Summary Report on Project Municipality Feedback

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This report synthesises structured feedback on the CommitClimate CO_2 Simulator received from five partner organisations: Riga City Municipality and Cēsis Municipality in Latvia; Lapplands Kommunalförbund (LKF) in Sweden, acting with its member municipalities Gällivare, Jokkmokk, Kiruna and Pajala; and Pałecznica and Raciechowice municipalities in Poland. The report also includes feedback from Tallinn City in Estonia, which participated in the testing and evaluation of the simulator as a project municipality. The feedback covered data availability, presentation of outputs, GHG mitigation measures and policies, interface usability, training and support, and the tool's usefulness for municipal planning. The findings are descriptive and reflect the municipalities' experience with the simulator version available during their respective testing periods. They are not intended as statistically representative results. Differences in local data systems, municipal capacity and the stage of tool development should therefore be considered when interpreting the scores.

This project receives financial support from Interreg program

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1. Executive summary

- **Overall assessment:** Usefulness or long-term potential received the highest average score (8.8/10), followed by training and support (8.5/10). Satisfaction with the policy set and usability both averaged 7.8/10, while outputs received 7.3/10. Data availability remained the weakest area, with an average score of 6.2/10.
- **Planning value:** Five respondents rated the tool's current usefulness between 8 and 10. LKF rated the version tested in May 2025 at 1/10 because unresolved model issues prevented its practical use, while assigning the tool a potential long-term usefulness score of 8/10.
- **Common strengths:** Respondents valued the broad sectoral coverage, scenario modelling, understandable structure and the possibility of supporting SECAP/SEAP updates, investment prioritisation, reporting and funding applications.
- **Main improvement needs:** Priorities include model validation and bug resolution, better local data integration, clearer and exportable outputs, more flexible local policy parameters, and updated scenario-based guidance for users.
- **Comparative score overview.** Score overview is presented in Table 1.

Table 1. Municipality feedback scores (0–10)

Organisation	Data	Outputs	Policies	UI	Training	Usefulness/ potential*
Riga	7	8	8	8	7	8
LKF	5	4	5	7	7	8
Cēsis	7	8	8	9	10	9
Pałecznica	8	10	10	9	9	10
Raciechowice	5	7	6	7	8	8
Tallinn	5	7	10	7	10	10
Descriptive mean	**6.2**	**7.3**	**7.8**	**7.8**	**8.5**	**8.8**

**For LKF, the figure shown represents its stated long-term usefulness score (8/10). Its 1/10 assessment related to the version tested in May 2025, which was affected by technical issues; this is explained in Section 2.2. All other usefulness scores reflect the feedback received during testing. Means are descriptive only.*

2. Municipality-level feedback

The following section presents a structured summary of the quantitative ratings and qualitative comments provided by each participating municipality, highlighting its specific experience with the tool, identified strengths, and suggested improvements.

2.1. Riga City Municipality (Latvia)

- **Data availability – 7/10:** Data outside municipal infrastructure was difficult to obtain, particularly in transport because no unified accounting system exists. National averages were considered insufficiently representative for the capital. A central database serving all municipal departments was proposed.
- **Outputs – 8/10:** The outputs were useful, but individual worksheets contained too much text. Fewer words and more graphs would improve readability.
- **GHG policies – 8/10:** The policy set was broadly suitable, but some measures were too general. Building insulation, for example, would benefit from several selectable implementation options rather than only a rate or target year.
- **Usability – 8/10:** The interface was generally user-friendly. Smaller amounts of text and clearer visual emphasis on the most important information were recommended.
- **Training and support – 7/10:** Training was considered useful, with practical team workshops identified as the most effective format.
- **Usefulness – 8/10:** The tool was useful for analysing energy efficiency and emission-reduction strategies and could support comparison with, or updating of, the city's SECAP.

2.2. Lapplands Kommunalförbund (LKF, Sweden)

- **Data availability – 5/10:** National statistics were available, but important local data were missing for smaller northern municipalities, including modal split in passenger-kilometres, residential energy use per square metre, and detailed commercial, primary and industrial sector data.
- **Outputs – 4/10:** LKF reported unresolved bugs and inconsistencies that limited practical use. Examples included municipal CO_2 emissions being 45% above official statistics, future population assumptions changing historical baseline values, incorrect sector aggregation, and inconsistent energy-saving results. Graph readability, export functions and scenario saving also required improvement.
- **GHG policies – 5/10:** LKF requested smoother incorporation of new energy-efficiency requirements, inclusion of municipal public procurement and parking policies, and a clear distinction between local actions and EU- or national-level measures.
- **Usability – 7/10:** Navigation was relatively easy, although the interface appeared dated in places. More information buttons and unambiguous units such as kWh or MWh were requested.
- **Training and support – 7/10:** Municipal coaching sessions were appreciated. At the time of testing, however, the manual was not updated, and the online platform was not yet ready.
- **Usefulness – 1/10 for the version tested in May 2025; 8/10 long term:** Practical use of the model version tested in May 2025 for scenario planning and SEAP updates was hindered by model issues, but LKF recognised strong potential if reliability and supporting materials were improved.

2.3. Cēsis Municipality (Latvia)

- **Data availability – 7/10:** Data collection was initially difficult but improved substantially as the municipality developed its energy management system. Transport remained the most challenging sector. Cēsis emphasised data integration, standardised reporting and cross-sector cooperation.
- **Outputs – 8/10:** Results aligned well with municipal planning documents and were useful for visualising current conditions, future goals and alternative development scenarios.
- **GHG policies – 8/10:** The mitigation options were comprehensive and aligned with municipal goals. Cēsis requested more locally adaptable and sector-specific measures, including selectable annual implementation volumes for measures such as municipal building insulation.
- **Usability – 9/10:** The interface was clear and intuitive, with useful charts, summary tables and guidance. Some complex input sections and technical terms could be simplified further.
- **Training and support – 10/10:** Interactive workshops, manuals and direct consultations provided a strong foundation. Continued support and regular methodological or feature updates were recommended.
- **Usefulness – 9/10:** The model supported structured, data-driven mitigation planning, investment prioritisation, stakeholder communication and alignment with national and EU reporting requirements.

2.4. Pałecznica Municipality (Poland)

- **Data availability – 8/10:** The municipality had good access to data on public buildings, energy consumption and production, public transport and building stock. Private-sector information, such as household heating fuels, remained difficult to obtain without surveys; national averages were a practical fallback.
- **Outputs – 10/10:** Graphs and charts were considered clear and legible, and numerical results were explained well.
- **GHG policies – 10/10:** The model was viewed as comprehensive and realistic for exploring different strategy pathways. Priority measures included energy efficiency, renewable energy, sustainable transport, waste management and carbon sequestration.
- **Usability – 9/10:** The interface was intuitive, logically organised and responsive. Visual indicators showing task or workflow status could improve the experience further.
- **Training and support – 9/10:** The guidance and support were comprehensive. Practical scenario-based examples, short video tutorials and step-by-step guides with result summaries were suggested as useful additions.
- **Usefulness – 10/10:** The municipality identified concrete applications including school thermal modernisation and ventilation optimisation, LED street-light replacement, an additional 1 MW of renewable electricity capacity, and annual private-building insulation targets.
- **Additional observation:** The analytical, visual and functional development since the first simulator draft was recognised positively. Quantifying the emission effects of behavioural change was proposed for future development.

2.5. Raciechowice Commune (Poland)

- **Data availability – 5/10:** Population and basic building data were relatively accessible, but usable floor area, detailed energy consumption, building age, heat-source data and local modernisation plans were harder to obtain or required further processing and cooperation with public data holders.
- **Outputs – 7/10:** The results provided a useful analytical basis, particularly energy-efficiency and CO_2 indicators and numerical estimates of consumption, emissions and reduction potential. Readability and presentation flexibility could be improved.
- **GHG policies – 6/10:** The main directions were appropriate, especially thermal modernisation, low-emission heat sources and renewables. Greater local differentiation was requested, alongside stronger treatment of transport and mobility, green infrastructure and carbon absorption, and residents' behaviour and education.
- **Usability – 7/10:** The step-by-step structure, basic visualisations and browser responsiveness were strengths. Technical language could discourage less experienced users and should be simplified.
- **Training and support – 8/10:** The introductory material and the possibility of consultation were useful, while deeper practical support for solving real cases would strengthen the training offer.
- **Usefulness – 8/10:** The tool could support municipal climate and energy planning, scenario testing, SECAP and other strategic documents, reporting, and evidence for funding applications.

2.6. Tallin City (Estonia)

- **Data availability – 5/10:** Consolidated municipal data were difficult to obtain because relevant information was distributed among multiple city asset managers and total energy consumption was not available in a single integrated dataset. Where municipality-specific data were unavailable, the use of default values was preferred. Clearer specification of data units was also considered necessary.
- **Outputs – 7/10:** The outputs were generally assessed positively, although some graphs did not open during testing, limiting the respondent's ability to review all results.
- **GHG policies – 10/10:** The range of mitigation measures was considered broad and relevant, providing users with a wide selection of possible interventions.
- **Usability – 7/10:** The interface was generally understandable, but the text in some information boxes was too small and difficult to read.
- **Training and support – 10/10:** The guidance was considered thorough and engaging. Written instructions were suggested as a useful complement to the training provided.
- **Usefulness – 10/10:** The tool was considered highly useful because it covered all relevant municipal sectors and provided a comprehensive basis for examining local energy use and greenhouse gas mitigation opportunities.

3. Cross-municipal findings, improvement needs and project response

Municipal feedback informed the iterative refinement of the CommitClimate CO_2 Simulator throughout the testing and development process. This section summarises the main findings, the improvements identified as necessary.

Reporting note: *Following project completion, this section was supplemented with additional information summarising how the identified feedback had been addressed during the project and reflected in the final version of the CO_2 Simulator. The additional information is presented in italics.*

3.1. Model reliability and consistency of results

Finding: During testing, some municipalities identified differences between simulator results and official statistics, as well as inconsistencies affecting historical baseline values, sector totals and the effects of selected policies.

Improvement need: Review and correct the relevant calculation logic, ensure that future assumptions do not affect historical baseline values, verify sector aggregation, and improve the consistency of interactions between renewable energy production, energy storage and policy measures.

Project-completion update: *The identified technical and calculation-related errors were corrected. Problems affecting historical baseline values and sector aggregation were addressed, and the interactions between renewable energy production, energy storage and policy measures were revised in the final model.*

3.2. Data availability and local context

Finding: Transport, private buildings, local energy use and statistics for smaller municipalities were recurring data gaps. In larger municipalities, information could also be fragmented among multiple municipal departments or asset managers, making it difficult to compile consolidated energy data. National averages and other default values can provide a practical alternative where local data are unavailable, although they may not fully reflect local circumstances.

Improvement need: Use locally available data whenever feasible and apply national averages or other default values where local datasets are incomplete. The limitations of default values should be considered when interpreting the results and transferring the approach to other municipalities.

Project-completion update: *Available municipal data were used in developing the project municipalities' scenarios. Where the required local information was not available, existing national or default values were applied to provide a consistent basis for scenario development.*

3.3. Output presentation and scenario management

Finding: Respondents generally valued the simulator's outputs but also suggested reducing the amount of text, improving graph reliability and readability, increasing the legibility of information boxes, providing clear units, and facilitating the comparison, saving and export of different scenarios and results.

Improvement need: Improve the structure and clarity of input and output information and provide practical functionality for comparing and managing alternative scenarios and their results.

Project-completion update: *The structure and presentation of input data and results were clarified. The final simulator includes improved functionality for scenario comparison and for saving or exporting scenarios and results. Additional explanatory texts were also incorporated into the tool to support the interpretation of inputs and outputs.*

3.4. Policy flexibility and local relevance

Finding: Municipalities valued the range of mitigation measures included in the simulator but highlighted the need for more flexible policy parameters and the possibility of testing different combinations and implementation levels.

Improvement need: Expand the range of adjustable policy parameters and improve the representation of interactions between different mitigation measures, energy sources and implementation assumptions.

Project-completion update: *The range and flexibility of policy parameters were expanded, allowing users to adjust implementation assumptions and test a broader selection of policy combinations. The interactions between policy measures, renewable energy production and energy storage were also corrected and refined.*

3.5. User guidance and practical support

Finding: Hands-on workshops, direct consultations and practical support were consistently valued. Respondents also requested clear written instructions, explanations within the simulator and practical examples demonstrating how the tool could be used in municipal planning.

Improvement need: Provide updated guidance materials, accessible explanations within the tool and practical support for users with different levels of technical experience.

Project-completion update: *An updated user manual and video guidance were prepared, and explanatory help texts were incorporated into the simulator. Municipal users were supported through training workshops and individual consultations. In addition, scenarios were developed for each project municipality, and descriptions of these scenarios and their results are available in the relevant project deliverables.*

3.6. Feedback-informed iterative development

Finding: Feedback received during municipal testing ranged from positive assessments of the simulator's usefulness and usability to detailed technical, structural and functional suggestions.

Improvement need: Review municipal feedback throughout the development process and use it to refine the model, interface, results presentation and supporting materials.

Project-completion update: *Municipal feedback was reviewed on an ongoing basis and informed numerous technical, structural and usability improvements throughout the development process. As the feedback was incorporated iteratively, this report summarises the main cross-municipal themes and representative improvements rather than providing an exhaustive record of every individual modification.*

4. Conclusion

The assessment showed that the participating municipalities generally considered the CommitClimate CO_2 Simulator a useful and relevant tool for scenario analysis and municipal climate and energy planning. Its main strengths were the broad coverage of emission sectors, the possibility of testing alternative mitigation measures, the visual presentation of results and the support provided to municipal users. At the same time, the feedback highlighted that the practical applicability of the simulator depended on reliable calculations, the availability of suitable local data, clear presentation of results, flexible policy parameters and accessible user guidance.

Project-completion update: *These findings were considered during the final development of the simulator. The identified technical and calculation-related errors were corrected, including issues affecting historical baseline values, sector aggregation and the interaction of renewable energy production, energy storage and policy measures. The input and output structure was clarified, scenario comparison and management functions were improved, and the range of adjustable policy parameters was expanded. Updated guidance materials, explanatory texts, training sessions, individual consultations and municipality-specific scenarios were also provided. As a result, the final version of the simulator more closely reflects municipal needs and provides a stronger basis for its continued use in climate and energy planning.*