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1. Background and objectives of the work

- The work is part of an EU-project "Dramatically Reducing Embodied Carbon in Europe" fostering widespread adoption of ambitious local, national and regional policies that will reduce embodied carbon and increasing the uptake of bio-based materials in the built environment in Europe.
- In Helsinki, two workshops are organised in order to:
 - 1. Support internal stakeholder involvement in Helsinki through the organization and facilitation a workshop to gather the city's desired outcome and internal stakeholder input for the implementation of the technical assessment report drafted by One Click CLA.
 - 2. Develop and strengthen dialogue with industry that inform city and business policy, create the needed predictability for industry, and accelerate the necessary market shifts.
 - 3. Gather and synthesize the reflections from the workshops ensuring the future implementations of the recommendations given in the technical assessment report and further validated through the workshops.



3. Workshop overview



WORKSHOP 1 Internal workshop Half day workshop, face-to-face event in Helsinki Approx. 20 participants, city employees Objectives of the workshop: Ensure that the recommendations given by OneClick LCA in their report are valid and accurate and make modifications in case needed. Discuss how to take given recommendations into practice in city of Helsinki by defining: Who is the owner (i.e. development programme in Helsinki) of taking recommended activity into practice? Should others be involved? Which activities need businesses to be > involved (and which / what type of businesses?) and which are internal for the city? Should the recommendation be modified in some wav? Any other observations that may arise.

In case of COVID-restrictions change, both events can be organised online.

WORKSHOP 2, External business workshop

- One day workshop, face-to-face event in Helsinki
- Approx. 30 participants, businesses and business interest organisations
- Objectives of the workshop:
 - Market dialogue with businesses and business interest organisations about city's plans, objectives and future thoughts.
 - > Identify mutual interests and possible challenges.
 - Discuss about expectations and collaboration possibilities on how to reach the targets in the future.

CNCA workshop: External stakeholder workshop Background



- As a part of the CNCA Dramatically Reducing Embodied Carbon in Europe project, Gaia Consulting facilitated a workshop together with the city of Helsinki on 28 March 2022.
- The workshop was open to all interested construction companies, architecture firms, industry designers and suppliers, key city experts and other interest groups. The in-person event had approximately 30 participants.
- The workshop built on the first internal workshop held in October 2021, strengthening the dialogue between the industry and the city.
- The external workshop presented best practice projects from a recent low-carbon green block planning competition and fasilitated a conversation between city staff and the industry on transferability of the sustainable building solutions.
- Gaia synthesised the reflections from the market dialogue, including the expectations and collaboration possibilities on how to reach the carbon neutrality targets in the future.

Agenda 28.3.2022



- 09:00 9:20 Welcome and introduction to the workshop
- 09:20 10:05 Best practice from the Mitte green block competition
- 10:05 11:00 Workshop: discussion about the Mitte projects in small groups
- 11:00 11:10 break
- 11:10 11:45 Workshop: Findings from the small group discussions and reflections
- 11:45 12:00 Conclusions

Objectives of the workshop





Present the best solutions from the Mitte low-carbon green block planning competition and discussing their wider applicability in the industry.

Discuss about the carbon footprint targets: challenges and opportunities.

Foster a dialogue between companies and the city about common goals and the vision for the future. WORKSHOP QUESTIONS

What aspects should be taken into account when using the carbon footprint threshold?

What are the benefits of a carbon footprint threshold?

What are the challenges?

Which other indicators should be considered alongside carbon footprint?

What kind of roadmap/development steps should be considered, given that the city wants to be a forerunner in sustainable construction?







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Summary of the workshop outcomes

The key findings

A carbon footprint threshold was considered a good way of steering new construction projects if the following aspects are considered:

- 1. Clarity and verifiability of indicators. The industry hoped for clear and consistent set of indicators, as well as verifiability of the proposed solutions.
- 2. Flexibility. The same indicators and thresholds are not suitable for all projects. The industry would like to see flexibility and case-by-case approach, including the price level of the area and slowly developing regulation.
- **3. Timescales.** Carbon footprint calculation timespan is 50 years, but at the same time pressure to construct long-lasting and convertible building increases.
- **4. Trade-offs** between different indicators and targets. For example, carbon footprint vs. convertability. The entire life-cycle should be considered.
- **5. Scalability and price.** Learning from the best practice and scaling up. Increasing prices due to lower carbon footprint should not compromise the availability of affordable housing.







What aspects should be taken into account when using the carbon footprint threshold?

Timespan (CO2 calculation vs. circular economy solutions)

Rapid development of the industry vs. slowly developing regulation

Case-by-case approach/flexibility

Realistic plans/verifiability

Scalability and affordable housing





What are the benefits of a carbon footprint threshold?

Transparency and clarity

Demonstrates the city's ambition level

Technology agnostic approach (being unbiased towards technology/materials). Attention should be paid to possible contradictions in the city plan.





What are the challenges?

Calculation methods and related changes, comparison of new figures to old calculations

Actual vs planned threshold values and verification

The threshold should be considered by region and by project

Trade-offs: carbon footprint priorisation can lead to unwanted outcomes (price, convertability)

Availability of reliable data.

Increasing costs

Limited supply of low-carbon materials.

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Which other indicators should be considered alongside carbon footprint?

Conflicts between different objectives (price, carbon footprint, etc.)

Possibility of setting a carbon budget for a project

Versatility and multi-functionality of buildings and spaces.

Other criteria for sustainable housing, such as shared facilities and biodiversity.

Architectural durability / aesthetics of the buildings





What kind of roadmap/development steps should be considered, given that the city wants to be a forerunner in sustainable construction?

More precise steering for the carbon footprint, e.g. streamlined CO2 calculator

Step-by-step tightening regulation / predictability

Using public buildings as testbeds for new innovative solutions

Supporting block-level collaboration in construction-phase

Using public buildings more effectively around the clock (flexibility and convertibility)

Recommendations

- 1. It is important to understand the impact of an ambitious carbon footprint threshold on construction costs. Could there be a zone-based system on market prices?
- 2. The city's actions should be transparent, equitable and verifiable. This also applies to carbon footprint targets.
- 3. If there are other objectives/criteria than carbon footprint (price, biodiversity, etc), understanding trade-offs is important.
- 4. Alongside carbon footprint, following criteria should be considered, as well as the tradeoffs: biodiversity, green factor, architecture, communality, flexibility.
- 1. How to get traditional large-scale construction companies onboard? The winning solutions at the Mitte block were not traditional major construction companies.

