D7.7, as soon as there was sufficient data from the app. However, insufficient app data, especially at the city level, meant it was not possible to justify specific city-level policies based solely on app data. Thus, D7.1, in contrast to the Grant Agreement description, rather primarily relies on a synthesis of insights from the outcomes of the focus groups and policy workshops.

Related deliverables D7.1 and D7.7 has been submitted in M36.

Deviations

D7.1 has been entitled "Report on policy-related findings to support local authorities in fostering the adoption of climate-friendly lifestyles"

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instead of "Policy files documentation" as indicated in the Grant Agreement, as the writers felt this better reflects the actual work carried out in the related Tasks 7.1 and 7.5, and, consequently, the content of this deliverable. This was coordinated and agreed by the Project Officer.

| Task 7.2 | Operationalizing scientific support for addressing lifestyles in NDCs | |
|----------------------------|---|--|
| Runtime | Start (planned): M15 End (planned): M34 | |
| | Start (actual): M15 End (actual): M36 | |
| Lead and involved partners | Lead: FEEM Partners: HEAS, EI-JKU, PIK, CANE, ECOLISE, E3M | |
| Status | completed | |
| Related deliverables | D7.2 | |

Task description & Status

Goal of the task as described in the GA

Responsibility for NDCs lies with national governments (or the EU), and each country has defined its own process for collecting and providing the relevant information of efforts to reduce national emissions and adapt to the impacts of climate change. CAMPAIGNers is supported by national authorities, local governments, agencies, enterprises, and individuals involved in the respective process either through full project partnership (e.g. P26 BAKU - Azerbaijan State Committee on Urban Planning and Architecture) or through Letters of Intent (e.g. Ministry of the Environment, FI). Task 7.2 exploits this resource and develops a "Guidebook for incorporating lifestyle-related pathways and actions into NDCs". Structured interactions with the relevant policy makers (see Task 7.6) ensure that policy-ready, highly practical and directly utilisable advice is provided.

Cornerstones of the activities are:

- derive the scope of lifestyle-related climate measures at the country-level (until 2025 and long-term) based on the projects' results (e.g., WPs 1 and 6) as to the level of detail relevant for the NDCs,

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- present the national pathways towards the Paris Agreement's targets derived in WP 6 to the national contacts and critically assess them in a workshop designed to discover how best to utilize the lifestyle pathways in the next NDCs,
- jointly assess where the national contacts see information deficits related to lifestyle pathways in the NDC, i.e., which further data/analysis/model outputs are needed, in order to explore how progress in lifestyle changes and climate action can be accelerated
- cooperatively decide how CAMPAIGNers can best provide and distribute its insights to the entities/key personnel involved in preparing the next NDC within each CAMPAIGNers partner country (EU and non-EU).

The final result will be a guidebook for how lifestyle-related considerations can increase the precision of countries' emission reduction pathways and be input to the NDCs and potential long-term strategies.

Description and progress of work

The goal of the task 7.2 was to formalize a document that would propose potentially feasible advice, derived from an in-depth analysis of the NDCs of the partner counties and an interaction with various policy makers. The suggestions were specifically aimed at reducing national emissions and adapting states to the impact of climate change, including measures related to citizens lifestyles and behaviours. These objectives have led to the publication and distribution of three main documents: a working paper (1), a policy brief (2) and a guidebook (3), as final deliverable of WP 7.2.

Initially a working paper entitled "Carbon neutral lifestyles and NDCs: advice and policy perspectives" was produced to summarize these fundamental but delicate aspects. On this occasion, the Nationally Determined Contributions (NDCs) and the long-term strategies of the countries involved in the project were initially considered and investigated, in order to understand what was present and what was missing and necessary to add in terms of carbon neutral lifestyle advice in different sectors. In addition to the qualitative analysis of these data, quantitative aspects (e.g., scientific evidence of official statistics) and the results of a survey administered to policy makers were included. From this data integration it was possible to prepare some lifestyle related suggestions.

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Subsequently, after this preliminary analysis, a policy brief entitled "Citizen-centred policy and behavioural change towards carbon neutrality: perspectives and recommendation" was published. It examined in detail the various regulatory and operational measures that have been implemented over the years, underlining a lack of focus on behavioural aspects related to carbon-neutral lifestyle adoption. In the policy brief, it is therefore considered the need to highlight a relationship between human activities and emission and to better understand the education process to assure responsible consumption and, finally, the possibility of including in emission reduction policies lifestyle advice, to be applied in the new policy frameworks.

The definition and presentation of lifestyle related advice, in terms of pathways and actions to be pursued and included in national policies, was the main objective of the final deliverable of Task 7.2: "Guidebook: incorporating lifestyle-related pathways and actions into NDCs and long-term strategies". In this document, it is possible to find the preliminary analysis process of the NDCs of individual countries, which highlight how some policies were only supply and production-side related and, thus, a substantial urgency of citizen focuses on their engagement and education. Subsequently, detailed drafts and suggestions for embedding behavioural pathways in NDCs were provided, specifically for each of the four primarily selected sectors, namely transport, diet, housing and other consumption, and for each country involved in the project.

Related deliverable D7.2 has been submitted in M36.

Deviations

Work in this task has gone according to plan, there are no deviations.

| Task 7.3 | Tools for assessing the progress towards the Paris Agreement' goals | | |
|----------------------------|---|-------------------|--|
| Runtime | Start (planned): M10 End (planned): M30 | | |
| | Start (actual): M10 | End (actual): M36 | |
| Lead and involved partners | Lead: CANE Partners: EI-JKU, PIK, ECOLISE, E3M, ICLEI | | |

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| Status | completed |
|----------------------|------------|
| Related deliverables | D7.3, D7.4 |

Task description & Status

Goal of the task as described in the GA

Several mechanisms and endeavours are in place to scrutinise the collective progress towards achieving the goals of the Paris Agreement. The Paris Agreement has the Global Stocktake, organised by the UNFCCC and the Conference of the Parties of the Paris Agreement, as the key process to track the collective progress. In addition, several civil society organisations provide essential assessments of national or collective progress towards the Paris Agreement goals and investigate how progress can be accelerated, such as Climate Action Network Europe's (partner CANE) "Ranking of EU countries' ambition and progress in fighting climate change" (https://bit.ly/2E1P4Qd) "Climate Action the Tracker" (https://bit.ly/3fKK4xb) to which Potsdam Inst. for Climate Impact Research (partner PIK) was a key contributor with ongoing links.

Task 7.3 takes a multi-addressee approach to support the Stocktake Exercise of various initiatives. For this purpose:

- a. the Global Stocktake allows all interested parties to provide input, in particular during Phases 1 and 2 (starting in mid 2022 and ending in 2023). Task 7.3 will provide input through a "Statement from CAMPAIGNers" position paper that clearly explains the shortcomings of national policies to provide citizens a supportive framework for adopting climate- friendly lifestyles and how the potentials of lifestyle transition can be included in NDCs in order to accelerate climate action progress. Since the NDCs 2021 will be submitted without clear guidelines on transparency and comparability (Article 13), where appropriate the "Statement from CAMPAIGNers" will comment on the related debate as well.

- b. as a follow-up and empirical support to the position paper in Task 7.3 then compiles an indicator report on countries' progress towards supporting Paris Agreement-compatible lifestyles to provide policy makers with background information, and lists barriers and opportunities to EU countries supporting climate-friendly lifestyles based in part on WP 1 and 3 outputs. Building on the analysis of the

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physical and regulatory barriers, enablers and motivators found through citizen engagement with the app, and subsequent best practices, strategies, policy measures, and easily- applicable interventions suggested by Task 7.1 (so far) and Task 1.1, the indicator report will evaluate the state of play in EU Member States. This will also include the emissions and emission reductions pathways of CAMPAIGNers' partner countries and other major-emitting economies (e.g. China, India, USA, Russia, Japan) covered in modelling tools of WP6 (REMIND, PROMETHEUS, GEM-E3) under the status-quo/business as usual and if lifestyle-related policies and behavioural changes were implemented (from WP 6), and compares them to the countries ambitions as provided in the latest NDCs and in their long-term low-emission development strategies.

- c. exchanging data, indicators and conclusions about measuring the progress towards the Paris Agreement with important initiatives (such as the Climate Action Tracker, EU-Calc, Energy Modelling Platform etc.), to cross- collaborate and mutually improve each other's work.

Description and progress of work

The development of the position paper (D7.3) focused on ensuring that the project position on policies best supporting sustainable lifestyles is duly represented, therefore the policy proposals shared in the position paper build on the research and analysis performed in the project such as D7.2, D7.5, D1.3 and the work undertaken in WP 6. The position paper was further enhanced by responding to the context of the UNFCCC processes by organising a side event on the day devoted to multi-level action, buildings and transport as key areas of intervention for sustainable lifestyles. Following from the position paper, a report (D7.3) was developed to provide evidence on the success of countries to reach the project-recommended policies to support climate-friendly lifestyles, in all four areas identified: cities and public authorities, energy, transport, natural resources and other consumption. The report identified barriers and enablers of the transition to sustainable lifestyles, building on the so far limited research as to the transition to sustainable lifestyles given the complexity of the systemic and individual changes required.

D7.3 was due in M18 but faced some delay due to health issues by the lead expert involved. The second one (D7.4) was due in M30.

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Deviations

D7.3 was due in M18. However, for health issues, the work had not been done on time. It was therefore decided to postpone the publication of D7.3 for the COP28 that was held in December 2023. D7.3 was eventually submitted in November 2023 (M31).

D7.4 was due in M30 and was submitted with a delay (M36). D7.4 focused on building on the position paper (D7.3) by incorporating the results of the project and providing evidence on the success of countries to reach the project-recommended policies to support climate-friendly lifestyles. Based on this report, countries are able to identify which of their policies are favourable for triggering behavioural change, and where they could improve. However, limitations on the data gathered through the app that affected the modelling exercise, and still limited research on the extent of assessing the quantitative progress towards achieving 'sustainable lifestyles', made deriving country-specific indicators options limited. A revision of the D7.4 included a proposed set of indicators bearing in mind the complexity of the assessment of the socio-ecological and -economic factors behind 'sustainable lifestyles'.

| Task 7.4 | The impact of lifestyle transition for EU and non-EU GHG reduction strategies | | | |
|---|--|--|--|--|
| Runtime | Start (planned): M6 End (planned): M35 | | | |
| | Start (actual): M6 End (actual): M36 | | | |
| Lead and involved partners | Lead: HEAS Partners: EI-JKU, UCT, IUE, BEU, ECOLISE | | | |
| Status | completed | | | |
| Related deliverables | D7.5, D7.6 | | | |
| Task description & Status | | | | |
| Goal of the task as described in the GA | This task is dedicated to support EU and non-EU (national) long-term strategies on GHG emission reductions through creating lasting, generalizable best practices, strategies, policy measures, and easily-applicable interventions that can be rolled-out across the globe to | | | |

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hasten lifestyle adjustments towards carbon-neutrality. Work in the task is tailored to provide direct input to the various policy areas of the European Green Deal (including the EU's strategy to climate neutrality by mid-century), and exploit results of preceding WPs 1, 3 and 6 to inform policies implemented in the COVID-19 Recovery Fund:

- In M11, the behavioural science results available in D3.1 are integrated into a policy brief that will outline the intersection between behavioural lifestyle science and observed lifestyle changes as a result of COVID-19 with practical ideas for use of the EU'S COVID-19 Recovery Fund. Key questions for the paper are: what policy makers can consider when deciding on the use of the financial resources to stimulate citizens' economic activities in a climate-friendly way and reinforce positive habits learned during the pandemic (i.e. reduced consumption of fossil fuels for personal mobility)?
- From M12 onwards, this task focuses on synthesizing materials from the project (notably Tasks 1.2, 3.1, 3.3, 5.3, 5.4, 6.4 and 7.1) into general recommendations for policy levels, regional, national, and EU to move towards low-carbon lifestyles and derive suggested (optimal) interactions between policies at different levels. This includes cooperation with the derivation of local-level policies in Task 7.5 to identify policy interactions. These recommendations will go through multiple rounds of stakeholder feedback and co-creation following the process in Task 7.6.

Description and progress of work

The work related to drafting the first Deliverable of WP (D7.5: Policy Brief. Advice for a citizen-centred and climate-supportive utilisation of the COVID-19 Recovery Fund) was described in the first reporting report. During the second reporting period, we capitalized on research conducted in the first part of the project, which included a thorough review of scientific literature. This was complemented by contributions from other WPs, especially WPs 3, 5, and 6. However, due to delays in collecting and processing data from the App users, it was decided to focus efforts on interactions with policymakers at all levels. These interactions were particularly continuous with the LCs, allowing us to receive feedback on our working hypotheses and assess proposed recommendations, validating or amending them based on feedback from policymakers.

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Several types of interactions with local policymakers were conducted. These included a series of Focus Groups with LCs as part of T7.1 in November 2022 (online), June 2023 (in-person in Lahti), and November 2023 (online). Additionally, various policy workshops were organized with LCs during CAMPAIGners GA meetings to define optimal procedures for supporting LCs and discuss policy approaches relevant to citizen communication.

Thematic workshops were also organized with LCs to exchange ideas on best practices, obstacles and solutions. These workshops aimed to present preliminary policy recommendations on specific issues to LCs and gather feedback to refine them into more suitable and implementable recommendations. Three workshops focused on:

- Energy Savings (online workshop on October 21st, 2022),
- Mobility (workshop during the Campaigners' GA in Lahti on June 13th, 2023),
- Diets and Circular Economy (workshop during the GA in Lahti on June 14th, 2023).

We also engaged with national policymakers responsible for climate negotiations to exchange insights with drafters of NDCs and NECPs, as well as COP negotiators. This included consultations and regular exchanges under T7.2, along with a workshop with UNFCCC national COP negotiators in Bonn in June 2023 during the UNFCCC preparatory discussions for COP28.

Finally, T7.4 greatly benefited from three public events organized under T7.6 at local, national, and European levels. These events, held in the project's final months, allowed us to present initial findings and recommendations, and receive feedback to better adjust and prioritize our recommendations, ultimately contributing to the drafting of effective and relevant policy recommendations.

The culmination of all this work is reflected in D7.6.

The first related deliverable (D7.5) has been submitted in M14 and the second one (D7.6) in M36.

Deviations

Both D7.5 and D7.6 were submitted with two month delay.

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| Task 7.5 | From global science to local action | |
|----------------------------|--|--|
| Runtime | Start (planned): M20 End (planned): M35 | |
| | Start (actual): M12 End (actual): M36 | |
| Lead and involved partners | Lead: NUIG Partners: EI-JKU, NTNU, HEAS, ICLEI, MILAN, ECOLISE | |
| Status | completed | |
| Related deliverables | D7.7 | |

Task description & Status

Goal of the task as described in the GA

This task follows the process in Task 7.1 to distil general advice and policy actions for follower cities and other local level actors. In particular, this task aims at synthesizing and demonstrating how the CAMPAIGNers climate science (From WPs 1, 3 and 6) can be converted into practical advice for local, multi-stakeholder action plans for GHG mitigation. CAMPAIGNers aims to be the bridge between science and local action and foster a global grassroots movement towards climate action. This task prepares a policy brief targeting municipalities of how to utilise results from climate and behavioural science for policy making, in particular in the communication with citizens to increase their acceptance of climate policies and make them part of climate movement, instead of its opponents.

This advice will be based on robust empirical evidence collected by the goal-setting network under Tasks 3.3 and analysed in Task 5.3. For example, several #LifestyleChallenges will test what effect i) citizens' uncertainty about climate change has and how to decrease unscientific doubts, ii) how communicating climate results affects commitment to climate actions, or iii) how best to counteract climate related fake-news and combat trivializing media coverage of climate change. In addition, to this policy brief a summary of the findings of Task 7.1 in effective local conditions and policies to bring about low-carbon lifestyles will be produced. These two components combine into D7.7.

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Description and progress of work

This task relied on two distinct and complementary activities: the analysis of the qualitative data collected though the App, and direct interactions with LCs. However, due to the lack of data available from the App users, we decided to concentrate on developing regular direct interactions with LCs. These interactions involved three rounds of focus groups carried out with LCs' representatives between November 2022 and November 2023. The aim of these focus groups was to collect and analyse LCs' experiences, perspectives and concerns surrounding the CAMPAIGNers approach and app.

In doing so, the focus groups and analysis contribute a critical and situated perspective for policymakers who endeavour to promote sustainable lifestyle changes via app-based interventions.

In total, seven focus groups were carried out across the 22/23 period. This included 34 participants, representing 12 LCs and project partners. Each focus group lasted on average approx. 90 minutes, with each focus group being recorded and transcribed.

Focus group discussions centred on cities' expectations and experiences of the CAMPAIGNers project in relation to their sustainability objectives, their experiences with the project itself, and their perspectives on the role of the app.

Following transcription, the interviews underwent a thematic analysis using Nvivo, a software for the analysis of qualitative data. This analysis was based on a grounded approach to elicit LCs' primary considerations, concerns and perspectives surrounding their utilisation of the CAMPAIGNers approach. Using Nvivo, transcripts underwent a series of coding, whereby short summarising descriptors were created to describe and organise the interview content. Once coding was completed, transcripts were reviewed and further examined to identify patterns and narratives relevant to the study's aims. Codes were organised into initial prospective themes. Next, prospective themes were reviewed and defined to ensure that they represent the data set and contribute to the research aims. Finally, the themes were written up in detail; developing a narrative of the relevant data and providing a full description of examples. The focus groups collected a range of valuable insights which contributed to the elaboration of the final set of policy recommendations targeting municipalities of how to utilise results from climate and behavioural science for policy making, in

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| | particular in the communication with citizens to increase their acceptance of climate policies and make them part of climate movement. All this work enabled the development of D7.7. | |
|------------|--|--|
| | Related deliverable (D7.7) has been submitted in M36. | |
| Deviations | Work in this task has gone according to plan, there are no deviations. | |

| Task 7.6 | Policy maker interaction and workshop series | | |
|----------------------------|---|--|--|
| Runtime | Start (planned): M18 End (planned): M36 | | |
| | Start (actual): M18 End (actual): M36 | | |
| Lead and involved partners | Lead: HEAS Partners: EI-JKU, IUE, BEU, CANE, ICLEI, ECOLISE | | |
| Status | completed | | |
| Related deliverables | D7.8, D7.9 | | |

Task description & Status quo

Goal of the task as described in the GA

This task facilitates the interaction of the project team with high-level policy makers at the local, regional, national and EU levels throughout the second half of the project. Pillars of the activities are i. at least three workshops to discuss and disseminate project results among target audiences, ii. online short questionnaires to collect expert opinions, ideas, and positions, and iii. the collection of written feedback. To ensure fluent communication with policy makers, a contact person in each policy maker's office will be agreed upon and communication will run through this person.

The discussion process will culminate in a workshop in the EU Parliament in Brussels around M30 (concerted with the schedule of the EP for 2023/24), where the revised and final set of most-promising policies and other project findings to address and accelerate citizens' lifestyle transformations will be presented and discussed. Numerous MEPs from 4 political parties already agreed to participate and

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contribute (see LoIs) and their involvement and engagement in the workshop will contribute to consensus building around the place of lifestyles in the EU's climate strategy on the political level. Two citizens who showed outstanding engagement with the goal-setting network and the #LifestyleChallenges will be invited to this workshop and are encouraged to share their individual takeaways and proposals to policy makers (see Section 1.3.2.1). This workshop represents a fundamental step to ensure that the project's main findings and policy lessons are duly transmitted to EU policy makers dealing with the European Green Deal and the EU's long-term strategy.

Description and progress of work

Three public events were organized with policymakers at different levels of authority: local, national, and European. The purpose of these workshops was to raise awareness about the importance of integrating lifestyle changes into climate change mitigation policies, to present our initial findings and recommendations, and to receive feedback from policymakers to draft policy recommendations effectively and relevance.

At the local level, an online event was held in partnership with the Covenant of Mayors (CoM) on December 18, 2023, focusing on "Leveraging Local Policy to Drive Sustainable Behavior Change in Cities." During this workshop, we delivered a keynote speech on "The Potential of Behavior Change in Creating Greener and Healthier Cities" and received valuable feedback from policymakers and local governance actors who shared their experiences.

At the national level, we organized an online side event at COP28 in Dubai on December 6, 2023, under the theme "Reimagining NDCs: Unlocking the Potential of Sustainable Lifestyles." This event targeted national-level policymakers and provided a platform to present our research findings and recommendations for better integrating lifestyle dimensions into NDCs, while also gathering feedback from participants.

At the European level, a workshop was convened at the European Parliament on February 21, 2024, attended by several Members of the European Parliament (MEPs). This session offered an opportunity to introduce the Campaigners project and discuss its key recommendations with the European legislature.

Related deliverables (D7.8 and D7.9) were due in M36 and M32 respectively; they were however both submitted in M36.

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| Deviations | Work in this task has progressed as planned, with only one minor | | |
|------------|---|--|--|
| | deviation: the workshop at the European Parliament was eventually | | |
| | organised in February 2024 instead of in Autumn 2023 as initially | | |
| | expected, due to reasons beyond our control. For this reason, | | |
| | Deliverable D7.9, which details the workshop at the European | | |
| | Parliament, was submitted in M36 instead of M32. | | |
| | | | |

Milestones

Milestone 7 (Submission of CAMPAIGNers position paper to the UNFCCC) was delayed (see 1st Periodic Technical Report) and eventually submitted in M31.

Concluding remarks on WP

Work in WP7 went well and according to plan, with the exception of T7.1 for the reasons explained in the description of the work done, and the delay in the submission of D7.3 (Submission of CAMPAIGNers position paper to the UNFCCC). Deliverable D7.3, which was initially due in M18 was eventually submitted in M31, just before the COP28.

3.7. WP 8: Dissemination, Exploitation and Communication

3.7.1. Administrative Information

Table: Administrative Information WP8

| Title: | Dissemination, Exploitation and Communication | |
|---------------|--|--|
| Lead Partner: | CANE | |
| Involved | EI-JKU, NUIG, NTNU, UCT, PIK, IUE, LUT, BEU, ICLEI, ECOLISE, SBK, E3M, Saints, | |
| Partner: | MILAN, IZMIR, LAHTI, DAFNI, LINZ, SKOPELOS, FREISTADT, VILNIUS, PESARO, | |
| Partiter. | GRENOBLE, DUBLIN, MALMO; LIBERTAD, ASOIU, HEAS | |
| Start: | Plan: M1 | |
| start. | Actual: M1 | |
| End: | Plan: M36 | |
| ena: | Actual: M36 | |
| Status: | completed | |

3.7.2. Use of Resources

Table: Staff effort in the reporting period per partner and in total WP8

(incl. PM shifts as described in chapter 2.3.1 Shift in Resources)

| Staff effort in Plan Actual Actual |
|------------------------------------|
|------------------------------------|

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| person*month | (M1-M36) | (M1-M18) *incl. | (M19-M36) |
|-----------------|----------|-----------------|-----------|
| Plan vs. Actual | | adjustment | |
| EI-JKU | 6.00 | 1.96 | 5.46 |
| NUIG | 2.50 | 0.58 | 2.42 |
| NTNU | 0.50 | 0.04 | 0.09 |
| UCT | 0.50 | 0.02 | 0.15 |
| PIK | 0.50 | 0.00 | 0.00 |
| IUE | 2.50 | 0.25 | 1.94 |
| LUT | 2.00 | 0.00 | 1.72 |
| BEU | 0.50 | 0.30 | 0.20 |
| CANE | 8.50 | 7.10 | 6.20 |
| ICLEI | 1.50 | 0.66 | 1.41 |
| ECOLISE | 8.00 | *2.85 | 6.73 |
| SBK | 5.00 | 3.00 | 0.46 |
| E3M | 0.50 | 0.05 | 0.44 |
| SAINTS | 4.50 | 4.00 | 0.00 |
| MILAN | 1.50 | 0.30 | 1.20 |
| IZMIR | 0.50 | 0.26 | 0.24 |
| LAHTI | 2.00 | 0.27 | 0.60 |
| DAFNI | 0.50 | *0.34 | 0.23 |
| LINZ | 0.50 | 0.07 | 0.36 |
| SKOPELOS | 0.50 | 0.10 | 0.40 |
| FREISTADT | 0.50 | 0.18 | 0.40 |
| VILNIUS | 1.50 | 0.69 | 1.50 |
| PESARO | 0.50 | 0.20 | 0.80 |
| GRENOBLE | 0.50 | 0.50 | 0.50 |
| DUBLIN | 0.50 | 0.00 | 0.50 |
| MALMÖ | 0.50 | 0.00 | 0.50 |
| LIBERTAD | 1.50 | 0.00 | 0.03 |
| ASOIU | 0.50 | 0.50 | 0.00 |
| HEAS | 0.50 | 0.13 | 0.07 |
| Total | 55.00 | 24.35 | 34.55 |

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3.7.3. Objectives, Progress and Deviations

Objectives

While WP4 is dedicated to the engagement of citizens and other stakeholders/supporters of the goal-setting network in the Lighthouse Cities, WP 8 is dedicated to promote the project and disseminate its results among all others who either are a. in a target group for CAMPAIGNers' results or are b. potential supporters of the project and the goal-setting network. Specific results are

- ▶ Objective 8.1: support the Follower Cities to promote the goal-setting network among their citizens and train them how to use CAMPAIGNers Monitor for addressing their own policy problems
- ▶ Objective 8.2: promote CAMPAIGNers according to the stakeholder analysis, respective key messages and channels as given in Section 2.2
- ▶ Objective 8.3: coordinate the project partners' activities for dissemination and exploitation to achieve a high level of efficiency and efficacy
- ▶ Objective 8.4: refine, adapt and execute the DEC plan including the key objectives for exploitation
- ▶ Objective 8.5: assess the need and potential for fundraising, plan and execute the related activities

Tasks

| Task 8.1 | Activities with and for the Follower Cities | | |
|----------------------------|---|--|--|
| Runtime | Start (planned): M8 End (planned): M35 | | |
| | Start (actual): M8 End (actual): M35 | | |
| Lead and involved partners | Lead: ECOLISE Partners: ICLEI, EI-JKU, NUIG, FEEM, IUE, CANE, MILAN, VILNIUS, LAHTI, LIBERTAD | | |
| Status | completed | | |
| Related deliverables | D8.1 Follower Cities Engagement and Networking Report | | |
| Task description & Status | | | |

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Goal of the task as described in the GA

The Amplifier Cities (ACs) are a group of municipalities or regions who commit to promoting the goal-setting network among their citizens. In Task 8.1 all activities done for and with the ACs are coordinated. This includes the following steps:

Subtask 1: Together with the initial 26 ACs a survey is completed to assess a) the free-of-charge communication channels available for promoting the goal-setting network, b) which of the materials (used for promotion in the LCs) the ACs wants to use themself and which adaptations are required (e.g. translation), c.) whether additional resources for the promotion are available and how these look like (media team can design city-specific graph, some financial resources for Facebook ads, ...). Then, together with the project team the ACs make a plan for recruiting citizens, and discuss and execute it in accordance to the activities in the LCs (see Task 4.3).

Subtask 2: A training workshop introduces the CAMPAIGNers' Monitor to the ACs. They are informed how to use, how to interpret the results and how to utilise the information for local policy making. As soon as first qualitative results (Task 3.3) and quantitative analyses (WP5) of the goal setting network, as well as policies have been developed by the LCs (Task 7.1), these will serve as examples for the ACs and are presented and discussed in a joint workshop with LCs (likely to be virtual, unless a large meeting of municipalities facilitates efficiently meeting physically back-to-back).

Subtask 3: Continuous extension of the group of ACs. The number of ACs will be increased throughout the project, and the promotion of joining CAMPAIGNers' FC group will happen through different channels. The LCs play a major role in this activity and a list of LCs' sister cities and twin towns has been compiled, among them New York (LC Malmö), Johannesburg (LC Cape Town), Barcelona (LC Milan). LCs will personally invite them and encourage their participation. ECOLISE, backed up by ICLEI will communicate via its own channels to ensure broader outreach.

T8.1 has seen more than 30 Amplifier cities joining the network.

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Description and progress of work

Description of Work

Task 8.1 focused on coordinating activities with the Amplifier Cities (ACs), which are municipalities or regions committed to promoting the goal-setting network among their citizens. This task ensured that ACs are effectively integrated into the CAMPAIGNers project, utilizing their local resources to amplify the impact of lifestyle changes.

Subtasks:

- 1. Survey and Planning with ACs:
 - Objective: Assess the communication channels, promotional materials, and additional resources available within the ACs.
 - Activities:
 - Conduct a survey with the initial 26 ACs to evaluate:
 - Available free-of-charge communication channels.
 - Desired promotional materials and necessary adaptations (e.g., translations).
 - Additional resources for promotion (e.g., media team, financial resources for ads).
 - Collaborate with ACs and the project team to create a recruitment plan for citizens.
 - Execute the recruitment plan in line with activities in the Lead Cities (LCs) as per Task 4.3.
- 2. Training Workshop for ACs:
 - Objective: Introduce the CAMPAIGNers' Monitor to ACs, guiding them on usage, result interpretation, and local policy application.
 - Activities:

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- Organize a training workshop to demonstrate how to use the CAMPAIGNers' Monitor.
- Present qualitative results (Task 3.3) and quantitative analyses (WP5) from the goalsetting network.
- Use developed policies by LCs (Task 7.1) as examples in a joint workshop, likely virtual, to discuss with ACs.

3. Extension of ACs Group:

- Objective: Continuously expand the number of ACs throughout the project.
- Activities:
 - Promote joining the CAMPAIGNers' group via different channels.
 - Utilize LCs to invite their sister cities and twin towns to participate.
 - Engage ECOLISE and ICLEI to use their channels for broader outreach.

Progress of Work

Subtask 1: Survey and Planning with ACs

- The initial survey with the 26 ACs has been successfully conducted.
- The survey identified key communication channels, necessary adaptations for promotional materials, and additional available resources.
- ACs, in collaboration with the project team, have developed executing recruitment plans to engage citizens in line with LC activities.

Subtask 2: Training Workshop for ACs

• The first training workshop was held, introducing the CAMPAIGNers' Monitor to ACs.

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| | ACs were trained on using and interpreting the Monitor's results and received examples of policies developed by LCs. Continued to provide support and updates as new qualitative and quantitative results become available. Subtask 3: Extension of ACs Group The group of ACs was actively expanding, with ongoing efforts to recruit more cities. |
|------------|--|
| | Leveraged the relationships of LCs with their sister cities and twin towns, as well as the communication channels of ECOLISE and ICLEI. |
| | We maintained momentum in recruiting new ACs and ensure they are integrated into the network and promotional activities: |
| | March 1st 2023: Amplifier City launch & monitor presentation March 29th 2023: Designing new behaviour change interventions September 05 2023: Back to School Lighthouse Cities Insights November 7th 2023: Policy development workshop |
| | 20th February 2024: The right to have a choice to live sustainably with Climate Campaigners Amplifier Cities |
| | D8.1 has been submitted in M36. |
| Deviations | No deviations. |

| Task 8.2 | Set-up and update of the DEC Plan | | |
|----------------------------|---|--------------------|--|
| Runtime | Start (planned): M5 | End (planned): M30 | |
| | Start (actual): M5 | End (actual): M30 | |
| Lead and involved partners | Lead: CANE Partner: EI-JKU, LUT, SBK, Saints | | |

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| Status | completed |
|---|--|
| Related deliverables | D8.2, D8.3, D8.4 |
| | Task description & Status |
| Goal of the task as described in the GA | At project begin, a detailed Dissemination, Exploitation & Communication (DEC) strategy and operative plan will be established together with the partners as a first deliverable (Del 8.2 DEC Strategy & Operative Plan) finalised by M6. This will be subsequently updated at the end of each project year D8.3, D8.4). Besides the overall strategic exploitation approach, objectives, key messages for different audiences and selected tools and channels as well as standard operating procedures (SOPs) for 1st Periodic Report Page 101 of 125 publications, participation in conferences / public events and exploitation for the project duration and market launch. |
| Description and progress of work | T8.2 has been progressing well after the resolution of the initial internal organisational challenges at CAN Europe. After a slight delay with D8.3, D8.4 was delivered on time. D8.2 has been submitted in M23 after a request for revision. D8.4 was delivered on time and submitted in M31 |
| Deviations | D8.3 was delayed and has been submitted in M27. |

| Task 8.3 | Multi-Channel Dissemination & Communication Activities | |
|----------------------------|--|--|
| Runtime | Start (planned): M1 End (planned): M36 | |
| | Start (actual): M1 End (actual): M36 | |
| Lead and involved partners | Lead: CANE Partners: all | |
| Status | completed | |
| Related deliverables | D8.5, D8.7, D8.8 | |

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Task description & Status

Goal of the task as described in the GA

The dissemination and communication activities include a range of channels and means to both put messages into the media and establish dialogue with stakeholders as described in Section 2. The hub of communication is the project website with an integrated blog, whereby the consortium can interact with defined audiences. The key message will be: the CAMPAIGNers concept is an outstanding social science approach for deriving unprecedented insights for policy making to support citizens to change their lifestyle. Facebook and Twitter will be a core medium in the CAMPAIGNers system to communicate with the general public, in particular citizens and policy makers. All channels will be continuously fed with valuable content, starting with explainer videos ("why-to" and "how-to" videos) to describe the overall idea in an entertaining way. Significant project news, project deliverables and outcomes will support google ranking and hence attract audiences. Owned and earned media, in particular of Saints, SBK and the Lighthouse Cities will be used to reach citizens and policy makers, e.g. LCs' newsletters, magazines and social media channels. The corporate communication channels and tools of the RTOs will address the scientific community. In M3 general and technical press releases will announce the project launch, press talks, interviews are planned later in the project when results are available. The consortium will disseminate its results in a number of visible and high-impact academic and policyrelevant events. Initially, the project will focus on disseminating its results at high-quality subject-relevant external workshops and conferences (see Section 2.2). Towards the end of the project runtime the scientific project partners will increasingly turn their attention to publishing their results in high-quality journals such as: Nature Climate Change, Global Environmental Change, European Energy Journal etc. (see Section 2.2). The golden or green open access route will be chosen on a case-by-case basis. Partner CANE will guide project partners on disseminating the project and its results at conferences, science days, workshops or other events by giving presentations, presenting posters or with a stand. The events will be scheduled and budgeted in the yearly DEC Plan, but

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| | with sufficient flexibility to react to short term dissemination opportunities as they become known. Dissemination activities also include stakeholder engagement workshops, e.g. at project's Lighthouse Cities' sites, will raise awareness and interest from the press & the media, either from policy-specific and general press. The first annual open workshop in M13, which is also the launch event of the goal-setting network (back-to-back with consortium meeting, attendance also possible via online facilities to reduce air traffic) delivers valuable insights into the app system's functionalities and how (and why) to join. At subsequent workshops, project results will be shown and feedback solicited – these workshops serve as a primary vehicle to disseminate results, demonstrate participation to and benefits of the goal-setting network and to gather stakeholder feedback. |
|----------------------------------|--|
| Description and progress of work | T8.3 has been progressing more smoothly after the resolution of the initial internal organisational challenges at CAN Europe. Multiple channels have been used for dissemination, not limited to just project channels to ensure a wider and more diverse reach of the project. D8.5 and D8.8 has been submitted and approved in the 1st Reporting Period. D8.7 has been submitted in M36 as planned. |
| Deviations | No deviations. |

| Task 8.4 | Evaluation of Fundraising Options | |
|----------------------------|---|--|
| Runtime | Start (planned): M18 End (planned): M36 | |
| | Start (actual): M20 End (actual): M36 | |
| Lead and involved partners | Lead: SBK Partners: EI-JKU, CANE, ECOLISE | |
| Status | completed | |
| Related deliverables | D8.6 | |

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| Task description & | Status |
|--------------------|--------|
|--------------------|--------|

Goal of the task as described in the GA

The exploitation strategy is outlined in Section 2.2 and will be progressively elaborated with the partners across the full project duration. Background, foreground (in particular regarding the app system) and exploitation objectives/ expectations are outlined in Section 2. This Task investigates the actual need for fundraising, regarding its objective to tailor the app to new countries (CO₂ footprint model and language) and to finance hosting and maintenance when SBK's commitment runs out 3 years after the project has ended (as explained in Section 2.2.1.1). Also in Section 2.2.1.1, the 6 initial candidate options for fundraising are listed, and respective activities are started (e.g., start a crowdfunding initiative for bringing the goal-setting network to Brazil when local environmental groups offer promoting it). The Task develops an Ethics Guidelines to make sure only such sponsors/partnerships will support CAMPAIGNers, who are in line with CAMPAIGNers overall objective to contribute to the Paris Agreement. While fundraising activities are approved by the project's Steering Committee during the project runtime, SBK (who will establish the required collaboration contracts or crowdfunding initiatives) commits to complying to the Ethics Guidelines also post-project.

Description and progress of work

T8.4 went according to plan with the deliverable D8.6 delivered on time.

D8.6 was submitted in M36 as planned.

Deviations

Small delay in the start due to heavy workload around M18. A revision of this deliverable is submitted post-project in July 2024, in particular with regard to a detailed description of the implementation of the fundraising plan eg how the CC app will be continued and managed over the next 3 years, including a description of the development and roll-out of the underlying business model. The monitoring and evaluation of the fundraising activities will be further improved and specified.

Milestones

Milestone M8: CAMPAIGNers website goes online was achieved in M11 (1st Reporting Period).

Concluding remarks on WP8

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WP 8 was dedicated to promote the project and disseminate its results among a. a target group for CAMPAIGNers' results or b. potential supporters of the project and the goal-setting network. As such the Work Package focused on the engagement and support for the Amplifier Cities, the developments of the DEC Plan (with updated versions as the project progressed) and finally the development of the fundraising options for the aftermath of the project. The Work Package used a variety of different methods and channels to reach a diverse audience and ensure that the outreach to stakeholders was fit with messaging, format and language to ensure maximum impact. There are several opportunities to build on the work achieved under WP8 building on the capacity developed by partners and the dissemination activities throughout the project, such as the exploration of further fundraising to ensure a long-term sustainability of the project. Given its wide dissemination the project has also been embedded into the work of the partners, ensuring its key messages and takeaways have been incorporated into their future work.

3.8. WP 9: Project Management

3.8.1. Administrative Information

Table: Administrative Information WP9

| Title: | Project Management |
|------------------------------|---|
| Lead Partner: | EI-JKU |
| Involved | NUIG, NTNU, UCT, PIK, FEEM, IUE, LUT, BEU, CANE, SBK, E3M |
| Partner: | NOIG, NTNO, OCT, FIR, FEEM, IOE, LOT, BEO, CAINE, SBR, ESIM |
| Start: Plan: M1 Actual: M1 | Plan: M1 |
| | Actual: M1 |
| End: | Plan: M36 |
| ena. | Actual: M36 |
| Status: | completed |

3.8.2. Use of Resources

Table: Staff effort in the reporting period per partner and in total WP9

| Staff effort in person*month / Plan vs. Actual | Plan (M1-M36) | Actual (M1-M18) | Actual (M19-M36) |
|--|------------------|--------------------|---------------------|
| EI-JKU | 24.00 | 14.84 | 14.79 |
| NUIG | 2.50 | 1.50 | 1.15 |

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| NTNU | 1.50 | 0.38 | 0.00 |
|-------|------|-------|-------|
| UCT | 0.50 | 1.07 | 1.16 |
| PIK | 0.50 | 0.00 | 0.00 |
| FEEM | 0.25 | 0.16 | 2.92 |
| IUE | 0.50 | 0.10 | 0.36 |
| LUT | 2.00 | 0.10 | 1.72 |
| BEU | 0.50 | 0.30 | 0.20 |
| CANE | 1.00 | 0.50 | 0.61 |
| SBK | 1.00 | 0.00 | 0.00 |
| E3M | 1.50 | 0.02 | 1.52 |
| HEAS | 0.25 | 0.25 | 0.29 |
| Total | 36 | 19.22 | 24.72 |

3.8.3. Objectives, Progress and Deviations

Objectives

The project management will guarantee the targeted and efficient development of the project objectives and covers the overall administration and management of the project. Furthermore, the project management will ensure the quality of the work and findings by a peer-review based quality management system. The compliance to data protection rules and ethical standards is facilitated through a dedicated task involving high-level experts. This work package has the following overall objectives:

- ▶ Objective 9.1: To ensure that the projects objectives are met, as defined in the project plan and prepare according progress and management reports;
- ▶ Objective 9.2: To keep the project on schedule and to guarantee the execution of the work plan and the achievement of the project goals on time, with highest quality and within budget
- ▶ Objective 9.3: To provide project steering for the internal developments of the project;
- ▶ Objective 9.4: To administer the contract and project financial management;
- ▶ Objective 9.5: To assure overall quality of the project's deliverables;
- ▶ Objective 9.6: To ensure the project execution is as sustainable and low-carbon as possible;
- ▶ Objective 9.7: To keep close liaison between the European Commission and partners;

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- ▶ Objective 9.8: To ensure comprehensive consideration of data handling, privacy and ethical standards,
- ▶ Objective 9.9: To establish and maintain liaisons with other initiatives with comparable goals.

Tasks

| Task 9.1 | Legal and Financial Management | |
|---|--|--|
| Runtime | Start (planned): M1 | End (planned): M36 |
| | Start (actual): M1 | End (actual): M36 |
| Lead | EI-JKU | |
| Status | completed | |
| Related deliverables | D9.1 Project Handbook | |
| | Task description & Status | |
| Goal of the task as described in the GA | This task will ensure the efficient leg of the project. It covers the establification financial records, the planning and coordination of cost claim submisss well as preliminary checks of incommon known criteria. In addition, the presentatements following the rules programme, monitoring and for preparation of payment summar global overviews will be coordinated prepare periodic financial reports are reviews. This task will also organized legal issues for contract management the tracking of the project contract project to detect inconsistencies of preparation of contract amendment monitoring of the application of the | ishment and maintenance of dimonitoring of expenses, the bion by the project partners as dividual cost claims against paration of consolidated cost and format of the H2020 llow-up of payments, and ies to each participant and ted in this task. This task will and carry out internal annual te all the necessary work and nent in the project. This covers act with the progress in the r problems, the proposal and ents when necessary and the |
| Description and progress of work | The legal and financial managem goals outlined above in the final 18 | |

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| | In this task, D9.1 "Project Handbook" was prepared. This report describes the project organisation (management roles), the reporting procedures, communication policies and a set of templates to be used within the project. The Handbook has been updated in M22 with a description of the strategic process for publications. |
|------------|--|
| | D9.1 Project Handbook was submitted in M3 and M22 with an updated version and made available to the consortium only (as it is a confidential report). |
| Deviations | Work in this task has gone according to plan. There are no deviations. |

| Task 9.2 | Management of Project Execution | |
|---|--|--------------------|
| Runtime | Start (planned): M1 | End (planned): M36 |
| | Start (actual): M1 | End (actual): M36 |
| Lead and involved partners | Lead: EI-JKU Partners: NUIG, NTNU, LUT, E3M | |
| Status | completed | |
| Related deliverables | none | |
| Task description & Status | | |
| Goal of the task as described in the GA | This task will carry out the overall project management and execution of the project. It will closely follow the project progress, coordinate the quality assurance functions, provide continuous risk assessment and in case of problems, will initiate the required corrective actions in close cooperation with the concerned partners. The scope of this task can be summarized in the following actions: Monitoring the progress of the work and the agreed deadlines and milestones of the time planning; | |

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| ► Coordinating and monitoring the WP Leaders' work and other |
|--|
| levels of the management hierarchy, following the defined task |
| responsible, including organizing monthly WP leader meetings, |

- ► Anticipating potential critical situations and proposing solutions:
- ▶ Quality control and packaging of the deliverables that will be provided as results of the actions;
- ► To meet the project's sustainability goal and reduce project-internal GHG impacts (see Sec. 2.1.2.1);
- ▶ Preparing periodic reports and
- ► Organizing project meetings with a periodicity of 6 months and whenever necessary,

The project management provides and effective framework to support all partners in the consortium in achieving the scientific and technical objectives of the project. The specific management roles have been agreed upon within the consortium and are described in detail in Section 3.2.

Description and progress of work

The management of the project has gone according to plan, in close collaboration with all the involved partners and the Project Officer. Monthly WP-leader meetings (all partners are invited) were held to ensure regular exchange of information. Among others two online General Assemblies (15th Feb and 15th March 2023) and two physical General Assemblies (13-15th June 2023 and 12-13th March 2024) were held successfully. The minutes of these four General Assemblies are attached in the Annex. The minutes of the 11 monthly status meetings (paused in holiday season) are available upon request. Submission of project report(s) and delays in the project's timeline are reported in the respective tasks.

There are no related deliverables.

Deviations

Work in this task has gone according to plan. Delay of Deliverables occurred because of the very high workload induced by the higher-than-expected management effort. This has also

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| lead to an overspending of budget for management activities in | |
|--|--|
| WP9. | |

| Task 9.3 | Data Management Plan, Privacy and Ethical Issues | | | | |
|----------------------------|---|--------------------|--|--|--|
| Runtime | Start (planned): M1 | End (planned): M36 | | | |
| | Start (actual): M1 | End (actual): M36 | | | |
| Lead and involved partners | Lead: EI-JKU Partner: NUIG, CANE, SBK | | | | |
| Status | completed | | | | |
| Related deliverables | D9.2 Data Management Plan D9.3 Consultations with National Data Protection Agencies | | | | |

Task description & Status

Goal of the task as described in the GA

Comprehensive consideration of data protection issues is mandatory to chieve high levels of acceptance of CAMPAIGNers app and IT ecosystem and thus achieve high number of citizens participating in the goal-setting network.

Task 9.3 will be led by Marie Holzleitner project manager and WP leader of a significant number of related national and European project activities, e.g. she was the leader of a workshop in the European Parliament about legal and social issues of smart grids in the course of the project SPARKS - https://project-sprks.eu and is a distinguished expert on the issue of data protection of citizens in research projects applying smartphone apps. Task 9.3 scrutinizes data before it is published (e.g. along with academic publications) and prepares the Data Management Plan (DMP) for the CAMPAIGNers project. The DMP takes full consideration of the specific situations of the Lighthouse Cities from the legal perspective (e.g. GDPR), and coordinates the consultations with the National Data Protection Agencies (definitely of non-EU participating countries and were requested by EU-LCs) to ensure that no information/data is displayed in the app that might be in conflict with EU/nation legislation or ethical standards. Hence, the

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| | output of Task 1.3 is the Data Management Plan to be followed by goal-setting network, and providing legal expertise to all WPs. The DMP will be a lining document that will be further developed and continuously improved throughout the project's runtime. |
|----------------------------------|---|
| Description and progress of work | Deliverables D9.2 and D9.3 were prepared, submitted and approved in the 1 st Reporting Period. The content of the data management plan did not change during the second reporting period and was valid for all partners. The international data protection matters were reviewed on an ongoing basis. No adaptations were necessary during the 2 nd Reporting Period. |
| | D9.2 Data Management Plan and D9.3 Consultation with National Data Protection Agencies (made available to the consortium only, as it is confidential) has been submitted and approved in the 1st Reporting Period. |
| Deviations | Apart from the short delay in the submission of D9.2, which was already reported in the 1 st Reporting Period, there were no deviations. |

| Task 9.4 | Management of networking activi | ties with research initiatives | | | |
|---|--|--------------------------------|--|--|--|
| Runtime | Start (planned): M1 | End (planned): M36 | | | |
| | Start (actual): M1 | End (actual): M36 | | | |
| Lead and involved partners | Lead: EI-JKU Partner: NUIG, NTNU, UCT, PIK, FEEM, IUE, LUT, BEU, CANE, E3M | | | | |
| Status | completed | | | | |
| Related deliverables | none | | | | |
| | Task description & Status | | | | |
| Goal of the task as described in the GA | The aim of this task is to establish liaisons with other research initiatives dealing with lifestyles in relation to climate targets to assure a fluent scientific dialogue/exchange between the projects, and fosters the prevention of unnecessary | | | | |

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double/parallel research. Among them, EU-Calc ad Climate Action Tracker, aim(ed) for developing mitigation pathways and measuring progress towards the Paris Agreement, and mutual exchange will be managed by PIK, who contribute(d) to these initiatives. E3M, PIK, NTNU and EI-JKU are core contributors to the Energy Modelling Platform for Europe EMP-E, whose annual conferences are hosted by the European Commission's DG Research & Innovation. CAMPAIGNers aims for introducing and organising an annual workshop series sharing latest findings on how to include lifestyle related aspects into Integrated energy-economy Models. Assessment and Additionally, CAMPAIGNers will contribute, upon invitation by the EC, to common information and dissemination activities to increase synergies between, and the visibility of H2020 supported actions. Such as the BRIDGE initiative, where numerous researchers of CAMPAIGNers are members. These EC initiatives experienced as very fruitful platforms for improving projects' efficiency and impact by several of CAMPAIGNers partners in their earlier H2020 projects.

Description and progress of work

In the 1st and 2nd Reporting Period, liaisons were built with the other projects funded under the same call: FulFill, EU 1.5° Lifestyles, 4i-TRACTION, COMMIT, ENGAGE and LOCOMOTION. Joint or bilateral online meetings were held to mutually understand the research perspective. In January 2023 a workshop was held, to identify possible pathways for boosting the impact of the projects by joint dissemination and exploitation events, knowledge exchange, information materials, and webinars.

Additionally, networking activities were undertaken with projects funded from different calls but with behavioural science and lifestyle research as their topic as well. These were, e.g. Dialogues, ENCHANT, PSLifestyles, where mutual exchange enabled to increase the robustness of the own results.

Further liaisons were undertaken with: **European Energy and Climate Modelling Forum** (ECEMF, https://www.ecemf.eu/): it
aims to bring together all Horizon projects relevant to energyeconomy modelling in the EU. These calls aimed to provide
regular updates of modelling activities/projects to the European

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| | Commission (with various DGs participating regularly in the meetings), facilitate interactions among projects and contribute to the ECEMP conference organisation. |
|------------|---|
| | (1) ECEMP 2022 "Assessing Lifestyle Transformations in Energy-System and Integrated Assessment Models: A Review (Andreas Andreou, E3 Modelling)", https://www.ecemf.eu/wp-content/uploads/2022/10/ECEMP-22-Programme-Final-5.pdf |
| | (2) EMP-E 2021 "New pathways to reach the Climate Change: European citizens' challenge for a more carbon-friendly life (Panagiotis Fragkos, E3 Modelling)", https://prod5.assets-cdn.io/event/6546/assets/8364679921-857afa9f3b.pdf |
| | There are no related deliverables. |
| Deviations | Work in this task has gone according to plan. There are no deviations. |

Milestones

Milestone 9: Conclusion of the consultation with National Data Protection Agencies was achieved in M12 (1st Reporting Period).

Concluding remarks on WP9

The project management was carried out the whole time in close cooperation with all partners. As one conclusion to mention, this collaborative effort has been more time-consuming than expected. Despite these challenges posed by the diverse nature of the partners – ranging from research institutions to SMEs to city representatives – the WP9 objectives were all achieved. The physical meetings (Physical General Assemblies) proved to be very valuable and significantly enhanced the coordination activities, knowledge exchange and of course the progress towards the project objectives. These face–to–face meetings (enriched with internal workshops, initiated working groups and excursions) facilitated a deeper understanding and alignment between partners and different needs and exposures between partners.

A focus was also given on the risk and quality management and helped a lot to overcome different challenges over project runtime and ensured the submission of high-quality deliverables. The project demonstrated that despite the complexities of a large and diverse consortium, detailed scheduling, regular WP leader meetings and dedicated teamwork can lead to the successful achievement of project goals. The experience of working together has not only produced valuable results, but has also laid a strong foundation for future endeavours. The only

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point that slightly tarnishes the excellent record of the project management is the prolonged undetected health-related absence of the initial work package leader of WP8, leading to delays in dissemination and exploitation activities.

4. Impact

EI#1 Providing measurable support to the EU's long-term strategy on greenhouse gas emission reduction Information on status of the impact expected (still relevant or needs to be updated)

Most important outputs are

- D6.1 Report on the updated system models in mobility and residential demand and their results
- D7.6 Addressing lifestyle transformation in climate related long-term policy strategies
- In the course of Task 7.6 A dissemination, discussion and consensus-building workshop at the European Parliament, hosted by First-Vice President Mairead McGuiness, on lifestyle-related climate policies that will directly inform the implementation of the EU Green Deal initiative and the long-term climate neutrality target

This impact is still relevant and was achieved during the project period. The improved modelling of lifestyle changes in Energy System and Integrated Assessment Models (especially related to the transport and building sectors) has been used to develop new, updated scenarios to directly support the EU's long-term strategy towards climate neutrality by 2050 highlighting the potential role of consumerdriven transitions.

D7.6 (General Policy Recommendations for EU policymakers) national and (Summary of the Workshop at the European Parliament) provided recommendations targeting European as well as national and local levels of governance. They focused on actions that public policymakers should undertake in terms of investment, fiscal policies, or the establishment of appropriate regulatory frameworks to encourage citizens to adopt sustainable lifestyles.

Key project assets for creating targeted impact:

Modelling tools utilized to develop

The impact is still relevant. Indeed, the project uses the PRIMES energy system model which is the one used by the EC in energy and climate policy impact assessments including the 2030

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mitigation pathways and assess the impact of different policy strategies, are the same that are frequently use in ED energy and climate policy impact assessments i.e., Green Deal strategy, Energy Roadmap 2020 ...

- 10 MEPs from 6 countries and 4 different political parties support WS in EU Parliament)
- Political science team (lead HEAS)
 and policy advisors have decade(s)
 long experience in providing scientific
 support at the highest EU and
 national levels and the NGOs (like
 CANKE) are highly experienced to
 work and fruitful cooperate with MEPs

and 2040 Climate Target Plan and the Clean Planet for all mid-century strategy. The GEM-E3 and PROMETHEUS model have also been frequently used to support EC's climate policy impact assessments and have been improved in the CAMPAIGNers project. Therefore, the enhanced modelling versions developed in CAMPAIGNers will be directly usable by the EC to support future policy analysis with a better representation of lifestyle and behavioural changes.

The elaborated policy recommendations in WP7 have significantly benefited from ongoing exchanges with decision-makers at all levels in particular through several workshops, including one side-event to the COP28 for national decision makers, and a workshop with MEPs at the European Parliament. During these interactions, we were in contact with a wide range of policymakers from various political backgrounds and nationalities.

KPI

- Target: 50 EU-level policy makers involved
- Target: 5 policy documents directly utilizing CMAP results

Throughout the project, we maintained regular dialogue with policymakers at all levels. Within this continuous dialogue, which was mainly focusing on local and national policymakers, we also interacted with a dozen of EU policymakers from various political backgrounds and nationalities.

As the workshop at the European Parliament discussing the Campaigners policy results took place in February 2024, and the final set of policy recommendations have only been made public at the very end of the project, they could not yet have been integrated into new legislative documents. However, the feedback received from the European policymakers on our policy recommendations have been very

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positive and we are confident that they will feed future legislative policy documents.

EI#2 National/global pathways towards the Paris Agreement & informing counties' next NDCs

Information on status of the impact expected (still relevant or needs to be updated)

Most important outputs are

- D6.2: The impacts of lifestyle changes on climate change mitigation pathways
- D7.2: Guidebook for incorporating lifestyle-related pathways and actions into NDCs and long-term strategies
- In the course of Task 7.6: Structured interactions and workshop series with national policy makers involved in the preparation of the NDCs

The impact is still relevant. The enhanced modelling tools integrating a massively improved representation of lifestyle changes in the transport and buildings sectors have been used to develop new national and global scenarios and pathways to inform the next NDCs and long-term emission strategies of the EU and other major emitters.WP7: The information on the expected impacts is still relevant. D7.2 as well as the Deliverables of T7.6 were submitted as scheduled at the end of the project.

The results that emerged from this detailed analysis allow to better understand the potential deriving from the incorporation of behavioural advice into reduction-emission policies and, specifically, in the NDCs of the countries participating in the CAMPAIGNers Project, highlighting the pivotal role of individual actions in reducing GHG emissions.

Furthermore, this guidebook could represent a useful and valuable support to direct the development and drafting of the forthcoming NDCs. The suggested policies, in fact, are powered by scientific evidence, derived from a data collection phase, extended over three years and based on both quantitative and qualitative

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Key project assets for creating targeted impact:

- Agreement of 8 national policy makers (from ministries, agencies, ...) involved in the preparation of their countries' next NDC to cooperate with the project
- 16 Lighthouse Cities in 13 countries prepared and excited to co-create concrete policy actions in the course of the project, and thereby support the achievement of their countries' NDCs. Further 26 Follower Cities (including several EU capitals), are eager to learn new policy options for adjusting their own policy strategies and climate action plans.
- The modelling team developing the national, EU (and global) mitigation pathways under achievable lifestyle changes, as well as the policy advisors who will transform these pathways in policy-ready guidance for informing the NDCs are all leading centres/experts and show remarkable track records in their respective field.

considerations

WP6: Indeed, our well-established modelling teams (E3M, PIK, UCT) already collaborate extensively with the policy advisors from WP7 to transform the model-based pathways into policy-ready and practical guidance to inform the new NDCs of the EU and S. Africa. This has been demonstrated by the presentation of the main findings of the new lifestyle -informed mitigation pathways in the project workshop in the EU Parliament.

WP7: The information on the key project assets is still relevant. Research for D7.2 allowed to assess the state of the art of current policies regarding the reduction of emissions and identify gaps, then redefine them, with the help of policymakers, in a more structured and all-encompassing way.

KPI

- Target: 30 informed/involved policy makers (with competence in preparing NDCs)
- Target: 100 new/improved local policies (defined or implemented) for supporting lifestyle transformation

Contact with related NDCs authorities and authors for each country involved in the project have been established, which facilitated the organisation of a Campaigners workshop in Bonn as the sidelines of the UNFCCC preparatory meeting for the COP28 (attended by more than twenty national policymakers), as well as an online Campaigners side event at the COP28 in December 2023, reaching out more than one hundred participants. Throughout





the project, LCs have been informed of the progress of our research and interacted with national policymakers.

he development of D7.2 involved exchanges with policymakers, notably through a questionnaire. Through these exchanges, as well as via the workshops organized as a side event of COP28, which brought together national negotiators from the COP, we were able to reach a significant number of policymakers at the national level.

As the Deliverable D7.2 compiling the final set of policy recommendations to national policymakers have only submitted at the very end of project, the these recommendations could not yet have been integrated into new legislative documents. However, the feedback received from the numerous national policymakers on our policy recommendations have been very positive and we are confident that they will feed future legislative policy documents.

EI#3 Support the Stocktake Exercise by taking stock of collective progress towards the Paris Agreement

Information on status of the impact expected (still relevant or needs to be updated)

Most important outputs are

- D6.2: The impacts of lifestyle changes on climate change mitigation pathways
- D7.3: Position paper: Statement from CAMPAIGNers to the Conference of the Parties

The impact is still relevant. WP6 modellers and researchers have already contributed to WP7 policy papers. In addition, the enhanced modelling tools have been used to provide quantitative support to the global stocktake, aiming to illustrate the role of lifestyle changes towards meeting the Paris Agreement goals.

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 D7.4: Indicator report on lifestylerelated barriers and opportunities The active participation of leading global models (REMIND, PROMETHEUS, GEM-E3) in our analysis demonstrates that our lifestyle-informed mitigation scenarios can provide quantitative support to the global stocktake.

The Paris Agreement noted the importance of sustainable lifestyles and sustainable patterns of consumption and production.

However, the most recent Nationally Determined Contributions (NDCs) delivered on behalf of the EU and Member States, although containing a series of measures and actions to bring European countries on track to achieve net-zero emissions by mid-century, have not adequately incorporated lifestyle-related mitigation pathways.

Key project assets for creating targeted impact:

- Submitting the CAMPAIGNers Position
 Paper officially to inform the UNFCCC
 Global Stocktake (file submission system of UNFCCC not yet online) and promote it through CAMPAIGNers' channels.
- Project partners are key contributors to initiatives continuously monitoring the progress towards the Paris Agreement's goals (e.g., PIK, CANE, etc.) and will ensure that the Position Paper (and later D6.2 and D7.4) are received by the UNFCCC's Conference of the Parties for their tasks of the Global Stocktake.
- The existing links between CAMPAIGNers partners (e.g., ICLEI, CANE) will be leveraged to ensure a direct link between the project and the

Probably this KPI is most relevant for WP7. However, the modelling tools (PRIMES, GEM-E3, REMIND, PROMETHEUS) used and further improved in the project are already key contributors of model-based scenarios for IPCC, EU policy, and UNFCCC. Therefore, the new scenarios informed with an improved representation of lifestyle changes will provide support to the policy papers targeting the UNFCCC COPs and Global Stocktake.

CAMPAIGNers key recommendations (D7.1, D7.2, D7.3, D7.4, D7.5, D7.6 and D7.7) resolve thus around the following five priority areas of lifestyle changes with the highest recognised potential for reducing climate impacts: energy, mobility, transport, housing, diet and use of resources.

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UNFCCC, and make its contribution to the Global Stocktake highly recognised.

KPI

- Target: 10 of representatives to the Conference of the Parties or their team members involved/informed
- Target: 10 of cooperations with nongovernmental initiatives for monitoring progress towards the Paris Agreement's goals

Several workshops and events have been organized to exchange with national policymakers non-governmental and organizations, including the organisation of a Campaigners workshop in Bonn as the sidelines of the UNFCCC preparatory meeting for the COP28 (attended by more than twenty national policymakers), as well as an online Campaigners side event at the COP28 in December 2023, reaching out more than one hundred participants.

EI#4 Demonstrate thow the latest climate science can be converted into practical advice for mitigation action

Information on status of the impact expected (still relevant or needs to be updated)

Most important outputs are

- D3.1: Multidisciplinary state-of-the-art in lifestyle transformation research
- D3.4: The ultima ratio of the goalsetting network
- D7.7: Local policies, actors and lifestyle transformation

Deliverables D3.1 and D3.4 have been completed and submitted (the former already in the 1st Reporting Period). While deliverable D3.4 points to areas of people's lifestyles that may be most amenable to change via simple interventions (e.g., change in diet), our results in fact suggest the existence of multiple areas of people's lifestyles that can to some extent be changed.

Key project assets for creating targeted impact:

 The goal-setting network as a testing facility of the various assumptions/hypotheses how the latest climate science can be utilised There was a large database of Challenges created and analysed the acceptance and completion by app users. The results point to several areas of people's lifestyles amenable to change, and identify individuals who might be most willing to adjust their lifestyles in response to simple app-mediated

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- to stimulate citizens' engagement with/acceptance of mitigation actions and policies.
- Leading climate scientists involved in the preparation of the IPCC ARs are in the consortium (PIK)
- Consortium member are leading scientists in numerous ongoing/past empirical studies for identifying the most effective mechanisms to maximise the effect of policy measures and their acceptance (EI-JKU, NTNU, NUIG, FEEM).

interventions (e.g., women, people with higher incomes, and younger individuals).

The latest scientific findings have been included in the Policy reports (D7.1, D7.2, D7.3, D7.4, D7.5, D7.6 and D7.7), and presented and discussed at different workshops with local, national and European policymakers, as described in D7.8 and 7.9.

KPI

- Target: 20 of identified avenues and mechanisms for utilizing climate science
- Target: 50 of policy makers informed about the found mechanisms incl. provision of example for implementation

We identified several mechanisms and avenues that can help achieve lifestyle changes and/or improve our understanding of how and when these changes can be achieved most effectively, including:

- targeting app interventions to women in particular (see D3.4)
- targeting app interventions to younger people in particular (D3.4)
- targeting app interventions to stay at home parents in particular (D3.4)
- targeting app interventions to the less educated in particular (D3.4)
- targeting app interventions to people with specific consumer habits (D3.4)
- several intervention areas should be targeted, but focusing on diet might be particularly effective in app-mediated interventions (D3.4)
- lifestyle changes requiring more time (over one week) are less likely to be successfully completed, therefore an approach using small incremental steps may be preferrable

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(D3.4)

- however, lifestyle changes requiring a lot of time (over three weeks) are more likely to be sought out by users, i.e., accepted in the app (D3.4)

WP7: We have elaborated a large number of policy recommendations targeting various levels of governance, including local, national, and European, and focussing on actions that public policymakers should undertake in terms of investment, fiscal policies, or the establishment of appropriate regulatory frameworks to encourage citizens to adopt sustainable lifestyles. These recommendations have benefited significantly from ongoing exchanges with decision-makers at all levels and many interactions with the LCs (including workshops and focus groups), as well as from different workshops. Thanks to the many interactions we had with policymakers at all levels of decision, we have been able to reach out and convey practical advices on lifestyle changes for mitigation actions more than one hundred policymakers.

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5. Exploitation and Dissemination

5.1. DEC activities

- press release

An overview of all press releases was compiled into one report D8.7.

- Social Media

The project was present across different social media platforms: Twitter, Linkedin, Instagram and Facebook. The combined following was 959 (Instagram: 381. Facebook: 236. LinkedIn: 230. Twitter: 112). Twitter and Linkedin coverage were designed to target civil society organisations, cities and decision-makers whereas Instagram and Facebook were aimed at individuals and (potential) app users. Accordingly, ICLEI acted as a community manager via Facebook and Instagram, while CAN Europe managed LinkedIn and Twitter. More information on the citizen-oriented community outreach on Facebook and Instagram can be found in the WP4 section of this report. Additionally, refer to D4.3, as well as D4.1 and D4.2, for more insights specific to communications and outreach to engage and activate citizens, including an in-depth analysis of results and recommendations for future exploitation.

In addition, social media of partners was used to promote the messages from the project and activities to ensure it reaches a wider audience, given their higher following. For example, CAN Europe shared diverse content on its Linkedin and Twitter channels during key moments, such as COP.

- Conferences

A list of conferences and events can be found below.

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Table 5: List of conferences

| Partner name | Type of activity | Name of activity | Links (where relevant) | Date | Location | Level of disseminat ion activity | Estimated total reach | Type of Audience |
|--|--|---|---|------------|---------------------------|----------------------------------|-----------------------------|--|
| CAN Europe | Conference | Gamifying Sustainable Lifestyles: Missing ingredient or lost endeavour? | https://project.climat e- campaigners.com/ne wspost/event/gamify ing_sustainable_lifes tyles | 13/03/2024 | Brussels and online | European | 100 | Civil society, scientific community, governmental representative s, Other |
| City of Milan | Events - Organisation of Workshops | #Lifestylechallenges workshop | development | 27/02/2024 | Italy | Local | 20 | General public |
| HEAS, EI-JKU | Workshop | Workshop at the European Parliament | | 21/02/2024 | Brussels | European | 30 | policy makers from various fields |
| Lappeenran ta-Lahti University of Technology (LUT) | Participation in event other than a conference or workshop | Presenting the app Climate Change cou | o during a lecture in urse | 12/02/2024 | Finland | Regional | 100 | General public |

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| CAN Europe | Organising an event | COP28 event Reimagining NDCs: Unlocking the potential of sustainable lifestyles | https://caneurope.or g/cop28-event- reimagining-ndcs/ | 24/11/2023 | Online | Global | 50 | Civil society, Policy makers, scientific community, Other |
|--------------------|--|--|---|------------|-----------|----------|----|---|
| City of Lahti | Pitch event | Teams event for ass | ociations | 14/11/2023 | Finland | Regional | 20 | Other |
| City of Vilnius | Participation in event other than a conference or workshop | The "Climate Campaigner" project was presented at the meeting of active communities and initiative groups in Vilnius - the COPE network. | https://vilnius.lt/lt/202 3/11/03/sostines- bendruomenes-kurs- klimatui-neutralaus- miesto-iniciatyvas/ | 03/11/2023 | Lithuania | Local | 30 | General public |
| City of Lahti | Participation in event other than a conference or workshop | Presenting Climate Campaigners for geography students from Lahden yhteiskoulu. | | 30/10/2023 | Finland | Local | 60 | Civil Society, Customers |
| City of Lahti | Participation in event other | Presenting Climate school students in La | Campaigners for high ahden Lyseo | 12/10/2023 | Finland | Local | 80 | Customers, Other |

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| | than a conference or workshop | | | | | | | |
|-------------------|---|--|---|------------|-------------------|----------|-----|---|
| City of Milan | Events - Participation in a Conference | Milan Digital Week conference: "UrbAlytics: Urban Heat Island Assessment and Adaptation through NBS" | https://www.landsrl.c om/land- news/urbalyticsallam ilanodigitalweek | 09/10/2023 | Italy | Local | 50 | Scientific Community, Policy makers |
| City of Milan | Events - Participation in a Conference | MCR2030 webinar "Tackling Urban Heat and Wildfire Risk with Inclusive Governance Systems" | https://mcr2030.undr r.org/news/tackling- urban-heat-and- wildfire-risk- inclusive- governance-systems | 03/10/2023 | Internati onal | European | 150 | Scientific Community, Policy makers |
| City of Dublin | Events - Participation in a Conference | Central Bank Sustainability Event | | 05/09/2023 | Ireland | Local | 50 | Industry, General public |
| City of Lahti | Participation in event other than a | Marketing at orientation week event at the university (LUT) | | 01/09/2023 | Finland | Local | 800 | Other |

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| | conference or workshop | | | | | | | |
|---|--|--|---|------------|-------------------------------------|----------|-----|---|
| Energieinsti tut an der Johannes Kepler Universität Linz | Events - Participation in a Conference | SCORAI-ERSCP- Wageningen conference 2023 | https://www.scp- conference- 2023.com/web/wiki/9 17650/session- overview-book-of- abstracts | 06/07/2023 | Wagenin gen (Netherl ands) | European | 100 | Scientific Community, Industry |
| City of Grenoble | Events - Participation in a workshop | Urban Future Conference: WS "Empowering Communities for Sustainable Cities: Strategies for Citizen Engagement" | | 21/06/2023 | German Y | European | 35 | Scientific Community, Other |
| Skopelos (DAFNI) | Participation in event other than a conference or workshop | Clean Energy for EU Islands Launch Event : 30 RES islands by 2030 | https://dafninetwork. gr/wp- content/uploads/202 3/06/CE4EU%CE%99_ WEBINAR_DRAFT_AGE NDA.pdf | 21/06/2023 | Greece | National | 50 | Scientific Community, Policy makers, Other |
| City of Grenoble | Events - Participation in a workshop | Urban Future Conference - wokshop "How to build an online community" | | 20/06/2023 | France | European | 30 | Scientific Community, Other |
| City of Grenoble | Participation in event other | Stand CC at the Transition | Biennal of Cities in | 10/06/2023 | France | Local | 25 | General public |

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| | than a conference or workshop | | | | | | | |
|---------------------|--|--|---|------------|---------|----------|-----|---|
| City of Grenoble | Events - Organisation of Workshops | WS "Taking action with an app ? Dialogue on the Climate Campaigners initiative" within the Biennial of Cities in Transition | https://www.grenoble .fr/2954-le- programme-de-l- edition-2023.htm | 09/06/2023 | France | Local | 10 | Civil Society, Policy makers |
| City of Lahti | Participation in event other than a conference or workshop | Participation in Ympäristökylä - event | https://www.lahti.fi/vapaa-aika/tapahtumat/ymparistoviikko/ymparistokyla/ | 05/06/2023 | Finland | Regional | 500 | General public, Customers, Other |

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5.2. Scientific Papers

The project's publishable outputs mostly depend on the availability of data about the users' interaction with the app. The data collection in the app only started in M18, so most publications fall into the 2nd Reporting Period or have not yet been officially published and/or are still under review. This is partly due to the number of app users and respective availability of data, which significantly increased in the very last months of the project, rendering publications relying on data impossible at an earlier stage. Overall, by the end of the project 12 publications were either published or under review, which is good results considering the originally planned number of 18 publications and the fact that multiple publications are currently in preparation.

Published by June 2024:

Davide Bazzana, Jed J. Cohen, Nicolò Golinucci, Manfred Hafner, Michel Noussan, Johannes Reichl, Matteo Vincenzo Rocco, Alessandro Sciullo, Sergio Vergalli (2022), A multi-disciplinary approach to estimate the medium-term impact of COVID-19 on transport and energy: A case study for Italy, Energy, Volume 238, Part C, 122015, https://doi.org/10.1016/j.energy.2021.122015

Biresselioglu ME, Savas ZF, Demir MH and Kentmen-Cin C (2024) Tackling climate change at the city level: insights from Lighthouse Cities' climate mitigation efforts. Front. Psychol. 14:1308040. https://doi.org/10.3389/fpsyg.2023.1308040

A. Andreou, P Fragkos, T Fotiou, F Filippidou, Assessing Lifestyle Transformations and Their Systemic Effects in Energy-System and Integrated Assessment Models: A Review of Current Methods and Data, Energies 15 (14), 4948, https://doi.org/10.3390/en1514494

Sitarz, J., Pahle, M., Osorio, S., Luderer, G., Pietzcker, R., EU carbon prices signal high policy credibility and farsighted actors $\frac{\text{https://www.econstor.eu/handle/10419/280455}}{\text{https://doi.org/10.1038/s41560-024-01505-x}}$

Under review or under preparation (draft in progress):

Andreou, A., Fragkos, P., et al. (under review). Evaluating the impacts of lifestyle change: A scenario-based analysis for the European residential buildings sector. Under review in Environmental Research Letters.

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Hynes, M., & Fahy, F. (under review). Eco-apps for change? Evaluating the use of mobile apps to promote and support sustainable lifestyle changes. Under review in ACM Journal on Computing and Sustainable Societies.

Kim, B., Klöckner, C. A., & Vesely, S. (under review). Can mobile phone apps promote sustainable behavior? The role of message perceptions and message features. Under review in Journal of Environmental Psychology.

Doris Fuchs, Ariane Debourdeau, Elisabeth Dütschke, Frances Fahy, Giulia Garzon, Benjamin Kirchler, Christian A. Klöckner, and Marlyne Sahakian, (under review) Assessing the impact of structural change in sustainable consumption and lifestyles research

Mike Hynes and Frances Fahy (under review), Eco-Apps for Change? A critical evaluation of the role of mobile apps in promoting and supporting sustainable Lifestyles.

Fahy, F. et al. (under review). Assessing the impact of structures in sustainable consumption and lifestyles research. Under review in Journal "Consumption and Society".

Cavalli, L., & Boeri, C. (2023) (under preparation), Carbon neutral lifestyles and NDCs: advice and policy perspectives. FEEM Working Paper

Claudelin, A., Kareinen, E., Halonen, V., Uusitalo, V. (under preparation submission planned in 2024), The potential to reduce greenhouse gas emissions via a mobile app promoting sustainable lifestyle challenges across various cities.

Andreou, A., Fragkos, P., et al. (under preparation), The impacts of lifestyle changes on climate change mitigation pathways: a system-wide analysis for the European Union.

Keenaghan, N., Fahy, F. Stokes, K., Dekker S. ... (under preparation – submission August 2024) Communicating A Sustainable Transition: Insights from local government'. Gateways: International Journal of Community Research and Engagement

Stokes, K., Fahy F., Keenaghan, N and Lawhon, M (under preparation – submission August 2024) 'Creating Climate Campaigners: Governing urban sustainability with/through appbased challenges'. Journal of Urban Affairs.

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6. Exploitable results

A summary of exploitable results in respect of last 18 months and explanation about how these results can/are exploited.

WP2: The Climate CAMPAIGNers app aims at delivering exploitable data on climate-related lifestyles that are not limited to the runtime of the project. Data from completed LSCs and assigned challenges will continue to offer insights into barriers hindering certain groups from adopting eco-friendly behaviours. Understanding motivations for successful adoption is also key. The targeted approach of these challenges can be used to further inform future policy interventions for specific groups even after the project has ended as the app will be continued to be available for the next at least 3 years, managed by the partner SBK. Therefore, the app is available for further use of the already established GSN or can also be used by new attracted users eg. cities as well. In addition, as explained in D8.6, further funding opportunities are being sought, which have already led to the app being used in companies, e.g. for company-specific challenges.

D3.1 catalogued knowledge gaps from the perspective of intentional communities/community-led initiatives and this information directly fed into a number of policy briefs. One example of a key exploitable result from this deliverable was the review of eco-apps conducted as part of D3.1 which produced an original research article, currently under review. The paper addresses how can apps be best used to assist and support the crucial lifestyle and behaviour changes needed to address the human impacts of climate change? Through a two-pronged study, this paper seeks to understand how such technology can be leveraged to promote and support sustainable lifestyles. First, a review of existing literature in the areas of mobile digital app use in eHealth and pro-environmental change was undertaken to discover what encourages and supports lifestyle change through digital eco-app use. Secondly, we reviewed data from first-hand eco-app users to consider what they find interesting and frustrating, and what compels them to uninstall such apps from their devices. This review identified attrition as a particular challenge for supporting app-based lifestyle change, with users indicating they will uninstall apps if they materially affect the running of their device or if the services on offer were irrelevant to their needs. The paper concludes by offering guidelines and suggestions for best practices for encouraging sustainable lifestyle changes through digital applications

WP4: The GSN established during the project period has evolved into an interactive network of app users and will remain available at least for 3 more years to users after the project ends providing an opportunity to continue activities and actions already created in the GSN or to attract additional users. Costs for the post-project maintenance of the app are covered by partner SBK. Additional cities can be motivated by other already participating

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cities to join or learn from the activities in the GSN and benefit from the experience already gained and may serve as a platform for cities. D4.3 also provides valuable analysis and benchmarking data for future Climate Campaigners Communication managers and for any other initiatives dealing with promoting more sustainable lifestyles.

WP5: The data storage, transfer, and query with GDPR compliance of Task 5.1, initially mentioned in the 1st Reporting Period, has been continuously validated in the 2nd Reporting Period and remains the primary source of useful information available to anyone who needs it.

Based on this, the CAMPAIGNers Monitor (available online in the second reporting period) is an important resource for city administrators and the public to assess the growth of the goal-setting network and citizen engagement with the LSCs. A second, complementary source of prebuilt basic statistical result is the R package developed for data validation and statistical analysis reporting in Task 5.2. Within this task, the econometric analysis of users' environmental behavior and the ongoing research design of Task 5.3 have been already exploited throughout the project for designing lifestyle challenges and research, as well as potential inputs for the mathematical models developed in WP6 and policy advice in WP7.

WP6: The detailed gap analysis on the representation of lifestyle changes in Energy System Models and Integrated Assessment Models is a value added for the project and for the entire modelling community in general (and has been published in an open-access scientific journal). The identification, selection and prioritization of lifestyle changes that need to be represented in national, EU and global mitigation pathways is available for future analysis guiding modelling developments beyond the CAMPAIGNers project. Finally, the improved mitigation pathways with an advanced representation of lifestyle change are also available for future analysis and can be used to inform and provide useful insights for climate policy design in the EU and globally.

WP7: Our efforts in developing and disseminating policy recommendations have laid the foundation for integrating behavioral changes into policymaking across various levels of governance—local, national, and European. These aspects have historically been overlooked or undervalued in climate policies, particularly within National Energy and Climate Plans (NECPs) and at the COP level. Consequently, our work has facilitated the creation of guidelines to equip climate negotiators with tools for effectively integrating behavioral dimensions and lifestyles into climate policy implementation. Furthermore, our research has identified exemplary practices at the local level concerning public policies that promote the adoption of sustainable lifestyles. We have also proposed strategies to overcome key challenges encountered by municipalities. Policymakers can now draw upon these findings to inform the formulation of their climate policies effectively.

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7. Use of Resources

This section describes the use of financial (related to costs/budget per partner) and personal resources (related to person-months per WP) spent in the final 18 months set into relation to the resources for the full runtime of the project.

Table 6: Costs per partner reported

| Total in € | Costs reported in | Costs reported | Total costs | Total budget |
|------------|-----------------------|----------------|------------------|---------------|
| | RP1 incl.adjustments* | in RP2 | reported RP1+RP2 | accord. to GA |
| | (M1-M18) | (M19-M36) | (M1-M36) | (M1-M36) |
| EI-JKU | 283 334,66 | 362 358,68 | 645 693,34 | 600 000,00 |
| NUIG | 118 443,44 | 193 370,84 | 311 814,28 | 283 462,50 |
| NTNU | 97 380,55 | 156 510,40 | 253 890,95 | 355 500,00 |
| UCT | 104 767,90 | 95 557,91 | 200 325,81 | 212 500,00 |
| PIK | 422,81 | 238 109,46 | 238 532,27 | 246 500,00 |
| FEEM | 37 904,01 | 71 411,19 | 109 315,20 | 110 625,00 |
| IUE | 96 435,40 | 101 383,20 | 197 818,60 | 202 500,00 |
| LUT | 70 129,53 | 125 262,13 | 195 391,66 | 200 000,00 |
| BEU | 34 562,50 | 42 875,00 | 77 437,50 | 71 250,00 |
| CANE | 91 975,00 | 96 226,30 | 188 201,30 | 187 020,00 |
| ICLEI | *111 057,79 | 216 960,41 | 328 018,20 | 358 750,00 |
| ECOLISE | 84 966,25 | 107 750,04 | 192 716,29 | 192 500,00 |
| SBK | 342 912,18 | 62 664,10 | 405 576,28 | 394 640,00 |
| E3M | 138 055,24 | 179 683,90 | 317 739,14 | 317 772,50 |
| Saints | *228 999,07 | 71 978,74 | 300 977,81 | 295 175,00 |
| MILAN | 25 989,94 | 45 834,99 | 71 824,93 | 76 875,00 |
| IZMIR | 23 426,20 | 8 545,43 | 31 971,63 | 34 225,00 |
| LAHTI | 15 924,81 | 73 168,20 | 89 093,01 | 87 875,00 |
| DAFNI | 27 198,70 | 17 193,03 | 44 391,73 | 45 725,00 |
| LINZ | 28 488,79 | 26 771,24 | 55 260,03 | 64 775,00 |
| SKOPELOS | 17 000,00 | 15 500,00 | 32 500 | 46 875,00 |
| FREISTADT | 14 568,91 | 15 021,14 | 29 590,05 | 53 750,00 |
| VILNIUS | 21 767,63 | 16 595,90 | 38 363,53 | 39 375,00 |
| PESARO | 18 101,00 | 35 730,58 | 53 831,58 | 51 875,00 |
| GRENOBLE | *28 835,04 | 23 197,03 | 52 032,07 | 51 875,00 |
| DUBLIN | 29 373,75 | 27 281,25 | 56 655,00 | 55 625,00 |
| MALMÖ | 19 450,08 | 46 028,60 | 65 478,68 | 71 375,00 |
| LIBERTAD | 15 375,00 | 41 411,05 | 56 786,05 | 43 750,00 |
| ASOIU | 11 735,00 | 20 765,00 | 32 500,00 | 32 500,00 |

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| Total | € 2 235 153,36 | € 2 655 942,81 | € 4 891 096,17 | € 4 999 670,00 |
|-------|----------------|----------------|----------------|----------------|
| HEAS | 106 748,75 | 120 797,11 | 227 545,86 | 215 000,00 |

For the final 18 months, the consortium has reported costs of \leqslant 2 655 942,81 thus 53% of the total budget.

Table 7: Person-months per partner and WP reported

| PM | WPI | WP2 | WP3 | WP4 | WP5 | WP6 | WP7 | WP8 | WP9 | M19-36 | M1-36 acc. to |
|-----------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|------------------|
| | | | | | | | | | | | GA |
| EI-JKU | 0.22 | 0.18 | 2.21 | 1.04 | 9.60 | 1.94 | 4.12 | 5.46 | 14.79 | 39.56 | 56.00 |
| NUIG | 0.00 | 1.00 | 1.97 | 1.72 | 1.46 | 0.00 | 7.48 | 2.42 | 1.15 | 17.20 | 30.00 |
| NTNU | 0.00 | 0.00 | 21.10 | 0.00 | 0.00 | 0.00 | 0.06 | 0.09 | 0.00 | 21.25 | 30.00 |
| UCT | 0.00 | 0.00 | 0.70 | 0.85 | 5.52 | 5.88 | 0.48 | 0.15 | 1.16 | 14.74 | 30.00 |
| PIK | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.62 | 10.67 | 0.00 | 0.00 | 33.29 | 24.00 |
| FEEM | 0.00 | 0.00 | 0.00 | 0.00 | 4.90 | 0.00 | 1.80 | 0.00 | 2.92 | 9.62 | 12.00 |
| IUE | 0.00 | 2.82 | 0.00 | 1.01 | 1.45 | 2.43 | 3.24 | 1.94 | 0.36 | 13.25 | 30.00 |
| LUT | 0.00 | 12.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.72 | 1.72 | 15.79 | 30.00 |
| BEU | 0.00 | 7.00 | 0.00 | 1.50 | 1.50 | 0.00 | 1.00 | 0.20 | 0.20 | 11.40 | 24.00 |
| CANE | 0.00 | 0.69 | 0.69 | 0.00 | 0.00 | 0.59 | 4.12 | 6.20 | 0.61 | 12.90 | 23.50 |
| ICLEI | 0.41 | 2.33 | 0.00 | 14.90 | 2.39 | 0.00 | 9.46 | 1.41 | 0.00 | 30.90 | 36.00 |
| ECOLISE | 0.00 | 2.08 | 0.00 | 0.00 | 0.00 | 0.00 | 5.36 | 6.73 | 0.00 | 14.17 | 24.00 |
| SBK | 0.00 | 1.18 | 0.00 | 0.00 | 4.80 | 0.00 | 0.00 | 0.46 | 0.00 | 6.44 | 44.50 |
| E3M | 0.00 | 0.00 | 0.00 | 0.00 | 2.83 | 14.34 | 2.31 | 0.44 | 1.52 | 21.44 | 31.00 |
| Saints | 0.00 | 0.00 | 0.00 | 6.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.30 | 22.50 |
| MILAN | 0.00 | 0.50 | 0.70 | 1.90 | 0.20 | 0.00 | 1.90 | 1.20 | 0.00 | 6.40 | 10.00 |
| IZMIR | 0.00 | 0.00 | 0.54 | 0.73 | 0.55 | 0.00 | 0.17 | 0.24 | 0.00 | 2.23 | 6.00 |
| LAHTI | 0.00 | 0.83 | 0.37 | 9.81 | 0.04 | 0.34 | 0.35 | 0.60 | 0.00 | 12.34 | 12.00 |
| DAFNI | 0.00 | 0.00 | 0.47 | 0.59 | 0.13 | 0.00 | 0.17 | 0.23 | 0.00 | 1.59 | 5.50 |
| LINZ | 0.00 | 0.00 | 0.54 | 1.92 | 0.05 | 0.00 | 0.08 | 0.36 | 0.00 | 2.95 | 6.00 |
| SKOPELOS | 0.00 | 0.00 | 0.50 | 0.90 | 0.50 | 0.00 | 0.40 | 0.40 | 0.00 | 2.70 | 5.00 |
| FREISTADT | 0.00 | 0.00 | 0.00 | 0.70 | 0.00 | 0.00 | 0.33 | 0.40 | 0.00 | 1.43 | 6.00 |
| VILNIUS | 0.00 | 0.00 | 1.00 | 3.50 | 0.50 | 0.00 | 2.00 | 1.50 | 0.00 | 8.50 | 10.00 |
| PESARO | 0.00 | 0.00 | 0.70 | 1.30 | 0.40 | 0.00 | 0.90 | 0.80 | 0.00 | 4.10 | 6.00 |
| GRENOBLE | 0.00 | 0.00 | 0.00 | 1.80 | 0.30 | 0.00 | 0.60 | 0.50 | 0.00 | 3.20 | 6.00 |
| DUBLIN | 0.00 | 0.00 | 0.40 | 1.00 | 0.50 | 0.00 | 1.00 | 0.50 | 0.00 | 3.40 | 6.00 |
| MALMÖ | 0.00 | 0.00 | 0.70 | 1.40 | 0.60 | 0.00 | 0.90 | 0.50 | 0.00 | 4.10 | 6.00 |
| LIBERTAD | 0.00 | 0.00 | 0.05 | 5.23 | 0.00 | 0.00 | 0.14 | 0.03 | 0.00 | 5.45 | 12.00 |
| ASOIU | 0.00 | 0.00 | 0.60 | 1.60 | 0.20 | 0.00 | 0.60 | 0.00 | 0.00 | 3.00 | 6.00 |
| HEAS | 0.00 | 0.00 | 0.32 | 0.00 | 0.00 | 0.49 | 6.47 | 0.07 | 0.29 | 7.64 | 13.50 |
| Total | 0.63 | 30.96 | 33.56 | 59.70 | 38.42 | 48.63 | 66.11 | 34.55 | 24.72 | 336.28 | 563.50 |

This table gives an overview of the PM per WP reported by the partners for the second reporting period as well as the PM per partner specified in the Grant Agreement.

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For the final 18 months, the consortium has reported staff effort of 336.28 person-months thus 59,68 % of the total person-months for the entire project runtime.

Clarifications on deviations in the use of resources

Average personnel rates

For those partners, whose person month costs deviate by more/less than 25% compared to the original budget plan, a clarification is provided in the table below.

| Partner | Clarification |
|---------|---|
| NUIG | University of Galway had an increase in their direct personnel costs due to |
| | two main factors: 1) staff changes: a member of staff left the organisation |
| | (postdoc) and had to be replaced by a more senior staff member for a |
| | period of time; 2) all public salaries in Ireland increased over the period due |
| | to new national pay scales. |
| NTNU | Personnel working on the project were paid less on average than |
| | envisioned in the Grant Agreement, mainly due to hiring a relatively junior |
| | colleague to work on the project. In addition, the evolution of currency |
| | exchange rates between EUR and the local currency (NOK) resulted in lower |
| | per-PM cost. |
| PIK | Staff that was previously planned to work on CAMPAIGNers left PIK and we had to hire new staff. It took very long to find suitable staff, so we reported no costs in the first reporting period, and in the end we could only find more junior staff than originally planned when we wrote the proposal. They therefore needed more time to do the work in the DoA, but also had a lower pay rate, so total costs stayed the same. |
| LUT | The personnel costs per month have been higher than in the GA due to risen salaries after the start of the project. |
| ICLEI | Personnel costs average rate exceeded projections primarily due to unforeseen staff changes and a subsequent realignment of tasks and responsibilities within the team. More Junior staff is involved in the project, thus the needs of more hours and consequently PMs. However, we guarantee that the outcome of the project is not affected by this choice. They had to take on more responsibilities than initially planned, with the added challenge of managing overlapping tasks and deliverables. |
| IZMIR | A screenshot shows the value of the Turkish Lira against the Euro. It is taken from the official website of the European Central Bank and shows the |

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| | increase in the exchange rate of the Euro against the Turkish Lira as a |
|-----------|---|
| | function of time. Our salaries are not generally adjusted in line with the |
| | exchange rate of the Euro against the Turkish Lira. Both the usual increase |
| | in the value of the Euro against the Turkish Lira and the generally low rate |
| | of increase in the salaries of employees in public institutions in our country |
| | result in the declared cost per PM being lower than that stated in the Grant |
| | Agreement. |
| Freistadt | Freistadt had an increase of direct personnel costs due to the resignation |
| Troistage | of an office manager, which necessitated a change in personnel to |
| | Christoph Aumayr. Christoph Aumayr is the head of the citizen services |
| | department in Freistadt. However, this is associated with higher personnel |
| | costs, as a head of department is ranked higher than an employee in the |
| | office management. It also has to point out the high inflation of the last two |
| | years, which has also led to higher wage agreements. |
| Vilnius | The costs are reported lower because the PM and an expert (highest paid) |
| | retired, and for a few months we had a gap in the PM and junior staff did |
| | the job. |
| | |
| | , |
| Libertad | The deviation in the average rates for personnel costs came about as |
| Libertad | |
| Libertad | The deviation in the average rates for personnel costs came about as follows: |
| Libertad | The deviation in the average rates for personnel costs came about as follows: The majority of the hours charged through the project were made by two |
| Libertad | The deviation in the average rates for personnel costs came about as follows: The majority of the hours charged through the project were made by two consultants, Luis Garcia (senior and scientific consultant) and Romana |
| Libertad | The deviation in the average rates for personnel costs came about as follows: The majority of the hours charged through the project were made by two consultants, Luis Garcia (senior and scientific consultant) and Romana Rainer. Due to their qualifications, a gross hourly wage of 10€ cannot be |
| Libertad | The deviation in the average rates for personnel costs came about as follows: The majority of the hours charged through the project were made by two consultants, Luis Garcia (senior and scientific consultant) and Romana Rainer. Due to their qualifications, a gross hourly wage of 10€ cannot be charged. For this, it was possible to out-source part of the personnel costs, |
| Libertad | The deviation in the average rates for personnel costs came about as follows: The majority of the hours charged through the project were made by two consultants, Luis Garcia (senior and scientific consultant) and Romana Rainer. Due to their qualifications, a gross hourly wage of 10€ cannot be charged. For this, it was possible to out-source part of the personnel costs, by collaborating mainly with the Universidad Cesar Vallejo, which has |
| Libertad | The deviation in the average rates for personnel costs came about as follows: The majority of the hours charged through the project were made by two consultants, Luis Garcia (senior and scientific consultant) and Romana Rainer. Due to their qualifications, a gross hourly wage of 10€ cannot be charged. For this, it was possible to out-source part of the personnel costs, by collaborating mainly with the Universidad Cesar Vallejo, which has provided personnel at its own expense. |
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Absolute terms of overall project costs

For those partners, whose absolute terms of overall project costs deviate by more/less than 25% compared to the original budget plan, a clarification is provided in the table below.

- EI-JKU request of higher grant budget than stated in the GA

 The management of the project proved to be more challenging than anticipated during the proposal stage. Communicating with 30 partners and the need to switch some of these partners during the project's runtime through an amendment resulted in multiple person-months of unplanned work. This issue not only affected WP9 but also required EI-JKU to intervene across multiple work packages to ensure the successful achievement of objectives. Consequently, these circumstances led to a request for higher costs for the total project duration than specified in the Grant Agreement, approximately 10% higher.
- NTNU request of lower grant budget than stated in the GA
 Personnel working on the project were paid less on average than envisioned in the
 Grant Agreement, mainly due to hiring a relatively junior colleague to work on the
 project. In addition, the evolution of currency exchange rates between EUR and the
 local currency (NOK) resulted in lower per-PM cost. These circumstances also lead
 to a request for lower costs for the total project duration than specified in the Grant
 Agreement, which is approximately 30% lower.
- City of Skopelos request of lower grant budget than stated in the GA
 The lower request of grant budget refers to the cost category of other direct costs only. Travel costs were not used because of the General Assemblies dates were not convenient. Equipment costs were not used as all the printing (brochures, posters) was done in Skopelos Municipality using our own means, since the procedure was faster and at (literally) zero costs.
- City of Freistadt request of lower grant budget than stated in the GA
 The city of Freistadt has very limited human resources in administration. Therefore,
 the project had to be integrated into existing departments. The commitment of 6 person-months for this project was ambitious.
- Libertad request of higher grant budget than stated in the GA
 The additional requested costs were due to the fact that during the project runtime
 the campaign was organised in 4 cities instead of just one as originally planned. This
 resulted in more material costs, personnel costs and travelling expenses.

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Clarification on the use of resources in terms of SME owners not receiving a salary

We confirm that beneficiary 11, 13, 15 and 27 are SMEs and there are no SME owners not receiving a salary that have worked in the project. Beneficiary 14 has changed its legal status and is no longer an SME. Before the acquisition of E3M through a larger enterprise, E3M was an SME and declaring the personnel cost related to Horizon projects of its SME owners (without receiving a salary through an employment contract) as unit cost (not actual) using the unit cost rate fixed by Decision C(2020) 71155. However, until end of 2022, E3M's SME owners hadn't been involved in the CAMPAIGNers project, therefore no cost for SME owner declared under section A.

Clarification on adjustments to the reporting period 1 (M1-M18)

Three partners made adjustments to the RPI. The explanations are given below:

ICLEI

The change of personnel cost originates from the internal salary adjustment of employees.

SAINTS

Unfortunately, a calculation error was made in the total direct personnel costs in the Financial Report M1-M18, which has now been discovered during the audit of the final statement.

GRENOBLE

Internal salary adjustments resulted in a slight modification to the total direct personnel costs. This change, although minor, has been taken into account to ensure accuracy. Additionally, a previously forgotten invoice of €39.17 for two roll-up prints used in a PR stunt has been included in the "Costs of internally invoiced goods and services" section. For internal accounting purposes, this amount was charged to the "Campaigners" budget line. This ensures consistency between the EU report and municipal accounting.

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8. Annex

Minutes of 2nd online General Assembly, 15th February 2023

Minutes of 2nd physical General Assembly, 13th – 15th June 2023, Lahti/Finland

Minutes of 3rd online General Assembly, 15th November 2023

Minutes of 3rd physical General Assembly (including final conference), 12th – 13th March 2024, Brussels/Belgium

Engagement Letter Engagement Letter "Citizens Acting on Mitigation Pathways through Active Implementation of a Goal-setting Network (CAMPAIGNers)" Agreed-upon Procedures for "Costs claimed under a Grant Agreement financed under the Horizon 2020 Programme (H2020)" - KMPG

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Minutes of 2nd online General Assembly meeting

of Citizens Acting on Mitigation Pathways through Active Implementation of a Goalsetting Network

Meeting date: 15th February 2023, 10.00 –13.00 hrs (Vienna time)

Agenda:

| Timing | Welcome |
|-------------------|--|
| 10:00 - 10:15 | Welcome and Agenda |
| | Interaction |
| Timing | App development - Update |
| 10:15 - 10:30 | Current status of app development, new features and what's coming next (Lead: SBK) |
| approx. +10 mins. | Time for discussion (all) |
| Timing | #Lifestyle Challenges – Status quo |
| 10:40 - 10:50 | Design of challenges and further processing (Lead: EI-JKU) |
| approx. +5 mins. | Time for discussion (all) |
| Timing | Climate Campaigners Reward System |
| 10:55 - 11:05 | How does the reward system work (Lead: SBK) |
| approx. +5 mins. | Time for discussion (all) |
| Timing | Online Monitor |
| 11:10 - 11:20 | Interpretation and practical use (Lead: FFFM) |

Time for discussion (all)

| Timing | Lighthouse Cities activities |
|-------------------|--|
| 11:40 - 12:00 | Overview of LHC activities and next plans, insight of approll-out in one LHC (Lead: ICLEI) |
| approx. +10 mins. | Time for discussion (all) |

| Timing | Integrating lifestyle changes in large-scale models |
|-----------------|---|
| 12:10 - 12:20 | Assessing #Lifestyle Challenges through improved modelling structures (Lead: E3M) |
| approx. +5 mins | Time for discussion (all) |

| Timing | Dissemination & Exploitation |
|------------------|---|
| 12:25 - 12:35 | DEC strategy for next project period (Lead: CANE) |
| approx. +10 mins | Time for discussion (all) |

| Timing | Project Management |
|---------------|--|
| 12:45 - 13:00 | Revision status of first periodic report, upcoming PHYSICAL General Assembly at Lahti/Finland and outlook (Lead: EI-JKU) |

Short break!

Welcome: Johannes (EI-JKU)

56 persons participated in the meeting and were welcomed by Johannes.









The meeting was recorded. Permission of all participants has been received. The recorded meeting is available at CAMPAIGNers Google drive:

https://drive.google.com/drive/folders/lbYEhf-v5I-fm96sFvGmNfh7lcZmgN7Dg



Summary: General points that require action of partners

| Reminder | To-do | Additional information |
|---------------------------------|---------------------------------|--------------------------------------|
| Chat history saved | Persons who are interested in | Link to Google drive: |
| Every comment in the | discussing comments are | https://drive.google.com/driv |
| chat can be discussed | invited to write an email to | e/folders/1bYEhf-v5I- |
| after the meeting (if it | the relevant partner or | fm96sFvGmNfh7lcZmgN7Dg |
| was not possible during | coordinator. | |
| the meeting). | | |
| Reward system of the | LHC are invited to take part in | Please inform SBK if you are |
| арр | the reward system by | going to implement a reward |
| | providing rewards locally | for your city/region. |
| | | |
| | | LHC can already set up local |
| | | rewards here: |
| | | https://docs.google.com/spre |
| | | adsheets/d/1Q3ACkLs996inkA |
| | | <pre>qPG55_cD3aGKFhZKHI/edit#g</pre> |
| | | <u>id=1148565948</u> |
| Sharing LHC activities | 1. sharing social media posts | for further information |
| | (and tag CAMPAIGNers' | ppt of ICLEI |
| | social media accounts | contact |
| | when posting) | sophie.callahan@iclei. |
| | 2.report your dissemination | <u>org</u> |
| | activities by project tracker | |
| | 3.post in app community | |
| | and add location tag | |
| Dissemination - | filling in any idea of relevant | available at |
| Exploitation: Activities | events/conferences | https://docs.google.com/spre |
| mapping sheet (xls.file) | | adsheets/d/1Muaj7- |
| | | owRtlha_4WE0OmO3ypmlqQt |
| | | CrdtgJvqzi3eps/edit#gid=0 |
| Agenda PHYSICAL | Partners are welcome to | reichl@energieinstitut-linz.at |
| General Assembly | send their ideas on an | and / or |
| | agenda topic to EI-JKU | aufreiter@energieinstitut- |
| | | <u>linz.at</u> |



App development - Update - Marijan, Oliver (SBK)

Update:

- now, the app is available in every country of the world
- continuous work on performance and design update
- personal notifications are based on the challenges, selected by the app user
- dashboard monitor has been implemented
- app users, who left the app or did not work actively with the app will receive an email with updates to bring them back

Outlook:

- planning of a notification page at the dashboard for the app users
- improving community page (e.g. upgrade filters, creating own hashtags)
- implementation of user generated challenges is in progress, but has to be discussed further with relevant partners; the admin team will check user proposed challenges, if they are appropriate
- chat functionalities will be developed further

Discussion:

| Johannes | User challenges will probably suggest their challenges in their own |
|----------|--|
| | languages. How can we solve this issue? |
| Marijan: | Integration of DeepL could be a possibility and also ask partners of the |
| | same native language to help with translation |

#Lifestyle Challenges – Status quo – Giulia (EI-JKU), Byungdoo (NTNU)

Within the next 2 weeks the development team (Giulia, Byungdoo, Anna) will start implementing the second wave of challenges in the back-end. New challenges won't be published all together.

Prompted challenges will start next week. Users will get a push notification, if they accept or do not accept the challenge. These challenges are drawn from wave 1.



NTNU with partners NUIG and ICLEI is developing a process on how to come up with a new challenge which can be used in several domains. The first testing was done in Milan and new ones will come in March.

Two questions were raised by Giulia to the participants:

1. Should all second wave challenges be already made available in the app or should some of them be assigned as prompted challenges?

Discussion:

| Name: | |
|--------|--|
| Laura | Suggestion of making all challenges available at once |
| | and in a second step to select some of them as a prompted challenges |
| | (like we did for wave 1). |
| Doreen | Doreen also agreed on having all challenges in the app as well as having |
| | some of them sent as prompted also to be able to compare which |
| | challenges are accepted/rejected by users if asked and which ones are |
| | selected freely. |
| Grant | Prompted challenges' main concern is to get more people to make |
| | decisions about priority concerns/challenges that we are interested in. |
| | First 5 or 6 prompted challenges are rolled out until the end of |
| | March/April. All prompted challenges will be available like all other |
| | challenges for all users as well. |

2. IDEA: publish 4 new challenges per week every Monday with push-notification (starting from week of 20th Feb) -> in favor?

This question was discussed in the chat with the conclusion to check the literature for best time/day of the week:

https://journals.sagepub.com/doi/full/10.1177/0956797615605818.

Climate Campaigner Reward System - Marijan, Oliver (SBK)

Rewards tab is now available (next to Challenges). Local coins are included in the Global coins. At the moment there is only one global reward - the CC T-Shirt. The size can be

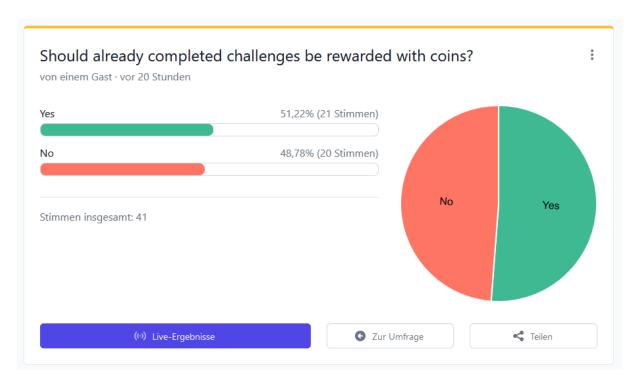


selected and users see as well how many coins the reward will take. It will take approx. 24 hours to integrate a new reward into the app.

For the shipping data (address) the user is asked in advance for the agreement.

SBK pointed out that there is a need for more rewards, to make this feature interesting for app users.

Poll whether already done challenges should be rewarded with coins or not? Voting in the call: https://strawpoll.com/polls/NoZr33wpay3



As the vote was quite narrow and some participants were not able to give the vote online the decision was made to

- 1. think of a flat line starting coin number for all challenges already done
- 2. at the moment the reward system is live, all coins can be earned as they are listed in the challenges

The reward system was discussed controversially – also in the chat – (pros and cons of rewards e.g., materialized rewards like t-shirts and further behavior-encouraging rewards like public transportation voucher). The chat history is available at CAMPAIGNers Google drive. https://drive.google.com/drive/folders/lbYEhf-v5I-fm96sFvGmNfh71cZmgN7Dg



Online Monitor – Laura (FEEM)

https://climate-campaigners.app/dashboard-monitor

The online monitor distinguishes between two aims and different kinds of users. The configuration gives the possibility to choose main variables and secondary variables.

There will also be the possibility to set predefined variables.

It will be possible to download locally characteristics data. Note: all the data can in any case be downloaded and exported for research purposes.

Within WP5 there will be an agreement on the predefined list of variables and a close cooperation with SBK to solve specific technical issues.

Partners are welcome to contact Laura, if any questions/comments arise.

Lighthouse Cities activities - Sophie (ICLEI)

Most LHC have already launched the app in their cities and all others will follow soon. A lot of activities happened like flyer distribution, PR stunts, press releases, social media posts,...

Project milestone 4 of 1000 users is already fulfilled but much more users are needed to reach a relevant mass of data. Up to now, roughly 1750 users downloaded and registered in the app. Further information on users of webpages, media reach etc. was presented by ICLEI and can be found in the ppt (at CAMPAIGNers drive).

The second media wave will start as soon as the reward system is ready. A third wave is planned in spring 2023.

There are several upcoming lighthouse city activities this year in various LHCs starting with Cape Town, Lahti and Skopelos & Dafni.

City of Vilnius (Monika) presented their activities around the app launch with the result that approx. 450 persons downloaded the app. Further detailed actions are planned for 2023.

Discussion:

| Johannes | Influencers might be a good multiplicator for DEC activities but the costs |
|----------|---|
| | are very high. If there are some partners with a budget left, this could be |
| | an idea to spend this money. |



| Johannes | Johannes will present CAMPAIGNers to a larger group of Austrian pupils. |
|----------|---|
| | He will share his experiences on that as this might be a very good group |
| | to focus on. |
| | Due to this statement, data protection requirements for people below |
| | 16/18 were discussed in the chat and online. |
| Johannes | Suggestion to develop a list of ages at which children can download |
| | apps (per country). |
| | ad age of users: legally in EU we are on the very safe side with age >=16 |
| | and >=18 outside EU. However, the app stores approved the app for kids |
| | as well, and we have an app Disclaimer excluding all liability. So we can |
| | follow Anna's recommendation and ask children to ask parents for |
| | approval to download the app, or recommend parents download |
| | themselves. |
| Frances | DEC: Are there some basic slides of the project for example with |
| | infographics? |
| | EI-JKU will check how to elaborate such a deck. |
| | Sophie would help to come up with some inputs for such basic slides |
| | |

Integrating lifestyle changes in large-scale models - Andreas (E3M)

Improving the representation of lifestyle changes is the core target of this WP6. At the moment there is the second phase of the modelling process to integrate CAMPAIGNers data with the existing system models in the different sectors of the project defined, e.g., residential sector. Several potential applications and next steps till December 2023 were presented.

Discussion:

| Johannes | Question to a slide in the presentation (heating): What is the driving |
|----------|--|
| | force behind the increasing demand for heating? |
| Andreas | This represents total demand, which still increases in the coming years, |
| | due to microeconomic indicators (e.g., number of buildings, increase in |
| | square meters per household, increasing income) - although per |
| | individual household there will be a decrease in heating needs (due for |
| | instance to climate-driven increase in temperatures) |



Dissemination & Exploitation - Doreen (CANE)

A new colleague is supporting the CANE-Team (Marie-Amélie). There have already been meetings with WP4 and WP7 partners. An internal discussion was launched with CAN international to get out possible resources for participating in COP28 or other relevant conferences.

At the moment the focus is on coming up with the DEC strategy (D8.2 and D8.3) as D8.2 was requested for revision by the EC in the frame of the technical periodic report. And D8.3 was already due in October 2022. CANE will send out a draft till 6th March (a week to give feedback) and to have a final version latest until 15th March (deadline for submitting revised D8.2 is 17th March).

A first draft of newsletter content will be sent out to partners asap. Therefore, the first newsletter should be ready in March.

Furthermore, CANE will send out examples of events that might be interesting for the project to EI-JKU and will be discussed separately e.g. https://www.ecca2023.eu/. Every partner is invited to list relevant events/conferences/meetings etc. in the sheet "Activities mapping" https://docs.google.com/spreadsheets/d/lMuaj7-owRtlha_4WE0OmO3ypmlqQtCrdtqJvqzi3eps/edit#qid=0.

Discussion:

| Frances | Would like to know more about conferences where dissemination can |
|----------|--|
| | take place. |
| Johannes | We can make a conference plan to make sure we ensure broad |
| | outreach |
| | Giulia (CANE) will focus on this work to have this plan as soon as possible. |

Project Management - Johannes (EI-JKU)

Information on the review status of the periodic report was provided. EC requested some deliverables for revision. All relevant partners are already informed.

The agenda and possible topics for the upcoming physical General Assembly was discussed. Partners are welcome to email further ideas to EI-JKU and a slido poll was initiated to ask for expectations.

Partner LUT (Ville) informed about how to travel best to Lahti. Further information will be provided soon by LUT.



Slido poll

| What do you expect of 2nd physical General | | | |
|--|------------|----------------------------|-------------------------------|
| Amplifier city inte | gration | Reality check: expecta | ations vs status quo |
| Focus group with LHC | discussion | OnGeneralisability | Research |
| | | promoting action | Updated Research aims |
| challenges hac | kathon | | brainstorming Lahti city tour |
| Questions | fun time | reflection | brainstorming Lanti City tour |
| Publications workshop | concrete a | action interactive | app crashtest Inspiration |
| Delicious local fo | od 🍟 💮 Ta | alk about jointly publishi | ng opportunities |
| | | New sustainable rev | vards ideas |

Other questions / discussion to partner or consortium as a whole

none

Next monthly status meeting: 15th March 2023, 10 – 12 am (Vienna time)

Link to telco:

https://jku.zoom.us/j/95435921379?pwd=K3lLb3VGcWk4UDBDUVdDbHFEOTZEQT09



Participants list

| Teilnehmer | (56) |
|------------|------------|
| | Teilnehmer |

| QF | inden Sie einen Teilnehmer | | EQ | Etibar Qahramanov | ½ √a |
|----|----------------------------------|------------|----|---------------------------------|-------------|
| RA | Regina Aufreiter (Co-Host, ich) | <i>¾</i> □ | FF | Frances Fahy (Uni of Galway) | <i>¾</i> |
| JR | Johannes Reichl (Host) | ₽ 🗆 | FP | Francesco Palmia ICLEI Europe | ¾ □1 |
| LC | Laura Cavalli-FEEM (Co-Host) | ₽ 🖂 | F- | Freistadt - Martin Reindl | % √∆ |
| GG | Giulia Garzon - El-JKU (Co-Host) | <i>‰</i> □ | GN | Giulia Nardi - CAN Europe | ¾ □1 |
| MD | Marijan Dzoic (Co-Host) | ½ √s | GS | Grant Smith | % |
| SK | SB Konzept (Co-Host) | ¾ | IR | Ilham Rustamov ASOIU | <i>‰</i> □1 |
| AC | Anna Claudelin | <i>¾</i> | IQ | Isa Qasimov | <i>‰</i> □1 |
| AS | Anna Sonnleitner Linz | <i>‰</i> □ | ML | Jarusch Müßel (He/him) | <i>‰</i> □1 |
| AV | Aušra/ Vilnius municipality | <i>¾</i> | JR | | <i>%</i> |
| BS | Berfu Solak | <i>¾</i> | - | Jenni Rahkonen, Lahti | |
| | Bircan_İzmir Büyükşehir Belediy | <i>¾</i> | J | Jennifer Cote | ¾ □1 |
| В | byungdookim | <i>¾</i> | JW | Josie McCann | <i>¾</i> |
| cs | Caitlin Sole City of Cape Town | ¾ | КК | Kai Kier | <i>¾</i> |
| СВ | chiara boeri | ¾ | KS | Kathleen Stokes | % |
| CA | Christoph Aumayr (Freistadt) | <i>¾</i> | LB | Lisa Bitossi | % √1 |
| cz | Christos Zacharias DAFNI | ¾ | LF | Luca Farnia (FEEM) | % √∆ |
| DG | Daisy Gallagher | <i>¾</i> | LG | Luis Garcia-Moron | % √∆ |
| DB | dalia bardauskiene | <i>¾</i> | МН | Manfred Hafner | <i>‰</i> □1 |
| DF | Doreen Fedrigo, CAN Europe (| <i>¾</i> □ | | Marie-Amélie - CAN Europe | <i>¾</i> □1 |
| EA | E3M Andreas Andreou | ½ √ | M- | Mane-Amelie - CAN Europe | 72 (1) |
| EQ | Etibar Qahramanov | % M | | | |



| M- | Marie-Amélie - CAN Europe | ¾ □1 |
|----|-----------------------------------|--------------|
| MI | Monika Vilnius | % √a |
| NM | Nathalie M. (Grenoble) | ¾ □ |
| 0 | olivermewald | <i>%</i> √⁄a |
| P | Parviz | <i>%</i> √⁄a |
| * | Philippe COPINSCHI | <i>%</i> √⁄a |
| PG | Pier Giacomo Sola (City of Pes | <i>%</i> √4 |
| RR | Ricarda Rosemann (PIK) | <i>%</i> |
| RS | Ricardo Silva - ECOLISE | <i>¾</i> |
| | Robin Hasse (PIK) | <i>%</i> √4 |
| RR | Romana Rainer | <i>%</i> |
| RK | Rudi Kapeller | <i>‰</i> □ |
| SD | Sabrina Dekker | <i>%</i> |
| | Sophie Callahan ICLEI she/her | ¾ □ |
| S | stepanv | <i>¾</i> |
| TG | Trevor Graham | <i>¾</i> |
| VU | Ville Uusitalo | <i>¾</i> |
| VH | Vilma Halonen | % |
| | | |



Minutes of 2nd physical General Assembly Lahti, Finland

of Citizens Acting on Mitigation Pathways through Active Implementation of a Goal-setting Network

13th - 15th June, 2023

Venues:

Fellmania Mukkula Campus, Sibelius Hall

<u>climate-campaigners.com</u>





Agenda

Tuesday, 13th June 2023 - Lighthouse City Day

| Tuesday, 13 June 2023 | |
|---|--|
| At Fellmannia, Kirkkokatu 27, 15140 Lahti | |
| Time (EEST) | |
| 8:30 - 9:00 | Breakfast and registration In the auditorium |
| 9:00 - 9:15 | Welcome / Intro |
| 9:15 - 9:45 | Presentations on Lahti's approach to climate neutrality & behavior change |
| 9:45 - 11:00 | Discussion with all cities |
| 11:00 - 11:30 | Coffee / tea / light snack break |
| 11:30 - 12:15 | Site visit 1: Main library |
| 11.50 - 12.15 | Kirkkokatu 31, 15140 Lahti |
| 12:25 - 12:55 | Site visit 2: Palvelutori Service Centre |
| 12.25 - 12.55 | Aleksanterinkatu 18, 15140 Lahti |
| | Lunch |
| 13:15 - 14:15 | In the 'common area' of the Fellmannia restaurant. |
| | Daily lunch buffet offer Includes salad, bread, a warm dish (one fish/meat option and a vegan option), coffee/tea and a dessert. |
| 14:15 - 17:00 | Policy forum: Transport and Urban Mobility |
| Includes a short break | In the auditorium |

CLIMATE CAMPAIGNERS

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101003815.





Wednesday, 14th June 2023 - 1st GA-Meeting day

| Wednesday, 14 th June 2023 | | | |
|---|---|---|--|
| at Mukkula Campus(Auditorium 3), Mukkulankatu 19, Lahti | | | |
| Time | | | |
| 08:30 - 09:00 | Arrival / Re | gistration | |
| 09:00 - 09:30 | Welcom Elina Ojala / Environment Johannes Re | al Director of City of Lahti | |
| | Main Room (Auditorium 3) | Second Room (Room nr. D247) | |
| 09:30 - 10:30 | Sustainable recruitment strategies – part 1 Lead: ICLEI Participants: all | Open discussion room ad-hoc, bi-/multilateral meetings Participants: open for all (Room nr. D224) | |
| 10:30 - 10:45 | Coffee | break | |
| 10:45 - 12:00 | User generated challenges in the CC App Lead: SBK Participants: NTNU, EI-JKU, other scientific partners | Sustainable recruitment strategies – part 2 Lead: ICLEI Participants: all (Room nr. D224, D247, D250, D252) | |
| 12:00- 13:00 | Lun (Group) | | |
| 13:00 - 14:30 | Open discussion room ad-hoc, bi-/multilateral meetings Participants: open for all | Focus groups "research activities" Lead: NUIG Participants: City partners (Room nr. D224, D250, D252) | |
| 14:30 - 15:45 | Enriching modelling by local expertise Lead: E3M Participants: City partners | Academic session Lead: UCT Participants: scientific partners (Room nr. D247) | |
| 15:45 - 16:00 | Coffee break | | |
| 16:00 - 17:30 | Open discussion room ad-hoc, bi-/multilateral meetings Participants: open for all | Local engagement strategies Lead: ICLEI Participants: City partners (Room nr. D224, D247, D250, D252) | |

CLIMATE CAMPAIGNERS 2

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101003815.





Thursday, 15th June 2023 - 2nd GA-Meeting day

| Thursday, 15th June 2023 | | |
|--|--|--|
| at Sibelius Hall, Ankkurikatu 7, Lahti | | |
| Time | | |
| 08:30 - 09:00 | Arrival / Registration | |
| 09:00 - 09:10 | Opening / Agenda Johannes Reichl / EI-JKU | |
| 09:10 - 10:00 | Update on #LifestyleChallenges Lead: NTNU Participants: all | |
| 10:00 - 11:30 | Deepening DEC strategy Lead: CAN Europe Participants: all | |
| 11:30 - 12:30 | Lunch | |
| 12:30 - 14:30 | Overcome barriers to the adoption of sustainable lifestyles by citizens. The role of municipalities. Lead: HEAS Participants: all | |
| 14:30 - 14:45 | Coffee break | |
| 14:45 - 15:45 | Reflections on what we have learned, and lines of enquiry going forward. Lead: UCT Participants: all | |
| 15:45 - 16:00 | Wrap up, welfare | |

Presentations (slide decks) and photos of the meeting as well as this minutes are available at CAMPAIGNers Google drive

https://drive.google.com/drive/folders/16IsInRwaGDAEXkyQhka2vJgFqWxKNoK3





Lighthouse City Day, Tuesday, 13th June 2023

Designed specifically for Light House Cities (LHC), the day focused on practical implementation and intensive exchange between LHC on sustainable lifestyles. Project partner ICLEI organised the day in cooperation with HEAS, ECOLISE and the City of Lahti. Only LHC were participating unless specifically coordinated otherwise with ICLEI.

Workshop: Presentation on Lahti's approach to climate neutrality & behavior change

Lead: ICLEI Participants: City partners

| Content | Additional information (if needed) |
|--|------------------------------------|
| Presentations by Aino Kulonen, Environmental Coordinator | |
| at the City of Lahti (on Lahti's Climate Strategy) and Ville | |
| (LUT) (on CitiCAP project) | |

22 persons participated in the workshop.

| General main points | Additional information (if needed) |
|---|--|
| Aino's presentation: Historical overview of Lahti's environmental policies and strategies since the 1980s. Two of Lahti's main current goals: Waste free by 2050 Climate Neutrality by 2025 (=cutting the production- | See slide deck for further particulars (Aino Kulonen's presentation) |
| based emissions by 80% from 1990 level); 80% reduction of use-based emissions by 2030 o large contribution was the change to carbon- free district heating for large parts of the city (the district heating company is city-owned). o a large remaining challenge is the transport sector (e.g. How to facilitate electrification from the city side?) - Circular Economy | |
| Ville's presentation: Personal carbon trading (PCT) for mobility emissions using the CitiCAP app (2'500 users in the end, a lot of media attention, also internationally) | Experience published: Uusitalo, V. et al. (2022). Using personal carbon trading to reduce mobility emissions: A pilot in the Finnish city of Lahti. Transport Policy, 126(C), 177-187. |





Q&A:

- Main issue for the CitiCap App not to continue were taxation obligations for money/prizes/rewards for users (similar problem for CAMPAIGNers?)
- Background: history and economic developments in Lahti which enabled the emissions reductions? mainly district heating (city-owned and lead), also change to service-based economy instead of industry-based
- How does Lahti encourage cycling during dark and snowy winters? There are a number of large wellmaintained fast bike lanes to the city center. Citizens switch to spike tires in winter (could be a CC challenge?)
- Question on data streams and data integration/accessibility. At the moment, to access data you have to email the people involved in the project or the public institute of statistics directly, but it would be good to have a place to store the data that everyone can access from the web.
- Biggest barriers to climate neutrality in Lahti?
 - Transport. The city's options to influence are limited.
 - Cars passing by on highways account for 60% of the transport emissions, which has to be influenced on a national level.

Parking can be influenced in the city center mainly.

Follow-up and /or "to-dos"

Non







Site visits: Lahti's main library and Service Center of Lahti

Lead: ICLEI Participants: City partners

| Content | Additional information (if needed) |
|--|------------------------------------|
| One site visit to Lahti's main library and to the Palvelutori Service Centre | |
| (multi-purpose city-run service space within a central shopping mall) | |

22 persons participated in the workshop.

General main points

Lahti's main library

The first site visit to Lahti's main library started with a presentation on the role of libraries in Finland, an overview of the library's range of functions and services, and the library's performance in and contribution to sustainability, followed by a group tour. Finnish law requires at least one library per municipality, and many Finnish libraries, including Lahti's, offer not only a substantial range of non-media for people to borrow or use on-site, but also essential related instruction/training. E.g., people can check out sports equipment, litter pickers, and use studio recording and/or instrument practice spaces, and even a 3D printer (all for free). The holistic and multi-functional nature of libraries like Lahti's makes them attractive all-around community meeting spaces, particularly for kids, students, young families, and aging people, and thus are logical resources to leverage to support sustainable lifestyles.

Palvelutori Service Center

The Palvelutori Service Centre takes up a significant portion of the top floor of one of Lahti's main central shopping malls. The Service Centre has become the primary location for almost all of the key services that are administered by the municipality, combined with spaces (like a basic kitchen and working pods) and equipment (such as sewing machines) that the public can easily book. The Centre's located within short walking distance of public transit and many of the places people work and live downtown, and within a mall with a number of other essential businesses like pharmacies and grocery stores – making it convenient for people to access and to combine with other activities.



CLIMATE CAMPAIGNERS _____





Policy forum: Transport and Urban Mobility

Lead: HEAS Participants: City partners

| Content | Additional |
|--|-------------|
| | information |
| | (if needed) |
| HEAS facilitates LHC exchange with inputs from Freistadt and Pesaro. | |

22 persons participated in the policy forum.

| General main points | Additional |
|---|---------------------|
| | information |
| | (if needed) |
| HEAS presents main barriers to the adoption of sustainable mobility | See slide deck |
| | for further |
| | particulars |
| | (HEAS's |
| | presentation) |
| Freistadt presentation | See slide deck |
| They built public transport infrastructure to make people use public | for further |
| transport easily (e.g. Bus Terminal, Park+Ride: | particulars |
| o Park & Ride between Freistadt and Linz which has been and | (Freistadt's |
| is very successful. Free parking, and bus tickets to reach Linz well below the price people would otherwise pay for car fuel. | presentation) |
| Bicycle Parking Facilities as well as Bicycle Path Network expansion | |
| on the main connections in the city. | |
| Pesaro presentation | <u>See video</u> on |
| A critical issue for sustainability in Pesaro is tourism, which creates in 3 | Sonosfera |
| months as much environmental impact as the local population in 9 | |
| months. One of the city's policies was to create bike lanes throughout | See slide deck |
| the city and limit car access to the old town. Also, one of their initiatives | for further |
| involved joining climate change adaptation/mitigation with culture: | prticulars |
| Sonosfera, a place with a very big screen reproducing music/audio | (Pesaro's |
| taken from the experience of amazonian forest. It's mainly offered to | presentation) |
| schools. It promotes a respectful attitude/behavior towards the | |
| environment. One important challenge for the implementation was to | |
| take the different priorities and needs of different categories of people | |
| into account. | |
| Philippe (HEAS) talks about the identification of target groups with | |
| homogeneous mobility behavior patterns. He presents six categories of | |





people, according to their mobility habits, their values and their information types

- 1. Spontaneous On the Go
- 2. Highly Informed Sustainability
- 3. Efficiency-oriented Pickers
- 4. Interested Conservatives
- 5. Low Demand
- 6. Reluctant to change

(based on N. Haufe, A. Millonig and K. Markvica (2016), Developing Encouragement Strategies For Active Mobility

Breakout groups

How to address each target group with specific arguments for promoting sustainable mobility behaviour?

Argument? Communication channel?

Summary Group A

- "We are all weird, western-educated leftist, greenish urban elites". We really need to get out of our bubble. Others are not dumb, they have other needs etc and we need to try to understand them and be less arrogant.
- "Let's start where the footprint is highest, e.g. 4) Efficiency-oriented pickers. In the end we might also convince the 6) reluctant to change thanks to peer-pressure.
- How:
 - participatory
 - o Communication:
 - Local Newspapers (they are more conservative and right-wing and less green often). Show them what you do and convince them to also put positive examples about sustainable lifestyles and heritage can go together
 - Reverse commercial slogans away from "huge cars are hot and sexy", but "make sustainable lifestyles the new trendy and sexy"
 - Slogan: "make cities for children", "You are killing your children",...
 - 50% of newborns in Grenoble have health issues due to air pollution.

Measures

- o make life difficult for cars in cities (no access for cars to schools, but substitute with "walking buses" for example, "pedi-bus", not every parent needs to bring their kids individually but one parent can with a schedule pick up many kids and all walk together.)
- Ask kids to draw how they would like their city to look like or parents how they would like their city to look like for their kids.

Summary Group B

- Categorization does not fit many of the narratives that cities use. Its more analytical than operational. Often more focus on driving/non-driving, income and age.
- La Libertad and Cape town bring forward similar arguments saying that car use stems mainly from previous urban planning decisions and security concerns.

This project has received funding from the European Union's Horizon 2020

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- It's often more about catching up with issues than coming up with a strategy which is addressing specific groups as the ones presented. Public administration is not ready for that.
- Lahti: moves from action-oriented communication to a scenario-based communication: How do citizens/we see the city in 10 years?. Future-oriented communication involves the 1) spontaneous and 2) Highly Informed Sustainability
- Dublin: A lot of focus on health and getting fit in communication...it did not work so well. Now more focus on responsibility and respectfulness in road-use. Starting from schools.

Summary Group C

- Grouping 1-3) and 4-6) quite a lot
- For 1-3) Keep communication flowing towards them, attractive messages, addressing them on social networks with videos/catchy stuff: good practice example from London Underground "Dumb ways to die". Also make options more clear, maybe as a package to bundle multiple options under one roof
- 4-6) Focus on co-benefits: health; Communicate costs, e.g. also in non-energy-crisis times. And also make unsustainable behavior more expensive, although raising costs has not always worked solely; political will; use place-based approaches and codesign (often difficult to motivate people, co-design-fatigue, surely challenging)

Summary Group D

- Communication:
 - o Focus on the ones that are on the edge of moving. If they start moving they can also be
 - o role-models to the rest of society and pull more others in there. Who is on that edge, that is an important question.
 - o Focus on young people who do not have a car yet.
- Measures + communication
 - Once the norm is the car, and infrastructure is built for it, it is difficult to convince people of a new norm. So just raising the price might sometimes not work (because there is no good alternative?).

Brussels example: They make the life for car-users very difficult in the city center. Has to be combined with enlarging public transport offers, and safe bike lanes...then you can try to dissuade people from using the car and encourage to move by bike/public transport....first you have to provide the options, so people can try it.

Cities sharing:

Vilnius: Successfull campaign and city policy to "humanize" the streets: 12 principles/measures. What helped waspolitical leadership, support from the national government, and a good public communications campaign.

"Peru": Fuel is very expensive, also traffic is often chaotic, but anyways many people rely on the car, as public transport is not guaranteed in many places, or buses are also stuck in traffic. Extra bus lanes could make the bus more attractive. It is very difficult to get rich





people out of their cars. Public transport is seen as dirty. Prices don't scare them so much. Politicians have cars themselves and don't pass anti-car-laws.

Milan: Air quality is very low. So promoting cycling also means exposing citizens to bad air and dangerous traffic. Difficult. They have to guarantee a public transport solution for people who abandon the car. If this is ensured, the rate of people using public transport is quite high. But "you need to explain to people that public transport is easy/cheap/convenient." A good example is a one-for-all ticket which can be used in any kind of sustainable public transport. Bundle them.

General suggestions:

Peru: Public posters in places where there are traffic jams featuring alternative mobility solutions.

Freistadt: Make car use less convenient (higher prices for parking, longer traffic light waiting times,...)

Vilnius: Focus more on health aspects: Air pollution is a big issue, back problems or adiposity from driving/sitting, shorter life...

Milan: Communicate that cities should be human places, not need to be dedicated to carusers primarily. A winning approach is to co-design the spaces. Even children in the design of schools. Makes people feel ownership.











1st GA-Meeting day: Wednesday, 14th June 2023

Welcome and introduction: Team of LUT (Anna, Ville, Vilma and Antti), Johannes (EI-JKU) and Elina Ojala (Environmental Director of City of Lahti)

On Wednesday, 14th June 49 persons participated in the General Assembly and were welcomed by the team of LUT and Johannes. In addition to the welcoming words and presenting the agenda, Johannes explained the urgency and timeliness of our project using current examples.

The opening of the meeting was also accompanied by welcoming remarks of the Environmental Director of City of Lahti, Elina Ojala, who gave an insight into Lahti being the European Green Capital in 2021 and how it will become climate-neutral by 2030 and a zero-waste city by 2050. The presentations of Johannes and Elina Ojala are available on Google drive https://drive.google.com/drive/folders/1lKYPagPrEJOGIGhxoGuVA0SGTF3pExie

At this meeting, special attention was given to the exchange and integration with the Lighthouse Cities. For this purpose, the project partner ICLEI, with the support of the project partner HEAS and City of Lahti, organised a Lighthouse City Day, which took place one day before the General Assembly (for details see page 4-10 of this minutes). The days also focused on the first results of the data analysis of the app, its further development, and the elaboration of the policy recommendations. On 14th June space for individual and ad-hoc exchanges was provided by the "Open Discussion Room" slots, which were repeatedly offered to participants as an option to parallel workshops/sessions (if they were not the target group of respective workshops/sessions).







Workshop: Sustainable recruitment strategies - part 1 and part 2

Lead: ICLEI Participants: all

| Content | Additional information |
|---|------------------------|
| | (if needed) |
| Part One (09:30-10:30): | |
| ICLEI gave a presentation followed by a short Q&A, which covered a | |
| refresher on the communications strategy, progress on 6 KPIs, a description | |
| of the main recruitment activities globally and locally that have taken place | |
| since the last GA, and insights/recommendations/lessons learned for LHCs | |
| and consortium partners. | |
| Part Two (10:45-12:00): | |
| Lighthouse Cities exchange about lessons learned and good practices for | |
| their recruitment plans | |

49 persons participated in the first part of the workshop.

19 people participated in the second part of the session (LHC-specific workshop), with representatives from the following LHCs: Vilnius; Freistadt; Cape Town; Pesaro; Milan; DAFNI / Skopelos; Dublin; Lahti; Peru; Grenoble

| General main points | Additional |
|---|----------------|
| Part 1 | information |
| | (if needed) |
| The presentation includes an index with links to resources that have been | See slide deck |
| developed in WP4 for LHCs' and other consortium partners' use to-date | for further |
| | particulars |
| | (ICLEI's |
| | presentation) |
| Proposal for an expanded list of 6 big KPIs and targets to inform the next | |
| stage of recruitment work (social media impressions + traditional media | |
| reach; action page visitors; app store conversions; device downloads; | |
| registered user accounts; completed challenges). | |
| Key conclusion: The number of registered profiles has almost doubled and | |
| the number of completed challenges almost quadrupled since the last GA. | |
| But the ratio of total completed challenges to registered users is still close | |
| to 1:1. Thus, even despite the substantial growth in users and challenge | |
| uptake overall, we need to continue to intensify both the communications | |





| efforts | at all levels and improve the app's engagement features in order to | |
|---------|--|--|
| ensure | e there's sufficient data for research purposes. | |
| 3 big t | akeaways for general recruitment activity planning in LHCs: | |
| 1. | Effective cooperations with multipliers or influencers and press are | |
| | critical | |
| 2. | Diversified actions are still preferable to putting all eggs in one | |
| | basket | |
| 3. | Synchronizing efforts within and across cities Is best (faster results | |
| | will need a hose over a watering can) | |
| 5 goo | d social media post practices to boost performance are | |
| recom | mended (and are all elements that contributed to Vilnius' recent | |
| extren | nely successful work on Facebook, which has contributed to more | |
| new u | sers than any other single source): | |
| 1. | Collaborating with other accounts, especially those with bigger | |
| | and relevant audiences, is <u>the</u> most important thing you can do to | |
| | amplify the impact of any (social) media action! | |
| 2. | Your short list of hashtags should include ours + some popular | |
| | ones among your target group(s) | |
| 3. | Keep your post alive with active interaction / moderation! (Though | |
| | we do not recommend reacting to comments that promote | |
| | misinformation, are troll-like and/or aggressive: interacting with | |
| | this content simply makes it more visible.) | |
| 4. | Show faces! Images of real people (or cute animals) perform | |
| | better than images of objects. | |
| 5. | and THEN, little money to boost⌖ a post can go a long way | |
| Sever | al recommendations for in-app measures to support | |
| engag | gement/user retention: | |
| • User | motivation: Improve fun factor and experience, e.g. bonus for | |
| invitin | g a friend / colleagues and doing challenges together | |
| • Chal | lenges: Continue to regularly add more challenges, and make users | |
| aware | of new challenges via push notifications | |
| • Rewo | ard system: More smart and sustainable rewards - early evidence | |
| sugge | sts this is working | |
| • Onbo | parding: Make the app's unique benefits, functions and fun factor | |
| clear f | rom the beginning | |
| Advice | e for consortium partners to support LHC efforts: | |
| 1. | Ask a <u>friend</u> to leave a positive rating on the app store (our own | |
| | ratings aren't being posted) | |





| 2. Write about CC in your organizations' blog/newsletter | |
|---|---------------|
| 3. Share our content on Social Media | |
| 4. Offer your own global reward(s)! | |
| 5. DEC tracker reminder | |
| The presentation included a proposal for a "2nd soft launch" idea, i.e., | Slido results |
| deciding on one week when many partners could all coordinate | for the |
| communication actions. | second soft |
| | launch |
| | concept can |
| | be found |
| | <u>here</u> . |
| General main points | Additional |
| Part 2 | information |
| | (if needed) |
| In working groups, cities individually shared: | |
| activities and results (especially anything new since mid-February, | |
| our last online GA) | |
| barriers and limitations, if plans couldn't be realized or reported | |
| main goals next 1-3 months related to local recruitment activities | |
| And then, as a group, defined their "square, circle, and triangle": | |
| Square = What plans or challenges they feel are "squared away" | |
| (they understand well and are equipped to face) | |
| Circle = Challenges, tasks, or questions still spinning in their heads | |
| Triangle = 3 lessons, ideas, or actions you are taking away from | |
| this session / examples from their peers | |
| ** A few key points / feedback from cities [most relevant partners for | |
| their attention & follow up are in brackets]: ** | |
| Feedback that some of the global challenges are (still) not | |
| applicable to local contexts [NTNU, EI-JKU] | |
| Some cities shared concern about the lack of integration of their | |
| initial localized feedback on the global challenge set, both in | |
| tailored content such as in including related links and info, and in | |
| the display or non-display of certain challenges. These cities | |
| expressed that their communications departments (and in some | |
| cases, they themselves) are not eager to put their full energy into | |
| promoting the app, especially via press/media, as a result [NTNU, | |
| EI-JKU] | |
| L | I |





- In response to this feedback, in a separate session, EI-JKU put forward the following as next step:
 - Go back through the original feedback sheet and harvest the localized content from there to create city-tailored and/or local-specific challenges
 - Work to make a more fluid process for cities being able to assess the new challenges being shown in their cities
 - User-generated challenge template may also present new opportunity for local offer
- Feedback that the display of the project branding and things like the SDG icons not in the local language has been a turn off for some prospective local users [Saints, ICLEI]
- Some cities' comms departments have apparently been hesitant to promote the central SM channels since they are only in English [Saints, ICLEI]

Follow-up and /or "to-dos" Relevant partners should review and carry forward action on the notes in maroon text, above (the related sub-title for those notes is also framed by double asterisks **) The pending data on app store visitors and device downloads needs to be

provided (SBK/ICLEI/Saints)

Preparation for the 2nd soft launch, starting with requesting partners' inputs in the related Wp4 miro board space ICLEI has made here:

https://miro.com/app/board/o9J_IIi80W4=/

ICLEI / Saints to follow up on individual cities' support needs for next activities











Session: User generated challenges In the CC App

Lead: SBK Participants: NTNU, EI-JKU, other scientific partners

| Content | Additional information (if needed) |
|--|------------------------------------|
| Demo of how users can generate their proposals for new | |
| challenges within the app and how Admin(s) can review | |
| them | |

18 persons participated in the session.

| General main points | Additional information (if needed) |
|---|---|
| The session started with a short introduction about the task/feature which were developed to allow users to suggest their proposals for the future challenges within the Campaigners App. In this way there is an opportunity to the users to feel even more like a part of changing the climate change and letting them know that #LifestyleChallenges will not only be created by researchers and cities/regions. | See deck slide for further particulars (SBK's presentation) |
| A test group was set up during this session (attendees were Invited to write down user Ids from the app (to be found on user profile as #Id) to be part of the test group to demonstrate who users can create niche and global and/or region-specific challenges. | For demo purposes the feature is only available in English. |
| Finally, SBK showed how Admins review user generated challenges. | |
| SBK offered some suggestions which could be implement when pushing this feature to the live app. | All suggestions are mentioned in the deck slide. |
| The presentation ended with an open discussion about the shown feature. | |





| Follow-up and /or "to-dos" | |
|---|---|
| Attendees asked for a third column with all user generated challenges | Might be an option if enough challenges from users are available |
| User should add Start End Date | Might be difficult as it is not clear when the challenge will be fully reviewed and available in the app. Users can already define the duration of the challenge instead. |









Workshop: Focus groups "research activities"

Lead: NUIG Participants: city partners

| Content | Additional |
|---|-------------|
| | information |
| | (if needed) |
| Three focus groups with LC representatives, to gather qualitative data in | |
| support of CAMPAIGNers policy and research outputs. | |
| | |

18 persons participated in the session.

| General main points | Additional information (if needed) |
|--|------------------------------------|
| Facilitators introduce the session, reviewed the aims and discussed the ethical consideration and consent for participants participating in the focus groups. | |
| LCs were asked the following questions (responses will be presented in anonymised transcripts at a later date): How app use and challenges have evolved (20 minutes) | |
| What lessons have you learned over the recent period (since launch/November 2022) that you would share with other cities? Have your expectations for CAMPAIGNers changed? If so, how? Implementation successes, challenges and responses (20 minutes) | |
| What would you consider to be your successes to date? What has made them possible? What have been identified challenges? How are you addressing them? What capabilities/resources/knowledge have been useful for supporting CAMPAIGNers, and its objectives? How CAMPAIGNers is helping to fulfil/compliment broad sustainability | |
| objectives (20 minutes) | |
| What is your role, as local governments, in creating/implementing approaches to just and sustainable transitions? | |





| How has CAMPAIGNers contributed towards/informed your city's wider | |
|--|--|
| sustainability strategies and objectives? | |
| | |
| The focus groups were concluded and next steps surrounding | |
| transcriptions were outlined. | |
| Follow-up and /or "to-dos" | |
| | |
| Follow up with participating LCs with anonymised transcripts once | |
| Follow up with participating LCs with anonymised transcripts once complete (1-2 months). | |
| , | |
| complete (1-2 months). | |











Workshop: Enriching modelling by local expertise

Lead: E3M Participants: City partners

| Content | Additional information (if needed) |
|--|------------------------------------|
| Open discussion with Lighthouse City (LHC) experts on the potential adoption of different lifestyle changes in the residential and transport sector, defining enablers, perceived barriers and policy too. | |

27 persons in total participated in the workshop/session. Representatives from the following LHCs participated in the data collection process: Pesaro, Freidstat, Dublin City, Milan Municipality, Lahti, Baku, Grenoble, the DAFNI network, Skopelos, Peru (La Libertad), Cape Town and Malmö.

| General main points | Additional information (if needed) |
|---|---|
| The workshop was designed by partners in E3M, PIK, UCT, EI-JKU and had the objective to familiarise LHC experts with the objectives of WP6 and collect data input which will be used to update the model specifications for transport and buildings, as part of Task 6.2 and Task 6.3. | See deck slide for further particulars (E3M's presentation) |
| The session was split into parts: In the first part, the aims, objectives and task breakdown of WP6 were presented to LHC experts. The motivation for developing new mitigation pathways powered by lifestyle change was highlighted based on findings from the literature review which was conducted in the 1st year of the project. A link was then made between the scenario modelling methodology and data collection process, that would take place during the workshop. A short introduction to Energy-System (ESMs) and Integrated-Assessment (IAMs) models and their importance in climate mitigation policy analysis was also provided. The first part of the workshop was finished by re-iterating the potential contribution of the workshop towards the development of more realistic scenarios of behavioural change (as data in the literature are currently scarce). | |
| In the second part of the workshop, LHC experts were presented with 10 examples of behavioural change for the housing (e.g., thermostat | |





adjustment, renovation) and mobility (e.g., swithcing to active and public transport modes). domain. For each behavioural change, they were asked to provide qualitative estimates about the likelihood level of adoption for households in their city/coutnry (with the use of Mentimeter slides). Qualitative estimates were collected for two families of scenarios: a business-as-usual case (where current conditions hold in the future) and a climate-neutrality case (where targetted policies accelerate the penetration of behavioural change). At the end of each set of questions for buildings- and transport-related behaviours, participants were asked to provide examples of enablers (factors facilitating behavioural change), barriers (factors hindering behavioural change) and policies which are expected to be implemented in the future to overcome struggles perceived by households.

A number of important questions and comments were raised during the data collection process:

First, that questions could lead to different results depending on the perspective from which answers are provided (i.e., government vs household perspective).

Second, that it is challenging for experts to provide estimates on permanent changes in space heating behaviours as the last winter season is not representative (due to high energy prices).

Third, that experts need more clarifications on the practical differences between the business-as-usual and climate-neutrality scenarios. The following clarifications were given: Climate-neutrality is a scenario in which policies and other measures are put in place to accomplish the agreed climate neutrality goals. Also, that climate-neutrality can be reached through a combination of supply- and demand-side measures; for the latter intervention we do not know the real mitigation potential to which ESMs can provide evidence through modelled scenarios. Finally, that climate-neutrality represents the most optimistic scenario with best possible outcomes (upper bound of behavioural change).

Fourth, that estimates on behavioural changes depend on a number of underlying assumptions (e.g., whether people are owning/renting a house, income level, etc.), so estimates at the city- and national- level are highly uncertain. Heterogeneity of behavioural changes will be studied futher when WP6 receives detailed data from the CAMPAIGNErs app.





| Fifth, that experts would like to know better what is the link between the workshop and data from the CAMPAIGNErs app. It was highlighted that the original idea was to make use of statistical data from the app, which are not yet available, and that this workshop serves as an alternative route to | |
|---|--|
| obtain data. Later, WP6 will compare estimates from the workshop with | |
| data received from the app. | |
| Follow-up and /or "to-dos" | |
| A follow-up email will be sent to LHC experts participating in the workshop, | |
| providing them with the opportunity to revise, if they want, their estimates. | |
| | |
| The qualitative estimates collected during the workshop for different | |
| The qualitative estimates collected during the workshop for different behavioural shifts will be analysed and mapped into percentages, which | |



CLIMATE CAMPAIGNERS 22 This project has received funding from the European Union's Horizon 2020

research and innovation programme under grant agreement No. 101003815.





Academic session: Research Questions

Lead: UCT Participants: Scientific partners

| Content | Additional information (if needed) |
|--|------------------------------------|
| Research questions that academic partners think that there is worth in pursuing in the remaining 12 months of the project. | |

11 persons participated in the session.

| General main points | Additional information (if needed) |
|--|---|
| Understand what drives the formation of intention, as signalled by acceptance of a challenge. What covariates predict increased/decreased acceptance? In terms of covariates, of particular interest are demographic factors, framing, season, as well as variation of acceptance by cities, including variation in the variation of acceptance, and completion, by Cities (which may provide information about heterogeneity of attitudes by locale). | Use existing in-app data more extensively (in some cases this means asking for additional data from SBK). This also is an opportunity for RCTS to identify types of effect of most interest. NTNU proposed RCT very promising in this regard in terms of identifying certain framing effects. |
| Understand the difference between levels of intent, as shown by levels of challenge acceptance, and actual challenge completion | As above. |
| CO2 emissions averted as a result of challenges. Which challenges have contributed the most in terms of total CO2 averted (as opposed to most CO2 averted per challenge). | As many participants as possible redo the CO2 footprint calculator every 6 months, or at least once again before the end of the project. |
| Role of understanding CO2 averted in encouraging sustained use of the Campaigners app. Some in the workshop were interested in seeing how communicating the CO2 impact of one's particular history of participation in the app might | RCT of framing. |





| influence future participation. In view were framings of | |
|--|------------------------------|
| cumulative impact, long run impact, understanding the | |
| mechanics of how the impact arose. | |
| Understanding the priorities of app participants, who are | A short questionnaire to |
| largely citizens, and the priorities of municipal civil servants, | both civil servants and |
| who seek to use this app (and one like it) as a tool. In particular, | citizen participants about |
| workshop participants were interested in understanding how | what their priorities are |
| priorities of these two groups might differ. | |
| Understanding how this app, and potentially ones like this, are | Focus groups with |
| used by municipal civil services in delivering services to their | municipal civil servants |
| citizens, including environmental stewardship. | (already being pursued in |
| | WP7, led by NUIG) |
| Understanding factors that lead to downloads | Use app and back-end |
| | administrative data, RCT |
| | approach has potential |
| | but questions about |
| | whether this is achievable |
| | along with other priorities. |
| Follow-up and /or "to-dos" | |
| Further discussion to decide which approaches to pursue on | |
| which topics as a matter of priority. | |
| | |







Workshop: Local engagement strategies

Lead: ICLEI Participants: City partners

| Content | Additional information (if needed) |
|--|------------------------------------|
| ICLEI gave a brief presentation on the Who, Why and What concerning | See slide deck |
| potential engagement activities with local stakeholder such as advocacy | for further |
| groups, sports groups, business and/or entrepreneur associations, or | particulars |
| service providers. | (ICLEI's |
| Lighthouse City representatives exchanged in breakout groups about planned activities, expected outcomes, as well as possible implementation risks or obstacles. | presentation) |
| implementation risks of obstacles. | |

LHC-specific workshop with representatives from the following LHCs: Vilnius; Freistadt; Cape Town; Pesaro; Milan; DAFNI / Skopelos; Dublin; Lahti; Peru / La Libertad; Grenoble

| General main points | Additional information (if needed) |
|--|------------------------------------|
| In 3 working groups, cities presented their engagement plans and/or | |
| ideas and discussed the following 4 questions: | |
| - How do you plan to enter into contact with your target(s)? | |
| How strategic is the institution(s) for CAMPAIGNers? | |
| - What is the expected outcome? | |
| - What are possible implementation risks, or obstacles (e.g., do | |
| you have a rain plan?) | |
| Main points shared: | |
| Grenoble: | |
| have considered creating own community for app users within | |
| brand new Intranet | |
| Big sports forum happening in September: It would be a good | |
| opportunity to engage with 'beyond the usual suspects' and | |
| leverage the challenge angle. For this what could be important is: | |
| User-generated challenges | |
| City-specific challenges that don't compete with the | |
| global ones | |





- Sharing same post in someone's social feed automatically (integrated feature)
- Main channel SM post languages feeds are only in English. Have gotten critical feedback about this from prospective followers/partners

UCT:

 City has persuaded every city-owned computer to have a CC background. Newsletter blurb on background will go out to complement

Freistadt:

- Tried to do a partnership with a trade school, where students aged 15+ need to do independent projects. Entered CC as an option but unfortunately nobody took up.
- Plan to include CC in official Climate Week
- Event earlier at the WeFair with Linz
- Working on procuring monthly bus passes as rewards
- A representative is going to appear on radio Freistadt for 1+ hours
- End of June → going to be a street festival with 5-6k people, will use their remaining spray for a stunt

Milan:

 Engagement planned for the upcoming Green Week engaging with the Permanent Climate Citizens Assembly to create the slogans for the new stencils together.

Vilnius:

 Representatives promoted CC to the new public-led organization managing the Cities Mission.

Pesaro:

- Plan to engage a network of local municipalities they are working with for a new food waste project.
- Thinking about engaging an institutionalized group of youth (a network of civil society organizations).

<u>Lahti:</u>

 Further engagement with students planned to receive further feedback and to adapt challenges to local context.

Skopelos / DAFNI:

 Further engagement with school kids envisioned, also to get feedback and also as a potential target group (recruitment).

Peru:

This project has received funding from the European Union's Horizon 2020

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 Engagement/Cooperation with a local bus company in process.
 Not based on remuneration but on a win-win mutual promotion (sustainability communication including CAMPAIGNers promotion present on bus screens (recruitment), rewards in the app, ...in progress)

General Feedback:

- Engaging with collectives for a public art experience? → Even asking support from collectives can be very expensive
- An obstacle has been that not all city departments are on the same page when it comes to promoting an app they don't own (In their point of view it might not be a good long-term investment since they will lose ownership after the project, as they see it)
 - Suggestions to address include highlighting that in any case, the project is fully funded and we have a rare opportunity to go through with this as an experiment for the city → 'right to not succeed', so to speak (i.e. the city isn't an owner and therefore the stakes should be seen as lower for trying to use / disseminate the tool)
- A regional app from Klima100
 (https://play.google.com/store/apps/details?id=ltaj.egtapp&hl=de) has become a competitor in Freistadt /Linz

| Follow-up and /or "to-dos" | |
|--|--|
| A short reminder of the additional available budget for LHCs for engagement activities was included. (see slide) | |
| ICLEI / Saints to follow up on individual cities' support needs for next activities | |
| LHCs to report new activities and the ones which have not been reported yet in the Media & Cooperation planning sheets and the DEC tracker | |





2nd GA-Meeting day: Thursday, 15th June 2023

On Thursday, 15th June 45 persons participated in the meeting opened by Johannes introducing the agenda points for the second meeting day. Johannes also explained a change in the agenda, as project partner ECOLISE was unfortunately unable to attend the meeting at short notice (workshop on Amplifier Cities Strategy). The free slot was taken over by partner UCT with their workshop "Reflections on what we have learned and lines of enquiry going forward".

Workshop: Update on #Lifestyle Challenges

Lead: NTNU Participants: all

| Content | Additional information (if needed) |
|--|------------------------------------|
| 1. Review user engagement with the Challenge since the app's launch in | |
| September 2022. | |
| 2. Plans for Challenge development and research design in the coming | |
| months | |
| 3. Group discussion on ideas for fun-oriented Challenge | |

45 persons participated in the session.

| General main points | Additional |
|---|--|
| | information (if needed) |
| We reported on the total number of Challenges deployed since the app's launch, as well as user uptake of Challenges (acceptance and success). We showed the adoption status of Challenges by behavioral domain and country. We looked at which Challenges were most preferred by users from each country. We showed preliminary analysis results on the attributes of Challenges (Challenge duration, behavior type, etc.) We shared our plans for new Challenge development in the coming months. Finally, we brainstormed in groups of 4-5 about new ideas for funoriented Challenges. | See deck slide for further particulars (NTNU's presentation) |
| Follow-up and /or "to-dos" | |
| For "completion" data, we will also look at completed but failed cases. | |





- We will make sure to indicate what daily/occasional sustainable behavior means.
- It needs to be discussed how the CAMPAIGNers app will be run after the project ends (consider bottom-up approach).
- We will review and consider the "Fun-oriented Challenge" ideas proposed during the group discussion. Some feasible ideas will be drafted as a new challenge. Some ideas suggested include:
 - Drink locally (local brewery)
 - Grow plants on your own balcony
 - Create challenges that involve friends
 - Have a vegan party and bring leftovers
 - Make stationery out of recyclables
 - Make reusable sponges from old clothes
 - Draw in nature
 - Visualize your accomplishments
 - Make toys for children
 - Consider a bottom-up approach within the consortium (e.g. miro boards)
 - Walk as much as your favorite sports star walked today







Session: Deepening DEC strategy

Lead: CAN Europe Participants: all

| Content | Additional |
|---|--------------------------|
| | information |
| | (if needed) |
| CAN Europe provides an update on deepening DEC plan and overall | <u>See dec slide</u> for |
| WP8 Strategy | further particulars |
| | (CAN Europe's |
| | presentation) |

45 participated in the workshop/session.

| General main points | Additional information (if needed) |
|---|--|
| We held 2 sessions with amplifiers cities, big levels of engagement and in the next phase working towards supporting AC activities. ECOLISE to lead a workshop with everyone and define agenda for next AC agenda. AC will be invited to the final conference with a specific part of it dedicated to them We will need to reflect on, while we are here, issue of different layers of political levels and how they interact with each other or not. Gaps between bottom up and top down approach. | The list of AC can be found on the website |
| LH and AC experiences are feeding bottom up messages and also what is happing at the EU and international level is being integrated. Deepened section on specific audiences, also in preparation of COP28. Iterations on how to integrate communal service providers and education services. | The Idea is that this research project has an element of permanence of change of people behavior in lifestyles and policies as well. |





 We need more engagement from your side and active contributions from as many of you as possible to amplify and improve effectiveness.

<u>Discussion</u>: What kinds of interesting news we can communicate beyond the policy briefs, news that are policy relevant we can take and amplify whether is EU and international context. Facts and figures don't have to come necessarily from project but also from LH, something helping cities to implement and/or use the app. Which messages you want to prioritise from your side?

What can you see coming in the coming months as a hook, message etc? The objective is not to find a strategy today but to reflect on these issues today.

- Need to enable the work to facilitate lifestyles changes, helping to drive people into a certain direction but their choices need to be made easy. How to reach the critical mass? Key elements around several topics, focus on few key areas. How do you design a change in the system that is enabling to the individual to take action?
- There's a question about how can we take advantage of these special collaboration of cities representatives, that are the closest to cities rather than national representatives?
- There is not a making-things-permanent way of thinking right now.
- Important to share success story, Lithuania has success story. Since April to now they grew users, interesting for other LH, AC cities. We can deliver these kinds of messages as inspiration.
- The success also depends on how closely this program was integrated in things done by municipality. How it was explained the product itself, creating evidence around climate change. During and after covid the city of Vilnius for example took huge changes in the environment. Around city and suburban areas, city saw real changes, therefore it wasn't very difficult to combine this project. Especially they





worked with citizens in this field. Citizens think this is not their business. Visualisations, diagrams, common activities to do together are helping a lot together with involving the comms division of the city which has quite huge experience to communicate to people. They worked on outreach, used very popular channel, social media (fb the most popular).

T8.3:

Events Update Takeaways (check the slides):

- Dinner in Bonn
- Grenoble: Biennale of Cities in Transition
- CAN Europe Spring General Assembly: Sufficiency session and Poster Session
- Feed messages into reaching out to different categories

Newsletter:

Think how to shape a relevant newsletter

Policy brief:

- Recommendations can be presented as a package together of separately, just to pull them out as needed.
- It's not just us who can tweet but also you to tweet and tag us

T8.4 presented by SBK (Oliver):

- How to make the app a permanent feature in people life?
- We need more users, getting this more attractive, more fun, attractive for businesses, use money to go on with the project if someone invests. Need more life during project period itself, we need more users, open for discussions for proposals.
- The cooperation with companies could be an interactive part, hope to become attractive to companies. Great opportunity to find European project call to go on with this type of activity, something to exploit the app in somehow.
 National calls are also an opportunity to set up a specific activity, dealing with the app in general.
- It doesn't have to be under the heading of climate, while discussing in Bonn an Austrian person interesting insight on waste prevention measure presented as waste but it was

There will be a deliverable for October lead by CAN E (D8.4).

CC App: If you have any questions, you can get in touch with SBK.





on climate. We can also apply for circularity, net zero types activities, link to nature based solutions.

- While looking at opportunities moving ahead, we must acknowledge the tool isn't ready for the rollabout yet. Question on where we are today and where we are going to build a tool that is dynamic enough. Big rollout happens, you refine the tool. We need to refine the tool first. Question on how to pull that together?
- Idea to create a published package of challenges tool. Co creation tool, develop your own challenges and toolkit that is a wider range of cities can uptake.
- SBK: We can prepare presentation and show to partners, tool itself is easy to use and understandable.
- Locally generated challenges are of outmost importance especially outside EU. A few degrees cooler, design a cool campaign. With the space of 2 degrees you can create
- On funding there's the option to go to municipality or institutions that could be interested to buy such a product.
- It can be possible but we need users. But we also need to see how much money it will be needed. Selling is only one amongst the solutions. Business should have the same way of thinking, they should sell products that fit our goal. If we say them they can save up money with their lifestyles they can be more likely give 1,2,3 euro.
- Importance to see the difference between keep managing a project and build a package for the future

Follow-up and /or "to-dos"

As partner ECOLISE could not attend the meeting on a short note, the workshop on "Aplifier Cites" will be held online.

Therefore, ECOLISE will send out a Doodle poll to find a most suitable date.

Provide your input to:

• Content you want to showcase and suggestions for social media contacts





• Activities and Events

- 1. Set up plan and collect at least 2 messages from every WP on what they learned so far.
- 2. Ask an event from every WP where these could be spread so we can have operational approach on collective messages and events.
- 3. Make a quick list of things to communicate and quick list of outlets to communicate









Session: Overcome barriers to the adoption of sustainable lifestyles by citizens. The role of municipalities

Lead: HEAS Participants: all

| Content | Additional |
|---|-------------|
| | information |
| | (if needed) |
| Interactive session to overcome barriers to the adoption of sustainable | |
| lifestyles by citizens with focus on diets, waste, re-use and awareness | |
| raising for Importance of behaviours change(s). | |

45 persons participated in the workshop/session.

| General main points | Additional information (if needed) |
|--|------------------------------------|
| This workshop aimed to facilitate exchanges amongst the project | See slide |
| partners on how to encourage citizens: | <u>deck</u> for |
| - to adopt more sustainable diets, | further |
| - to reduce their waste, | particulars |
| - to reduce their consumption by re-using existing items, | (HEAS's |
| - to raise awareness on the necessity to change behaviors. | presentation) |
| The session kicked off with a presentation by the municipality of Freistadt | See slide |
| on their policies regarding these issues. | deck for |
| | further |
| | particulars |
| | (Freistadt's |
| | presentation) |
| As the partners from the City of Pesaro were unfortunately unable to | |
| present in person, their presentation is available <u>here.</u> | |
| It was followed by a presentation by HEAS on the stakes regarding the 4 | |
| topics: the importance of addressing these issues, the difficulties for | |
| public authorities to legislate on these issues, and the possible solutions | |
| that can be identified in the scientific literature. | |
| The second part of the session was dedicated to a discussion between all | |
| participants (scientific partners and LCs) in order to collect feedback from | |
| the LCs on these topics. | |
| Break-out sessions were organized with the LC representatives being | |
| divided into 7 discussion groups and supervised by the scientific partners. | |





| The main task each group was asked to do was to to identify best | |
|--|--|
| practices, obstacles and policy strategies regarding diet, waste | |
| management, circular economy and conscientization. | |
| At the end of the session, each group briefly restituted the main elements | |
| of their discussion, followed by a general conversation involving all the | |
| partners. | |
| Follow-up and /or "to-dos" | |
| All the elements collected during this workshop will be utilized for the final | |
| report on policy recommendations at the end of the project. | |











Session: Reflection on what we have learned, and lines of enquiry going forward

Lead: UCT Participants: all

| Content | Additional information (if needed) |
|--|------------------------------------|
| Although planned as a reflection session that would lead to guidance | |
| about the way forward for the next 12 months of the project, the | |
| immediately prior session ran far over time. This rendered the completion | |
| of the session, as originally conceived, impossible. In discussion with EI-JKU | |
| (Johannes Reichl) it was resolved to move this session to a later date (date | |
| decided as a result of an online poll), with a quick introduction on the data, | |
| with an initial canvas of partipant's reflections on what we have learned | |
| and what they thought the lines of enquiry going forward should be. | |

45 participated in the workshop/session.

| General main points | Additional |
|--|-------------------|
| | information |
| | (if needed) |
| As time was running out, Grant gave a brief introduction to the planned | Email at: |
| workshop and asked participants to answer two questions very briefly on a | grant.smith |
| piece of paper and email them to him. | <u>@uct.ac.za</u> |
| This input will form the basis of the workshop, which will take place online | |
| as soon as possible. | |
| | |
| Question 1: What was the main message you took away from these days? | |
| Question 2: What are still important open questions? | |
| Follow-up and /or "to-dos" | |
| UCT will send out a doodle poll to all partners to find out a most suitable | |
| date. | |
| UCT will collate the 31 responses to the two questions that have been so | |
| far received to form a basis for the online session | |





At the end of the meeting, the possibility of holding the **monthly WP leader status meetings** in July and August in a different format was discussed. The reason for this is that many partners are not able to attend the meetings during the summer months (because of holiday season).

Proposal: Short written information to the coordinator about the progress of the project in the individual work packages In July and August, as well as individually organised meetings if needed. This proposal was accepted by the partners present.

A reminder will be sent out by the coordinator to WP-leaders accordingly.

The next monthly WP Leader Status Meeting will take place in the usual online format on **Wednesday, 20 September 2023**.

EI-JKU's presentation on the short introduction of the second GA-Meeting day, project management, wrap-up and welfare can be found here.

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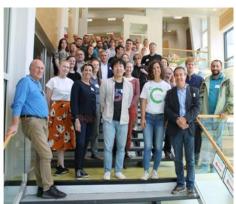
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101003815.





Selection of meeting pictures. More photos are available at https://drive.google.com/drive/folders/1Dc-UXNkEXq8a82qNKtxmQ59HIX2X0eKa and https://drive.google.com/drive/folders/10j4MKPWh73fNUvA88KrPKShtXBwrHH_Z





















Minutes of 3rd online General Assembly meeting

of Citizens Acting on Mitigation Pathways through Active Implementation of a Goal-setting Network

Meeting date: 15th November 2023, 10.00 –13.00 hrs (Vienna time)

Agenda:

| Timing | Welcome |
|---------------|-----------------------------|
| 10:00 - 10:10 | Welcome and Agenda (EI-JKU) |

| Timing | Update on CC app - 15min |
|------------------|--|
| 10:10 - 10:25 | Rewards system, user generated challenges and outlook on upcoming activities (Lead: SBK) |
| approx. +5 mins. | Time for discussion (all) |

| Timing | Update on User Engagement and some Analyses – 20min |
|------------------|---|
| 10:30 - 10:50 | Presenting initial results from framing effect study, |
| | discussion of initial results/descriptive analysis of dataset |
| | and look at dashboard results |
| | (Lead: FEEM, NTNU, UCT, EI-JKU) |
| approx. +5 mins. | Time for discussion (all) |

| Timing | Soft Launch and next activities WP4 - 20min |
|------------------|---|
| 10:55 - 11:15 | Update on where communications activities stand |
| | currently, next plans for the coming weeks, outlook D4.3. |
| | (Lead: ICLEI) |
| approx. +5 mins. | Time for discussion (all) |

Short break!

| Timing | Turning FCs disengagement into contribution opportunities – a collective exercise – 15min |
|------------------|---|
| 11:35 - 11:50 | Interactive session (Lead: ECOLISE) |
| approx. +5 mins. | Time for discussion (all) |

| Timing | Policy-Makers Strategy Support and Interaction activities up to the end of the project - 20min |
|------------------|---|
| 11:55 - 12:15 | Presentation of events with policy makers, update on |
| | policy briefs and outlook (Lead: HEAS) |
| approx. +5 mins. | Time for discussion (all) |

| Timing | Mitigation pathways – 15 min |
|-----------------|--|
| 12:20 - 12:35 | For the transport and residential buildings sector enabled |
| | by lifestyle change, reflecting D6.1 and D6.2 (Lead: E3M) |
| approx. +5 mins | Time for discussion (all) |

| Timing | Outlook 3 rd PHYSICAL GA and final conference/ Brussels - | |
|-----------------|---|--|
| | 10 min | |
| 12:40 - 12:50 | Preparatory work for the 3 rd physical GA (Lead: CAN E) | |
| approx. +5 mins | Time for discussion (all) | |

| Timing | Project Management |
|---------------|--|
| 12:55 - 13:00 | Timeline and Outlook until end of project runtime (Lead: EI-JKU) |

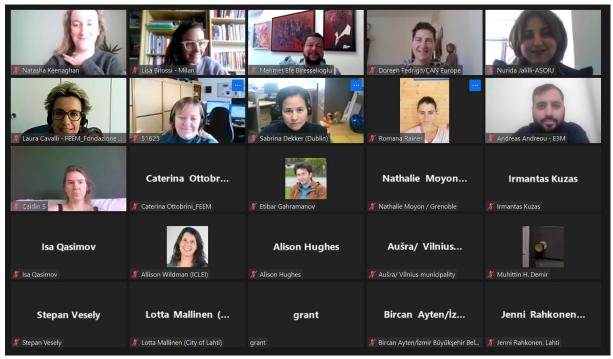


Welcome: Johannes (EI-JKU)

42 persons participated in the meeting and were welcomed by Johannes.

New team member of ICLEI was introduced: Giacomo Santangelo







The meeting was recorded. Permission of all participants has been received. The recorded meeting is available at CAMPAIGNers Google drive:

https://drive.google.com/drive/folders/1DkMZL17n079ZaJfmIN7cfX26H2EhW4gm

Summary: General points that require action of partners

| Reminder | To-do | Additional information |
|--|--------------------------------|-----------------------------------|
| Increase engagement of | If there are further ideas | Abdul.otman@ecolise.eu |
| Amplifier Cites | about engaging AC or | |
| | partners who want to join | |
| | further discussions on that | |
| | issue, please write an email | |
| | to Abdul. | |
| Event at the European | Kind request to share | get in contact with Agata |
| Parliament (hybrid | invitation (as soon as ready) | agata.meysner@caneurope.o |
| event, date still to be | with partner network(s) | rg |
| determined, sometime | | |
| early 2024) | | |
| Outreach of events | All partners are invited to | manfred.hafner@heas.ch |
| - side event at COP28, 6^{th} | share any comments, ideas | |
| Dec. 2023 | how to improve outreach to | |
| - event at European | cities and organisation of the | |
| Parliament (early 2024) | events by email to Manfred. | |
| - event with Covenant of | | |
| mayors, 18 th of Dec. 2023 | | |
| Policy relevant output | All partners are kindly | manfred.hafner@heas.ch |
| | requested to inform HEAS on | |
| | any policy relevant outcome. | |
| Final conference, 13 th | Any idea, who could be | get in contact with Agata |
| March 2024, Brussels - | invited for the final | agata.meysner@caneurope.o |
| external | conference please send an | rg |
| participants/guests | email to Agata. | |
| Organising Team for 3 rd | Idea: core group to take care | Please, send an email to Agata |
| GA/final conference 12th_ | of the organisation, but of | who wants to join that |
| 13 th March 2024 | every partner is invited to | group. <u>agata.meysner@caneu</u> |
| | join! | rope.org |



Update on CC app - Johannes (EI-JKU)

The partner SBK was unable to attend and was excused from the meeting. In coordination with SBK, Johannes (EI-JKU) gave a short update on activities regarding a planned cooperation with "Megamarsch" (https://www.megamarsch.de/) to promote the CC app among their more than 15tsd members. The idea is to go beyond the usual lifestyle and develop a specific challenge for Megamarsch (main message: integrate more walking in your daily routine). Successful participants will receive a discount on their next ticket. The challenge should take place in January/February.

Update on User Engagement and some Analyses – Grant (UCT), Byungdoo (NTNU), Luca (FEEM)

Update by Grant (UCT)

- Engagement of stakeholders were done over several points/rounds and led to following topics/priorities
 - o How to frame a challenge?
 - Drop offs
 - o What are the covariates?
- Work in WP 5 involves:
 - Online Dashboard (FEEM-SBK)
 - automatic report on descriptive statistics, challenges etc. can be found here
 (EI-JKU):
 - https://drive.google.com/drive/folders/1g62m62Xn6pqP958TLE2DFn1wNP0u 4U
 - orandomised control trial (FEEM-NTNU): Message framings have been rolled out in the last months through randomised control trial. Aims were to foster app engagement and to test the influence of message framings (e.g., motivational and emotional component) on app use

Update by Byungdoo (NTNU) on increase user engagement under WP3

- Engage users more regularly (be part of daily routine) two pilot studies were made
 - Control Group (unframed message) and Treatment Group (framed message including emotional components) to see if challenge framing increase acceptance of users
 - No significant difference was seen between those who received and those who didn't receive message framings.



- Lower user engagement in pilot 2 than in pilot 1, soft launch may be the reason for higher engagement in pilot 1. Issues with pop up messages determined failure of test in week 3. NTNU is working with SBK to solve these technical issues.
- Main experiment will take place in week 47-51 and focus on local framing (neighbourhood, city, ...) to test if this could increase user engagement
- User-generated challenges: 76 total submissions, 40 accepted, 34 rejected, 2 pending, most challenges are "other" domain (e.g., waste reduction, recycle/reuse/upcycle, planting trees, gaining knowledge, local & outdoor activities)

Update by Luca (FEEM) on sample of results

- Introduction on statistical analysis (Logit model) and available and reliable variables, goal is to assess influence of user characteristics on likelihood of acceptance and success in specific lifestyle challenges
- Meeting with WP 7 planned to make policy recommendations based on data analysis

Discussion:

| Name: | |
|----------|--|
| Johannes | Do you have overall conclusion or suggestion what you believe to help |
| | increase engagement? |
| | |
| | Answers |
| | Byungdoo: still have much to learn from messaging framing effects; |
| | encountered many unforeseen difficulties along the way implementing |
| | the study; in main experiment looking forward to have a better study |
| | design without interfering technical difficulties, sees potential with local |
| | framing (users are interested in preserving cities); user-generated |
| | challenges: learn interests from submitted challenges, based on that |
| | craft better challenges that resonate with user interests |
| | |
| | Luca: age plays important role, maybe decide to prioritize targeting |
| | younger people? maybe to include "older" users, open for discussion |
| | |
| | Grant: home parents have a higher likelihood of participate successfully, |
| | addresses importance to also report "non-results" in behavioural work |



| Stepan | Posted in chat: "adding a few attitudinal variables to Luca's models, connecting in this way with the literature and hopefully increasing explanatory power. We at NTNU can come up with a few items hopefully before Christmas, if desired. Let us know." |
|---------|--|
| Frances | Points out that research questions should be addressed somehow (more detailed in chat post: "Research within this project considers the impact of an app-based approach to promoting sustainable lifestyles and the role of app-based interventions within broader local government sustainability strategies and policies Research questions that we are in the process of answering: Evaluating the usefulness of mobile apps to promote and support sustainable lifestyle changes. How has Climate CAMPAIGNers contributed to/informed wider sustainability policy or strategies, or action in our lighthouse cities? Examining the challenges and best practices for implementing the CAMPAIGNers app Exploring the impact of CAMPAIGNers on resident-local government relations." |
| | She also flags out that there are many positive results of the project, also with respect to the learnings of cities on app use to engage citizens for lifestyle change, as it is emerging from the focus groups. These learnings are also relevant for the scientific team, even though the majority is focusing more on the quantitative outcomes from the app. Furthermore, the outcomes of the work with the focus groups should be recorded somewhere eg final report. Johannes: suggestion to create an overall executive summary which includes a balance of all the scientific research (have to find a kind of outlet for public in a more visible way as the final report) |

The presentation of UCT, NTNU and FEEM is available at CAMPAIGNers Google drive: https://drive.google.com/drive/folders/ldlxTzlq7kVtmfiJcgHMTPoLBMjeVYgLY



Soft Launch – Johannes (EI-JKU)

The main representative of partner ICLEI was unable to attend and was excused from the meeting. Johannes (EI-JKU) gave a short update on an activity with the largest newspaper provider in Upper Austria, who is interested in using the CC app on regional level (8 weeks with challenges relevant to their readers in terms of sustainable lifestyles, supported by reports in the newspaper). Some technical details must be discussed as the action should take in spring 2024 there is still some be prepared.

Jenn (ICLEI) reported shortly about the paid media-partnerships: possible media partnership with an EU-wide agency (broadcasting in newsletters, on the website, social media, etc.) Discussing with politicians too, but focusing on media partnership first. CAMPAIGNers made it to the final round of the Rebecca Ballestra Communication Award (to be announced tomorrow). There were around 300 applicants and the CAMPAIGNers project was among the best 30. More news on this award is expected by the end of this week.

ICLEI will send out the planned presentation to consortia upon the return of Sophie.

Turning FCs disengagement into contribution opportunities – a collective exercise – Abdul (ECOLISE)

Update on activities with amplifier cities:

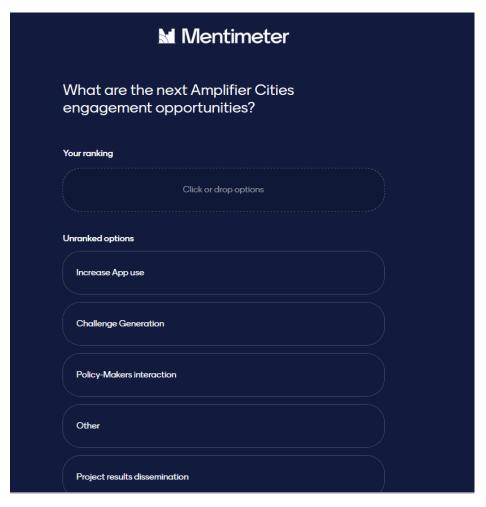
- a webinar was done in September with amplifier cities. There were 7-8 amplifier cities. Unfortunately, the interaction was limited.
- an event with ICLEI and partner City of Dublin was successful however, participation of amplifier cities could have been more.

Abdul included an interactive part for the consortia with the question:

"What are the next Amplifier Cities engagement opportunities?"

Mentimeter: https://www.menti.com/alcm196mu3tq

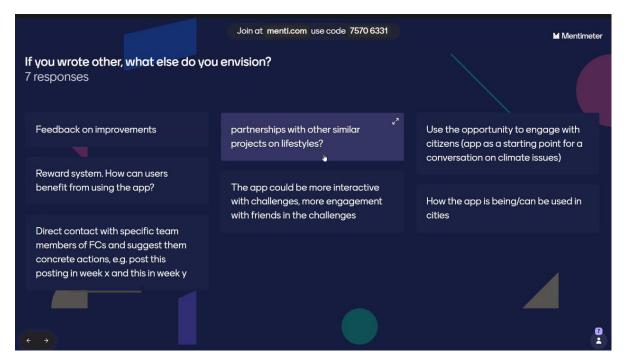








Another question via Mentimeter: "If you wrote other, what else do you envision?"



Discussion:

| Name: | |
|----------|--|
| Johannes | comments on his post: "direct contact with specific" that there is the |
| | impression that AC are overwhelmed with information; engagement |
| | could be a clearer action which enables AC to do it within a short time |
| Doreen | comments on her vote on "Policy-Makers interaction": this project should |
| | link recommendations between regional/national/European levels |
| | Abdul suggests to have a bilateral meeting with Doreen |
| Frances | challenge generation on number one: more user generated challenges |
| | would maybe give a sense of challenges which are interesting for AC as |
| | well as legacy is an important fact of the project |
| Johannes | good idea to look at user generated challenges and who created them |
| | (take privacy issues into account) but from the challenge it might come |
| | clear eventually if the challenge was proposed by AC |
| | |
| | Stepan comments in the chat: "I think we tried to obtain the info Luca |
| | now mentioned from SBK but I believe they said demographics cannot |
| | be connected to authorship of Challenges atm." |



If there are further ideas about engaging AC or partners who want to join further discussions on that issue, please write an email to Abdul <u>Abdul.otman@ecolise.eu</u> Some partners have already committed in the chat to be involved in further development actions around AC.

Policy-Maker Strategy Support and Interaction activities up to the end of the project – Manfred (HEAS)

The communication of the results and recommendations at local, national and European level is the big question to be discussed and focused on now.

The main objective is to transfer knowledge about what lifestyle challenges/behavioural changes are accepted by users.

There will be a side event at COP28, 6th of December 2023, 13-14:30 CET (online). There will also be an event at the European Parliament (hybrid event, European Parliament: date still to be determined, sometime early 2024) with the support of CANE. As soon as invitations are ready Agata (CANE) will share it and appreciate it this would be shared by partners networks. If there are any suggestions, please get in contact with Agata.

Johannes suggested to invite MEPs also to our final conference in March 2024.

There will be an event with Covenant of mayors on 18th of December 14:00-15:30 organised by ICLEI. Manfred pointed out that there is an overlap of LC to attend those events, so the idea is to reach out to other cities. That is also the reason why to cooperate with a COM format.

All partners are invited to share any comments, ideas on how to improve outreach to cities and organisation of the events by email to Manfred.

HEAS works very closely with LC to enrich the evidence and findings for policy reports (recommendations: how to make behavioural change practical and integrable). All partners are asking to inform HEAS on any policy relevant outcome (chat: "all input you have for WP7 (organization of our upcoming policy events, policy briefs and/or any policy relevant information), send me an email: manfred.hafner@heas.ch").

HEAS is currently working on two policy briefs (mobility and diet) out of the workshops held at the Lahti meeting. In addition, partners are working on several policy briefs, e.g. E3M results from D6.1 will be included in a policy brief, NUIG related to focus groups, IUE policy brief is under review and NTNU may also provide one on why people do not use a challenge or participate in general.



Discussion:

| Name: | |
|--------|---|
| Trevor | How the behavioural elements can support the technical |
| | changes/innovations (e.g., business models) that need to be made in |
| | the transition is an important question for climate issues and for the kind |
| | of pilot discussions that these policy events should address too. |
| Grant | Sample size did so far not produce so many policy relevant outputs. But |
| | there are some, also incredible outputs for the projects. |
| | |
| | Manfred: There was a co-ordination meeting with WP7 last week and |
| | there is an awareness that such outputs will be considered (Grant |
| | mentions that input has already been provided). |
| | |
| | Frances: As already mentioned earlier – it is important to keep such |
| | outputs even if they rely on a single LC or very active partner. So, there |
| | should not be a generalisation of what we say. |

Mitigation pathways - Andreas (E3M)

Andreas presented the main objectives and work carried out in WP6 as well as main content and conclusions of D6.1 Report on the update system models in mobility and residential demand and their results, which was submitted recently. This includes also the main points for the gap analysis, scenarios of lifestyle changes, description of general modelling improvements, and scenario design incl. key results. The work of D6.1 will pave the way for D6.2 The impacts of lifestyle changes on climate change mitigation pathways, which is under preparation and due by 31 Dec 2023. The presentation was finalised by an outlook and next steps by E3M.

Discussion:

| Name: | |
|--------|---|
| Doreen | How do you address the different temporal nature of these actions: from |
| | pressing a simple button to moving home or installing insulation? |
| | Andreas: The approach was simplistic and some assumptions had to be |
| | made. Therefore, scenarios were created. |

The presentation of E3M is available at CAMPAIGNers Google drive: https://drive.google.com/drive/folders/ldlxTzlq7kVtmfiJcgHMTPoLBMjeVYgLY



Outlook 3rd PHYSICAL GA and final conference/Brussels - Agata (CANE)

Agata gave a summary of the first meeting on organising that event.

Organisation of the Physical General Assembly

- 1st Organising Team Meeting on 6 November
 - o 13 March
 - Clear key project recommendations
 - Morning discussion with decision-makers
 - Afternoon exchange with similar projects, takeaways & next steps
 - Ideas for guests (EESC, Committee of the Regions, CEMR, Eurocities, Energy Cities, SCORAI Europe/ ERSCP/ ENOUGH Networks, other lifestyles project, e.g. 1.5 degree lifestyles, EC, EP, Per Reps working on climate, transport, circular economy, academia, CSOs in/near Brussels...)

Next steps

- Venues
- Suggestion to proceed with CANE, HEAS, ICLEI, NUIG, EI-JKU for the core organising team
- o 2nd Organising Team Meeting before Christmas
- Comms work on invitation, website page & registration

Ouestions

- o Any recommendations for guests to invite?
- o Any suggestions for content for the agenda?
- Final Conference, 13th March 2024: external participants
 - Please get in contact with Agata if you have any idea, who could be invited for the final conference or any content for the agenda by email
 - o Johannes suggests inviting guests from sister projects.
- 3rd GA/final Conference 12th–13th March 2024: Organising team meeting
 - o idea is to have a core group to take care of the organisation, but of course every partner is invited to join. Please let us know who wants to join that group.
 - There are a couple of names as a starting point but of course will be happy to enlarge this group.
 - A second organising meeting will be held before Christmas. Agata will send out a Doodle to relevant partners and/or expressed interest to be part of

Reminder to all: please suggest persons who could be guests and/or speakers at our event!

Discussion:

| Name: | |
|----------|---|
| Johannes | The idea of having a full day conference or dividing the day into two |
| | halves, for example, can be condensed into different levels. |
| | This can be discussed in the organising group during the second |
| | meeting. |



| Agata | The Venue is an urgent issue. CANE will have a check on possible venues. |
|---------|--|
| Allison | It's a bit of a chicken - egg problem, no? We should know our audience |
| | and why they would be interested before we figure out what we want to |
| | share precisely. |
| | Johannes suggests to discuss this as well within the organisational |
| | group. |

The presentation CANE is available at CAMPAIGNers Google drive: https://drive.google.com/drive/folders/ldlxTzlg7kVtmfiJcgHMTPoLBMjeVYgLY

Project Management – Johannes (EI-JKU)

An outlook on upcoming deliverables until the end of the project runtime was presented as D7.9 has to be rescheduled for early 2024. In total 13 deliverables have to go for.

As the issue of legacy planning is to be considered important the idea is to integrate it as a permanent part within the monthly WP leader status meetings. Agata is not sure if CANE has the capacity to lead this issue but agreed to be a moderator on that.

There is also a kind reminder to be aware of the upcoming meeting dates (see slide about all the dates).

Other questions / discussion to partner or consortium as a whole

none

Next monthly status meeting: 20th December 2023, 10 - 12 am (Vienna time)

Link to telco:

https://jku.zoom.us/j/95435921379?pwd=K3lLb3VGcWk4UDBDUVdDbHFEOTZEQT09



Participants list

| ~ | Teilnehmer | (42) |
|---|------------|------|
|---|------------|------|

| Q Finden Sie einen Teilnehmer | | |
|-----------------------------------|--------------|---------------------------------------|
| R- Regina - El-JKU (Co-Host, ich) | <i>¾</i> √⁄a | IR Ilham Rustamov ASOIU 🎉 💆 |
| JR Johannes Reichl (Host) | % M | ID iPad di Pier Giacomo 🔏 💆 |
| 5 51625 (Co-Host) | <i>¾</i> | IK Irmantas Kuzas 🔏 🔀 |
| GS Grant Smith (Co-Host) | <i>¾</i> √⁄a | IQ Isa Qasimov 🔏 💆 |
| G grant (Co-Host) | <u> </u> | IM Ismini Moustafelou (DAFNI) 🔏 🔀 |
| Abdul | <i>¾</i> | JC Jenn Cote (ICLEI) |
| AM Agata M (she/her), CAN Europe | <i>%</i> | JR Jenni Rahkonen, Lahti 🔏 🔀 |
| AH Alison Hughes | <i>¾</i> | JH Julia Haider 🔏 🔀 |
| Allison Wildman (ICLEI) | <i>¾</i> | LC Laura Cavalli - FEEM_Fondazio 🔏 🔀 |
| AA Andreas Andreou - E3M | <i>¾</i> | LB Lisa Bitossi - Milan 🔏 🔀 |
| AS Anna Sonnleitner Linz | <i>¾</i> | LM Lotta Mallinen (City of Lahti) 🎉 💆 |
| AV Aušra/ Vilnius municipality | <i>¾</i> | LF Luca Farnia (FEEM) 🔏 🔀 |
| B byungdookim | <i>¾</i> | MH Manfred Hafner 🔏 💆 |
| CS Caitlin S | <i>¾</i> | ME Mehmet Efe Biresselioglu 🔏 💆 |
| CO Caterina Ottobrini_FEEM | <i>¾</i> √⁄a | Muhittin H. Demir |
| DF Doreen Fedrigo/CAN Europe | <i>¾</i> | (Finlands) (Allert and Laboratoria |
| Etibar Gahramanov | <i>¾</i> ✓ | Einladen Alle stummschalten |
| GS Giacomo Santangelo ICLEI | % M | |
| Giulia Garzon | % M | |
| IR Ilham Rustamov ASOIU | % √10 | |

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101003815.



Minutes of 3rd physical General Assembly

Brussels, Belgium

of Citizens Acting on Mitigation Pathways through Active Implementation of a Goal-setting Network

12th - 13th March, 2024

Venue:

Mundo Madou Av. des Arts 7/8, 1210 Bruxelles

climate-campaianers.com







Agenda

Tuesday, 12th March 2024 - 1st GA-Meeting day

| Tuesday, 12 th March 2024 | |
|---|---|
| at Mundo Madou – conference room: Artemisia | |
| Time | |
| 09:00 - 09:30 | Arrival / Registration |
| 09:30 - 09:45 | Welcome / Intro EI-JKU & CANE |
| 09:45 - 11:15 | Project Chronicle: milestones, takeaways and lessons learnt Lead: IUE Participants: all |
| 11:15 - 11:30 | Coffee break |
| 11:30 - 12:30 | Project Chronicle: milestones, takeaways and lessons learnt Focus: policy findings Lead: HEAS Participants: all |
| 12:30 - 13:30 | Lunch |
| 13:30 - 15:00 | Experience sharing from Lighthouse Cities Lead: ICLEI Participants: all |
| 15:00 - 15:30 | Coffee break |
| 15:30 - 17:00 | Beyond CAMPAIGNers: amplifying sustainable lifestyles Lead: UCT Participants: all |
| 17:00 - 17:15 | Wrap up, end of first meeting day |
| 19:00 - 22:00 | Social dinner at BrewDog, Putterie 20, 1000 Brussels |

CLIMATE CAMPAIGNERS

This project has received funding from the European Union's Horizon 2020 research and

innovation programme under grant agreement No. 101003815.





Wednesday, 13th March 2024 – WP-leader Meeting and Final Conference

| Wednesday, 13 th March 2024 WP-leader Meeting Participation of WP-leaders is required. All other partners are welcome to join – if so, please inform EI-JKU about your planned participation. | |
|---|--|
| at Mundo Madou – conference room: Artemisia | |
| Time | |
| 09:00 - 09:30 | Arrival / Registration |
| 09:30 - 09:45 | Opening / Agenda Johannes Reichl / EI-JKU |
| 09:45 - 11:00 | Work Package Leader meeting Focus: Rehearsal Final Conference Lead: EI-JKU |
| 11:00 - 11:15 | Coffee break |
| 11:15 - 12:30 | Work Package Leader meeting Focus: Review meeting & Final report Lead: El-JKU Participants: WP-leader |
| 12:30 - 13:30 | Lunch for the whole consortia |
| CLIMATE CAMPAIGNERS – Final Conference (public event) Gamifying Sustainable Lifestyles: Missing ingredient or lost endeavour? at Mundo Madou – conference room: Artemisia | |
| Time | |
| 13:30 - 14:00 | Registration & Coffee |
| 14:00 - 18:00 | Sessions with keynote speaker, panel discussions and exchange upon the experiences from the CAMPAIGNers research project Detailed Agenda can be found here! |
| 18:00 – 20:00 | Networking drinks & bites |

Presentations (slide decks) and photos of the meeting as well as these minutes are available at CAMPAIGNers Google drive

https://drive.google.com/drive/folders/laE527Q2i_xv59gllTKWTYHk2JfPDxlcG

innovation programme under grant agreement No. 101003815.

CLIMATE CAMPAIGNERS

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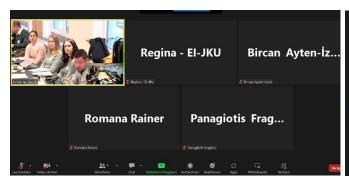
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1st GA-Meeting day: Tuesday, 12th March 2024

Welcome and introduction: Agata (CANE) and Johannes (EI-JKU)

On Tuesday, 12th March 41 persons attended the meeting in person and 4 persons joined the General Assembly online and were welcomed by Agata (CANE) and Johannes (EI-JKU).





At this first meeting day, special attention was given to taking a look at the project's work in the sense of 'project chronicles', discussing milestones, takeaways and lessons learnt, as well as what's beyond the CAMPAIGNers project period. Coordination of outstanding deliverables and preparation of upcoming reporting were also part of the second day of the meeting. One of the highlights of this 3rd General Assembly was the Final Conference, which took place on the afternoon of Wednesday 13 March.

09:45 – 11:15 Project Chronicles I: milestones, takeaways and lessons learnt

The session, moderated by Efe and Muhittin (IUE) focused on practical experiences and lessons learnt rather than policy implications including following points:

- project objectives, achievement, key phases, and overarching strategy, presented by Johannes (EI-JKU)
- following partners briefly shared the most significant milestones, success factors and challenges:
 - Muhittin (IUE)
 - WP1 focused mainly on 2 objectives (to investigate lifestyle-related decisions and to identify societal and structural changes) - the reflection input from LHC was very intensive and good teamwork; the scientific part of these reflections was more time consuming than expected- and could have been easier if there had been a face-toface meeting before;





- expert survey: successful collaboration with LHC, as the experienced local partners selected perfect fitting experts to take part in the field survey;
- Philippe (HEAS): The output of the "Report of Target Lifestyles" was mainly the result of a literature review, highlighting where the greatest potential for behaviour (individual choice) exists.
- Muhittin (IUE) Expert survey: What would be the future policy? There were more expectations on e-mobility; great reluctance to give up owning a car; sustainability was discussed at a very early stage within the LHC
- Anna (LUT)
 - footprint calculator very dependent on availability of local carbon emission factors; transport sector is the most developed, also on an individual basis; housing section was very difficult to calculate as there are few factors included; user input was sometimes random and not realistic (e.g. average usage)
 - challenges: some persons gave random numbers this distorted the result; perhaps it would be better to give an average value for the selection; challenges with transportation have the most potential to avoid CO2 emission
- Andreas (E3M): successfully enhanced/developed models to simulate lifestyle changes: focus on transport and housing sectors; through scenario analysis it was possible to identify lifestyle changes with highest mitigation potential; most challenging was to validate various assumptions of lifestyle changes from data in CAMPAIGNers app.
- Ausra (City of Vilnius)

innovation programme under grant agreement No. 101003815.

- success factor was to engage local policy persons and colleagues of the city adminstration;
- assumption that most potential app users could be find in the social media area; it was necessary to have a strong back office to handle all the comments/communications which appears by kicking off the social media campaign(s);
- poster campaign was also very successful CAMPAIGNers offers very united layout, so the concept of the poster was changed a bit more become more local
- reward system worked out very well rewards with relation to the city life (museum tickets etc)

CLIMATE CAMPAIGNERS

4

This project has received funding from the European Union's Horizon 2020 research and





- Nathalie (City of Grenoble): A shortcoming of the app is that the local focus is less integrated than would have been attractive to citizens. The effort to manage the integration of the app was underestimated.
- Luca (FEEM): The database was not representative enough for the initial idea of the analysis output: In the future, consideration should be given to which citizens should be the focus of the application/advertising process.
- Sofia (City of Milan) and Ismini (DAFNI): lessons learnt: shift budget and promoting effort to the local needs

11:45 – 12:30 Project Chronicles II: milestones, takeaways and lessons learnt Focus: policy findings

The session with focus on policy findings was moderated by Philippe (HEAS):

- Andreas (E3M) presented the work carried out in WP6 (<u>ppt</u> available at CAMPAIGNers Google drive) including a summary and conclusions from the model-based analysis.
 - A very valuable output of the project is that the modelling made possible to show possible costs and investment possibilities of lifestyle changes
- Giacomo (ICLEI): D7.1 analyses the results of policy exchange with LHC (policy forms, focus groups) to report on local policies, actors and lifestyle changes. A final list of key recommendations from LHC for public authorities (see ppt available at CAMPAIGNers Google drive) was highlighted.
- Philippe (HEAS) pointed out that people are often unaware of alternatives when changing their lifestyle(s).
 - o main lessons learnt: the profile of the municipality needs to be elaborated, e.g. by using CALs, to get the right message to the right people; cultural dimension is very important (nutrition, mobility); complexity of governance makes it necessary that there is no one solution for all; social context plays an important role as well (see ppt- available at CAMPAIGNers Google drive)





13:40 – 15:00 Experience sharing from LHC discussion

The session was designed as a discussion round by using the method of "sharing cycle" and was moderated by Giacomo, Jennifer and Allison (ICLEI):

Discussion round with Ausra (City of Vilinus), Anna (City of Linz), Nathalie (City of Grenoble), Caitlin (City of Cape Town), Sabrina (City of Dublin) Pier Giacomo (City of Pesaro), Ismini (DAFNI), Christoph (City of Freistadt), Lisa (Municipality of Milan), Jenni (City of Lahti)

key takeaways

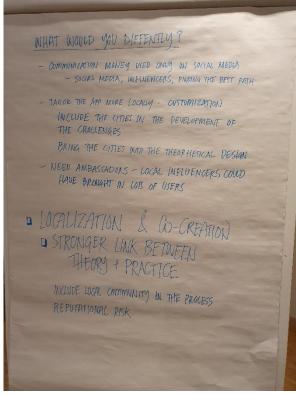
- The message of CCapp exists is important to spread
- Personal promotion: CCapp was a good starting point for discussion what is the city doing, what citizien think of
- Talking to people on indivial basis –
- Hard to get people to change their lifestyles even to use the CCapp
- People remember the CCapp good remarkable campaign
- With the CAMPAIGNers project, the already existing awarness has been sublimated
- Challenging to come up with the effort to set up the campain and follow-up actions
- Make sense to promote this campaign to younger people/schools
- Local context is needed
- Long term perspective translated to smaller challenges to give to feeling of being part of the transition
- Challenges was translated to other media than the app eg brochures
- Find new ways to communicate with citizens

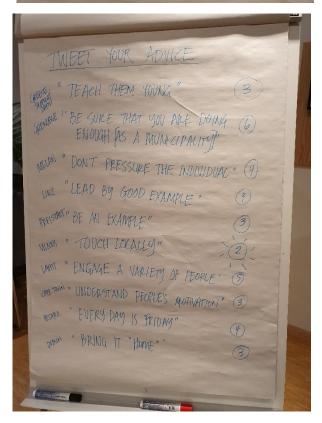


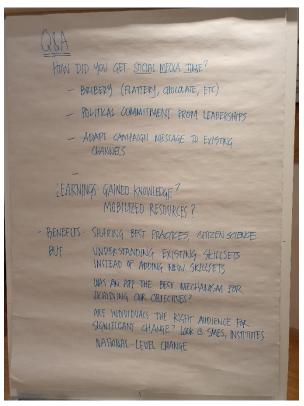


Flip-chart notes:



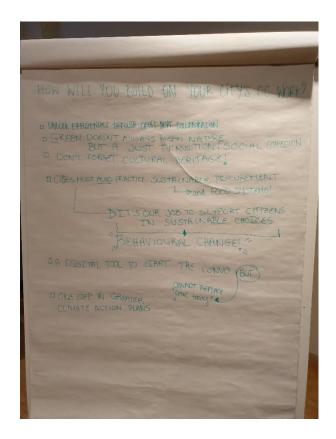












The Flip-chart notes are also available at our CAMPAIGNers Google drive:

https://drive.google.com/drive/folders/lyrvRMq5wOD8xrUXRpsDlzu-3WbcuOmVx

15:30 – 17:00 Beyond CAMPAIGNers: amplifying sustainable lifestyles

3 questions were discussed with the consortia, moderated by Allison (UCT)

Question 1

To what degree do you think this project can be described, at this point, knowing what we know, with the experience that we now have, (successful) Pilot, or as a completed research project?

- Johannes (EI-JKU) ongoing cooperation with regional newspaper is very successful
- project will run till 2026 at least (administrated by SBK)
 - o kind request: go on with promoting the CCapp
 - new challenges, translations, bugs etc. will be handled by SBK just get in contact Oliver and Felix

CLIMATE CAMPAIGNERS



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- o local companies can also be motivated to give rewards
- user challenges were sometimes quite similar to the already existing ones
- EI-JKU will analyse date also after the project runtime, if there a possibility arise to receive some funding from JKU
- Johannes (EI-JKU): the project is a tool to motivate citizens (lifestyle changes) but maybe the way to collect data is not the best for basic research
- Allison (UCT): launch at the campus was a very interesting experience more seen as a pilot; now with the very developed app features maybe it will be interesting to go on with providing the CCapp to the students
- Buyungdoo (NTNU): great pilot project in the perspective of getting insights of lifestyle changes; would be interesting to figure out some more certain ways on how the success of the challenge can be measured – so far the app is fully depended on self-report of the citizens

Question 2

- Frances (NUIG): there might be a hugh potential for the CCapp e.g. sustainability raising elements; collecting more data in people's individual behaviour would be very interesting
- Johannes (EI-JKU): the financial aspect has been to keep in mind

Question 3

What would be required to use this tool to run new experiments of interest to you? a. What would be required on your site?

b. What development would be required on SBK's side?

- Johannes (EI-JKU): would be an idea to create challenges from the research/scientific perspective which could be spread to a large number of users
- Ismini (DAFNI): How can be companies integrated as users? An app-based competition on an island could be interesting?
- Nathalie (City of Grenoble): pointed out once more the importance of the local context; Johannes noted that the opportunity to design local/regional challenges is already there and can be used





16:50 - 17:00 wrap up - end of first meeting day (Johannes - EI-JKU)

- no monthly WP-leader status meeting on 20th March
- last monthly WP-leader status meeting on 17th April



2nd GA-Meeting day: Wednesday, 13th March 2024

09.30 - 12.30 Work Package Leader meeting

The focus of the 2nd meeting day was on the coordination of outstanding deliverables and preparation of the upcoming final reporting and review meeting as well as the final preparation for the Final Conference. Therefore, a session for all WP-leaders were on the agenda. All other partners were welcome to join. Johannes (EI-JKU) welcomed 10 persons (all WP-leaders were represented).

13.30 - 20.00 CLIMATE CAMPAIGNERS - Final Conference (public event)

One of the highlights of this 3rd General Assembly was the Final Conference, which took place on the afternoon of Wednesday, 13th March. 45 people attended onsite and 5 people joined the conference online.

The conference provided a comprehensive overview of two years of data and experiences from Climate Campaigners smartphone app users, and presented quantitative, model-based insights into the potential impact of behaviour change and lifestyle transformation on achieving the goals of the Paris Agreement. The conference was opened by Johannes (EI-JKU), Elisa Vargas Amelin (Project Advisor, CINEA) & Mathilde Mousson (Policy Officer, DG RTD). The keynote speaker Garette Clark gave a lively input on Sustainable Lifestyles: (household consumption) and empowering people to live better and lighter. The CC app as a lifestyle self-commitment to tackle the climate crisis was discussed by Johannes (EI-JKU) and Oliver (SBK), while the interview with two CC app users (Denisas K. onsite and Elisabetta





R. online) brought in real user experience. The final panel discussion moderated by Philippe (HEAS) with Garrette Clark (Sustainable Lifestyles Programme Officer, Consumption and Production Unit, UN Environment Programme), Joe Inwood (EU Elections Campaign Officer at Climate Action Network Europe) & Jenni Rahkonen (Environment Coordinator at the City of Lahti in Finland) brought the discussion to the topic of "European Parliament Elections & Beyond - Enabling Sustainable Lifestyles". Afterwards, participants took the opportunity to network in a relaxed atmosphere over drinks and snacks.

Selection of final conference pictures. More photos are available at https://drive.google.com/drive/folders/1JhhXqQqnTYeuAEV5e5K3IQsatTqpJxnV

















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DocID 603231474375768

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Linz, 17 June 2024

Engagement Letter "Citizens Acting on Mitigation Pathways through Active Implementation of a Goal-setting Network (CAMPAIGNers)"

Agreed-upon Procedures for "Costs claimed under a Grant Agreement financed under the

Agreed-upon Procedures for "Costs claimed under a Grant Agreement financed under the Horizon 2020 Programme (H2020)"

Dear Dr. Tichler

this letter is to confirm our understanding of the terms and objectives of our engagement and the nature and limitations of the services that we will provide. Our engagement will be conducted in conformity with Austrian Standards for agreed-upon procedures (KFS/PG 14) and in accordance with the International Standard on Related Services (ISRS 4400) applicable to agreed-upon procedures engagements and we will indicate so in our report.

Terms of Reference for an Independent Report of Factual Findings on costs declared under the Grant Agreement No. 101003815 - CAMPAIGNers financed under the Horizon 2020 Research and Innovation Framework Programme

This document sets out the 'Terms of Reference (ToR)' under which Energieinstitut an der Johannes Kepler Universität Linz ('the Beneficiary'), agrees to engage KPMG Austria GmbH Wirtschaftsprüfungsund Steuerberatungsgesellschaft ('the Auditor') to produce an independent report of factual findings
('the Report') concerning the Financial Statement(s)¹ drawn up by the Beneficiary for the Horizon 2020
Grant Agreement No. 101003815 - CAMPAIGNers from 1st May 2021 to 30th April 2024 ('the
Agreement'), and to issue a Certificate on the Financial Statements' ('CFS') referred to in Article 20.4 of
the Agreement based on the compulsory reporting template stipulated by the Commission.

The Agreement has been concluded under the Horizon 2020 Research and Innovation Framework Programme (H2020) between the Beneficiary and the Executive Agency for Small and Medium-sized Enterprises (EASME) ('the Agency'), under the powers delegated by the European Commission ('the Commission').

The Agency is mentioned as a signatory of the Agreement with the Beneficiary only. The Agency is not a party to this engagement.

¹ By which costs under the Agreement are declared (see template 'Model Financial Statements' in Annex 4 to the Grant Agreement).



1.1 Subject of the engagement

The coordinator must submit to the Agency the final report within 60 days following the end of the last reporting period which should include, amongst other documents, a CFS for each beneficiary and for each linked third party that requests a total contribution of EUR 325 000 or more, as reimbursement of actual costs and unit costs calculated on the basis of its usual cost accounting practices (see Article 20.4 of the Agreement). The CFS must cover all reporting periods of the beneficiary or linked third party indicated above.

The Beneficiary must submit to the coordinator the CFS for itself and for its linked third party(ies), if the CFS must be included in the final report according to Article 20.4 of the Agreement.

The CFS is composed of two separate documents:

- The Terms of Reference ('the ToR') to be signed by the Beneficiary and the Auditor;
- The Auditor's Independent Report of Factual Findings ('the Report') to be issued on the Auditor's letterhead, dated, stamped and signed by the Auditor (or the competent public officer) which includes the agreed-upon procedures ('the Procedures') to be performed by the Auditor, and the standard factual findings ('the Findings') to be confirmed by the Auditor.

If the CFS must be included in the final report according to Article 20.4 of the Agreement, the request for payment of the balance relating to the Agreement cannot be made without the CFS. However, the payment for reimbursement of costs covered by the CFS does not preclude the Agency, the European Anti-Fraud Office and the European Court of Auditors from carrying out checks, reviews, audits and investigations in accordance with Article 22 of the Agreement.

1.2 Responsibilities

The Beneficiary:

- must draw up the Financial Statement(s) for the action financed by the Agreement in compliance with the obligations under the Agreement. The Financial Statement(s) must be drawn up according to the Beneficiary's accounting and book-keeping system and the underlying accounts and records;
- must send the Financial Statement(s) to the Auditor;
- is responsible and liable for the accuracy of the Financial Statement(s);
- is responsible for the completeness and accuracy of the information provided to enable the Auditor to carry out the Procedures. It must provide the Auditor with a written representation letter supporting these statements. The written representation letter must state the period covered by the statements and must be dated;
- accepts that the Auditor cannot carry out the Procedures unless it is given full access to the Beneficiary's staff and accounting as well as any other relevant records and documentation.



The Auditor:

is qualified to carry out statutory audits of accounting documents in accordance with Directive 2006/43/EC of the European Parliament and of the Council of 17 May 2006 on statutory audits of annual accounts and consolidated accounts, amending Council Directives 78/660/EEC and 83/349/EEC and repealing Council Directive 84/253/EEC or similar national regulations.

The Auditor:

- must be independent from the Beneficiary, in particular, it must not have been involved in preparing the Beneficiary's Financial Statement(s);
- must plan work so that the Procedures may be carried out and the Findings may be assessed;
- must adhere to the Procedures laid down and the compulsory report format;
- must carry out the engagement in accordance with this ToR;
- must document matters which are important to support the Report;
- must base its Report on the evidence gathered;
- must submit the Report to the Beneficiary.

The Commission sets out the Procedures to be carried out by the Auditor. The Auditor is not responsible for their suitability or pertinence. As this engagement is not an assurance engagement, the Auditor does not provide an audit opinion or a statement of assurance.

1.3 Applicable Standards

The Auditor must comply with these Terms of Reference and with:

- the International Standard on Related Services ('ISRS') 4400 Engagements to perform Agreedupon Procedures regarding Financial Information as issued by the International Auditing and Assurance Standards Board (IAASB);
- the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants (IESBA). Although ISRS 4400 states that independence is not a requirement for engagements to carry out agreed-upon procedures, the Agency requires that the Auditor also complies with the Code's independence requirements.

The Auditor's Report must state that there is no conflict of interests in establishing this Report between the Auditor and the Beneficiary, and must specify - if the service is invoiced - the total fee paid to the Auditor for providing the Report.



1.4 Reporting

The Report must be written in the language of the Agreement (see Article 20.7).

Under Article 22 of the Agency, the European Anti-Fraud Office and the Court of Auditors have the right to audit any work that is carried out under the action and for which costs are declared from the European Union budget. This includes work related to this engagement. The Auditor must provide access to all working papers (e.g. recalculation of hourly rates, verification of the time declared for the action) related to this assignment if the Agency, the European Anti-Fraud Office or the European Court of Auditors requests them.

1.5 Timing

The Report should be provided on time.

1.6 Other Terms

Auditor in charge of the engagement is Mag. Alexander Gall.

Our fee amounts to EUR 9.600 Net of VAT. It is based on the estimated average time required by the individuals assigned to the engagement. VAT and travel expenses will be charged in addition.

We look forward to full cooperation with your staff and we trust that they will make available to us whatever records, documentation and other information required in connection with the performance of the agreed-upon procedures.

Providing information to a public authority, a court, any other body entrusted with tasks of public authority, or to any third party named by you as well as the preparation and provision of documents in such proceedings to which KPMG is not a party, will be billed separately based on the time spent, the individuals assigned and their charge-out-rates.

General Conditions of Contract

Our services and liability, also towards third parties are based on the "General Conditions of Contract for the Public Accounting Professions", as amended. Upon signing this contract, you explicitly consent to the "General Conditions of Contract for the Public Accounting Professions" as amended. The "General Conditions of Contract for the Public Accounting Professions" as amended can be downloaded at http://www.kpmg.at/aab.



In order to avoid conflicts of interest, maintain the professional independence and comply with stock exchange requirements, the contractor and all other members of the KPMG Austria group are revocably authorized to store specific engagement data (i.e. name, address, contact person, agreed services, fees, timing) electronically and to transfer these data to other KPMG members worldwide (www.kpmg.at).

Please sign and return this contract to indicate that it is in accordance with your understanding of the arrangements for the performance of agreed-upon procedures.

Yours sincerely,

qualified electronically signed

KPMG Austria GmbH

Wirtschaftsprüfungs- und Steuerberatungsgesellschaft

We accept the above contract and the "General Conditions of Contract for the Public Accounting Professions".

Place

an der Johannes Kepler Universität Linz

A-4040 Linz, Altenberger Straße 69 Tel.: +43 (0) 732/2468 5656

Legally binding signature

(Authorized Signatory of Energieinsititut an der Johannes Kepler Universität Linz)

DR. ROBURT TICHLUR

DR. SIMON TOSOR

Name of signatory