



D4.1 Matchmaking and Innovation Activities Overview

05/12/2023

BLOXHUB, COPENHAGEN

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Description of the related task and the deliverable. Extract from DoA & GA	<p>T4.2 Matchmaking and innovation workshop activities (Leader: BXH, Duration: M3-M8, Contributors: all)</p> <p>Facilitated innovation workshops will be conducted for each of the three challenges defined in T4.1. The individual cases will determine the format of the workshop, which can be either a digital or physical event. At least one workshop will be conducted physically at BLOXHUB in Copenhagen and if preferred by the challenge owners, additional workshops can be done either digitally, at BLOXHUB or locally in the region of the challenge owner (SMC), supported or facilitated by relevant consortium partners. Selected experts, SMEs and investors (see T4.4) will be recruited for participation among the consortium's networks and ecosystems with support from all partners to set the team to solve the challenges. The innovation workshops are curated using Nordic design methods with a cross-sector view on holistic solutions, aiming to creating both cross-regional partnerships as well as sharing experience and solutions for the urban challenges defined in T4.1. The matchmaking from these workshops will also be supported and further expanded by digital matchmaking occurring via the Digital Forum (see WP2).</p>		
Participants	All partners		
Comments			
V	Date	Authors	Description
1	05/12/2023	Ditte Frisk	Working document ready for internal review
2	18/12/2023	All partners	Peer-review comments attended, finalisation
3	22/12/2023	PC	The coordinator submits the deliverable to the EU

Dissemination level

PU	Public	x
SEN	Sensitive	

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About SMCNetZero

SMCNetZero brings together six successful urban innovation initiatives in Europe with seven (7) regional and Pan European networks and their partners to create a **Satellite Network of innovation actors** to support public sector representatives from Small and Medium-sized cities (SMCs), SMEs, academia, NGOs, and investors across Europe to **facilitate decarbonisation in SMCs**.

The SMCNetZero consortium is composed of:

- BABLE Smart Cities**, Germany (BAB)
- ODRAZ - Održivi razvoj zajednice**, Croatia (ODZ)
- Smart City Cluster**, Spain (SCC)
- Southern Regional Assembly**, Ireland (SRA)
- BLOXHUB**, Denmark (BXH)
- WE BUILD DENMARK**, Denmark (WBD)
- UrbanDNA**, United Kingdom (UDNA)

This project is unique in that its diverse consortium partners and broad commitment from target stakeholders in the Satellite Network ensure **focus in regions with less innovation capacity**, with written confirmed commitment from nearly 100 innovation actors at the proposal stage, to participate in the activities- including an emphasis on largely underrepresented regions and stakeholders.

The project will leverage its diverse Satellite Network to:

- Gain an in-depth understanding of SMC needs and barriers towards achieving Net Zero emissions.
- Raise awareness and simplify access to existing successful initiatives supporting decarbonisation.
- Support matchmaking between supply and demand sides by linking SMEs, researchers, and investors with SMCs.
- Help identify and open access to funding for enabling innovation deployment in SMCs currently underrepresented in the European innovation ecosystem.

SMCNetZero's vision is to **create and strengthen local innovation ecosystems' interrelations in SMCNetZero regions** through brokerage and knowledge-building activities as well as digital resources to increase capacity **for planning, deploying, and**

scaling up of decarbonisation solutions, overall focusing on increasing the inclusivity of these innovation ecosystems and minimizing existing innovation divides.

To achieve this vision, SMCNetZero has the following primary strategic objectives:

- Open up opportunities and stimulate the dissemination of information and exchange of knowledge on best practices on decarbonization for SMCs (and as a result, SMEs).
- Increase implementation prospects between providers of zero-emission solutions and public authorities from SMCs by designing, developing and providing a digital space and accompanying toolkit for collaborating, learning and networking.
- Identify and engage innovation leaders from the public and private sectors from “strong” innovator regions and “moderate” to “modest” innovator regions within the project’s focus countries.
- Design and deploy engagement and knowledge-building activities for ensuring wide participation for SMCNetZero and maximum impact.
- Facilitate the understanding and implications of the implementation and scale-up of innovation projects in SMCs.

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Workshop Summaries: Unleashing Innovation for a Net Zero Future in SMCs

Tackling climate change and achieving global net zero targets is a complex challenge. However, Small and Medium-sized Cities (SMCs) are currently underrepresented in the European innovation ecosystem. While larger cities have had access to various programs and networks to accelerate their transition, SMCs have often been left behind. In the SMCNetZero project, a recent market analysis has identified the following SMC net zero priority topics: energy efficiency, sustainable mobility and transport, and environmental sustainability.

The barriers mentioned in the same analysis are not just about technical solutions. They are also about silo-thinking in municipalities, lack of resources, data management, difficult procurement processes, citizen engagement, and regulations and legislation.

To increase networking and knowledge-sharing and to identify ideas and solutions that can support SMCs on their way to net zero, BLOXHUB has facilitated a series of three workshops titled 'Unleashing Innovation for a Net Zero Future in SMCs' with the above priority areas and challenges as the centre of the discussion. The workshops were organized as follows:

Workshop 1: Theme - Energy efficiency. Challenges selected: Silo thinking, procurement processes, data management.

Workshop 2: Theme - Mobility and Transport. Challenges selected: Silo thinking, Public Engagement, Financing and Funding.

Workshop 3: Theme - Environmental Sustainability. Challenges selected: Municipality resources, Public Awareness and Behavioural Change, Regulatory Frameworks.

Participants included public and private bodies, different sectors, expertise, knowledge, and interests. The aim was to co-create ideas and solutions that could work in real-life scenarios.

During the workshops, Graham Colclough and Trevor Gibson from UrbanDNA gave a presentation on EU Funding Opportunities. They emphasized the complexity of the process and recommended approaching it as a long-term portfolio strategy. Despite administrative challenges, they highlighted the value of collaboration and the potential for funding to stimulate initiatives and increase visibility.

Colclough and Gibson stressed the need for a diverse approach, engaging in multiple endeavors simultaneously. It is crucial to understand the context of smaller cities, recognizing their strengths

like adaptability and closeness to citizens. They pointed out that EU funds often reallocate resources from nations to regions, constituting 2% of the EU budget.

Regarding project and grant funds, he highlighted Horizon Europe as an exciting prospect for small and medium-sized cities (SMCs) and small and medium-sized enterprises (SMEs).

Workshop on Energy Efficiency

The workshop focused on unleashing innovation for a net-zero future in small and medium-sized cities (SMCs), emphasizing energy efficiency. It highlighted how optimizing energy use across various sectors can lead to significant emissions reductions, cost savings, and a more sustainable environment.

The challenges explored included breaking down silo thinking, overcoming procurement hurdles and mastering data management.

The workshop aimed to discuss energy efficiency in urban contexts, address these challenges, and facilitate collaborative efforts for achieving net-zero energy in SMCs.

Presentations

Energy Efficiency and the Net Zero Future:

Nethe Veje Laursen, Program Director at Concito, a philanthropically funded green think tank, addressed the challenge of global greenhouse gas emissions and the gap between promises and necessary action, emphasizing the need to phase out fossil fuels for sustainable growth.

Laursen highlighted the pivotal role of energy efficiency (EE) in reducing the demand for expanding electricity infrastructure, especially in the short term, with fossil fuels still in use. EE saves money and entails low policy and technology risks, with readily available solutions and short payback times.

However, Laursen pointed out that EE often suffers due to factors such as low awareness, the need for multiple more minor actions, the involvement of various stakeholders, and the challenge of measuring its value. Additionally, its low-tech nature may generate little excitement.

Laursen advocated for a new approach involving partnerships, cooperation, and one-stop shops at local, regional, and national levels to expedite progress towards a net-zero society. Public entities can play a crucial role in gathering experience and facilitating change. Laursen emphasized the need to draw inspiration from existing initiatives.

Furthermore, Laursen stressed that EE offers numerous benefits and should be a self-evident priority. It could reduce the need for grid expansion in the long run. Many solutions are already available and need swift implementation.

In addressing why EE sometimes needs more attention, Laursen highlighted factors such as awareness gaps, involvement of multiple stakeholders, difficulty in measuring real value, and the perception of EE as a low-tech, less attractive option.

Laursen emphasized that change requires a combination of regulations, requirements, targets, and grassroots initiatives that challenge the status quo.

Laursen cited successful rapid transitions to accelerate progress, stressing the importance of partnerships, public support, one-stop shops, and disseminating solutions beyond closed forums. Collaboration and tailored approaches are also vital in business models and funding strategies.

During the Q&A session, questions were raised about focusing on softer aspects of EE, challenges posed by older housing stock, and developing effective business and financing models for change. The discussion also touched on value capture and who benefits from energy efficiency activities.

Stirling Council SMC Net-0

Ewan Prentice from Stirling Council emphasized the crucial role of local authorities in setting an example for Net Zero initiatives. He stressed the importance of shared goals and a unified direction, particularly in Scotland's extensive rural areas. A long-term delivery plan was highlighted as essential for sustained progress.

Prentice advocated for a "learning by doing" approach, encouraging participants to share their experiences. He underscored the significance of effective data management, emphasizing the need for comprehensive blueprints that can be both understood and scaled.

He outlined five key strategies for success:

1. Leading by example at the individual, team, and council levels.
2. Establishing corporate and area-wide targets.
3. Forming delivery teams based on evidence-backed and cost-effective delivery plans.
4. Ensuring projects address overlapping themes to prevent siloed efforts and maximize funding.
5. Implementing appropriate governance and efficient reporting mechanisms.

Regarding silo thinking, Prentice emphasized the necessity of a shared understanding of goals at all levels, supported by suitable governance structures. He also highlighted the importance of leveraging knowledge and funding through overlapping themes. Collaboration with neighboring local authorities and joint ventures was recommended to share knowledge, risks, financial burdens, and benefits. Prentice emphasized that achieving Net Zero requires collaboration not only at the local level but also at the national and international levels.

Prentice addressed procurement processes, advocating for long-term delivery plans to guide procurement teams and potential suppliers. He suggested employing a standard format, like the LHEES example, to inform the supply chain. Additionally, national consideration of long-term plans to address skill requirements was advised. Feasibility studies and comprehensive five-stage

business cases were proposed to ensure project success. Prentice emphasized the need for an efficient procurement process, suggesting the simultaneous progress of multiple projects if the process is slow.

Regarding data management, Prentice proposed using a platform to track progress in all themed areas. This platform would enable public engagement and transparent reporting of progress. Additionally, it would facilitate project evaluation based on their impact and highlight areas where resources may need to be focused. Prentice encouraged a learn-by-doing approach and sharing experiences with others. He recommended prioritizing "profitable" projects initially to gain momentum and generate income for aspects lacking an identified funding stream. Finally, Prentice emphasized that small and medium-sized cities (SMCs) have the agility to trial concepts with pilot projects, creating scalable and replicable blueprints.

During the Q&A session, examples were sought of how overlapping teams can prevent silo thinking, to which Prentice suggested establishing a lead office where different departments and leads spend time together.

Group discussions

Group 1

Group 1 highlighted the need to overcome silos and build confidence, even for seemingly straightforward tasks. The group acknowledged public bodies' financial constraints and stressed the importance of engaging investment communities. Small cities were praised for their agility and immediate impact.

A shared vision and effective stakeholder management were identified as crucial, with a call for open conversations about mutual benefits. Participants also delved into the complexities of business models and risks, drawing parallels to the "hen and the egg" dilemma. They emphasized the necessity of finding common ground and focusing on similarities rather than differences.

The group then focused on key areas for solutions, advocating for standardized approaches, scalability, and the importance of pilot projects. They underscored the need to refocus on basics and involve leaders in cross-collaborative efforts. Additionally, they called for better tools to manage data and information effectively.

The discussion also covered the elements of energy efficiency in SMCs, highlighting the influence of the built environment, mobility, and waste management. Quick wins in smaller cities were emphasized, along with the convening power of politicians to engage key stakeholders. The group emphasized the significance of building relevance and trust within the community.

The challenges of silo thinking were addressed, highlighting the importance of aligning motives and value realization. Risk aversion across parties was identified as a barrier, underscoring the need for building confidence together. The group suggested focusing on shared assets, knowledge sharing, and developing business model exemplars to break barriers.

The group recognized the differences between contractors and clients/investors regarding procurement processes. They proposed strategies like innovation procurement and providing tools to stakeholders. The need to challenge short-term financial thinking and develop innovative models was highlighted.

In data management, participants stressed the importance of data-driven decision-making in energy efficiency projects. They identified data ownership, quality, privacy, and security challenges. Ideas for effective data management included creating dashboards, clearly delineating stakeholders' interests in key performance indicators, and adhering to standards.

Group 2

Group 2 identified key elements, such as retrofitting measures, including boiler upgrades, insulation, glazing, and local renewable energy sources. Additionally, they emphasized the significance of energy efficiency in achieving Net Zero targets, highlighting its critical role.

The conversation then shifted towards addressing the challenge of silo thinking. It was pointed out that silo thinking can divide value capture and investments, often prioritizing financial considerations over environmental impacts. Participants suggested solutions, including advocating for a more comprehensive approach in public tender specifications. They also stressed the importance of public-private partnerships and the need for strong senior and political leadership to drive Net Zero initiatives.

The discussion further touched upon the challenges posed by current public procurement processes. It was noted that the issue often lies in the specific requirements rather than the process itself. Small and Medium-sized Enterprises (SMEs) face difficulties allocating sufficient time and resources to lengthy procurement procedures. Additionally, Net Zero considerations may not hold enough weight in the evaluation criteria, leading risk-averse cities to opt for low-risk options.

Participants suggested potential strategies to streamline public procurement and support energy efficiency goals. These ranged from national-level government requirements to embedding Life Cycle Assessment (LCA) and Net Zero Carbon (NZC) principles in public tenders. The conversation concluded with brainstorming ideas for effective data management, emphasizing the importance of data-driven decision-making in energy efficiency projects.

A Roadmap to NetZero

Blocking Challenges:

1. Expand and empower climate teams for effective collaboration.
2. Provide clear direction and strong leadership for the net-zero initiative.
3. Equip teams with essential tools and resources for project implementation.
4. Foster a culture of collaboration across departments and teams.
5. Develop communication and persuasion skills for advocating energy efficiency initiatives.
6. Implement a simple, accessible dashboard to track project gains.
7. Address misalignment between goals, reality, and affordability through open dialogues and realistic goal setting.
8. Enhance the climate team's capacity in skills and numbers for effective collaboration and bridging the gap with other departments.

Project Partnerships:

1. Utilize both positive incentives and regulations to motivate stakeholders.
2. Build a network of partners with aligned motives and targets for energy efficiency projects.
3. Establish a structured blueprint for cross-organizational collaboration for effective partnerships.
4. Facilitate discussions among municipal departments to identify common targets and establish multi-departmental project teams.
5. Focus on setting achievable goals with strong leadership and effective communication.

Project Partnership Incentives:

1. Incorporate environmental and social costs into economic planning for long-term benefits.
2. Recognize environmental sustainability as a shared interest, considering factors like carbon fees, biodiversity, climate resilience, and social impacts.
3. Emphasize climate resilience and environmental sustainability for long-term business viability.
4. Recognize and reward initiatives contributing to net-zero goals, driving innovation and creativity.
5. Implement a system acknowledging collaborative efforts across departments, promoting a culture of teamwork.

Partnership Touchpoints:

1. Provide fundamental tools and capacity-building resources for enhanced project effectiveness.
2. Establish standardized approaches and methods for streamlined project implementation and evaluation.
3. Implement benchmarking practices to assess project performance against industry standards.
4. Ensure transparency in using tools and resources for accurate project evaluation and decision-making.
5. Address financial aspects, including budgeting, financing, and investment strategies.
6. Incorporate innovative digital technologies for enhanced project efficiency.
7. Foster collaboration between cities to share knowledge, experiences, and best practices, particularly beneficial for Small and Medium-Sized Cities (SMCs).
8. Implement "Blueprint" approach to capture and disseminate valuable lessons from projects for continuous improvement.

Optimal Results:

1. Ensure aggregated data is accurately reflected in key performance indicators (KPIs) for informed decision-making.
2. Encourage tangible actions and initiatives through well-designed incentives and rewards.
3. Promote data-driven decision-making based on empirical evidence and standardized, open data.
4. Apply industry best practices and demonstrate adaptability to refine and optimize energy efficiency projects.
5. Establish a standardized approach to ensure uniformity in achieving net-zero project objectives.
6. Emphasize the importance of data-driven decisions, focusing on capturing and utilizing relevant data for informed choices.
7. Implement a system for transparent reporting and documentation to track progress and measure the impact of energy efficiency initiatives.

Workshop on Mobility & Transport

The workshop focused on achieving net-zero mobility and transformation in Small and Medium-sized Cities (SMCs), emphasizing challenges and solutions. The case study of Izmir highlighted the concept of "Mobility Islands," which emphasized cycling and walking. The challenges identified included changing mindsets, overcoming legal and political barriers, financial integration, and allocation of city space. The workshop discussed funding opportunities provided by the EU, emphasizing collaboration and a diverse approach. Group discussions focused on developing concrete climate plans, reducing private car ownership, and engaging citizens. Key elements included traffic management, promoting a sharing culture, and ensuring inclusivity. The workshop identified silo thinking and funding challenges as major hurdles and suggested partnership strategies for optimal results.

Presentations

New Vision for Izmir Mobility

Hamid Yazdani, Urban Planner, Transportation Planner, and GIS Specialist from Izmir, Turkey, introduced the city of Izmir and presented a case for the participants to work on, focusing on the concept of "Mobility Islands." In the past, Izmir's primary modes of transportation were cycling and walking.

Rising sea levels pose a significant threat to Izmir, and the city has implemented a comprehensive plan for cycling. It's important to re-establish connections and integrations within the city and to remember the role of ferries and bicycles in the transportation system.

A sharing economy for bikes exists, but it primarily operates on a leisurely basis. Some key statistics for Izmir, such as the average trip duration being 25 minutes for walking and around 10 minutes for biking, including a note that young and older residents of Izmir frequently walk.

Izmir is described as a city where many people walk within their neighborhoods. However, micro mobility accounts for only 1% of transportation options. Mobility Islands is therefore needed to form a network rather than a point-based system.

The "No regret site selection" concept temporarily repurposes parking areas for alternative uses and Izmir also has a nature-based strategy concerning transportation.

In the case presentation titled "New Vision for Izmir Mobility," the challenges faced by the city were outlined. These include a growing trajectory of private vehicle ownership at a rate of 6%

per year, most routes along the coastal line, low adoption of low-carbon mobility options (such as bicycles), high congestion, and a lack of sidewalks despite many residents walking.

The four main challenges impeding the implementation of Mobility Islands:

- Mindset and habits: Changing established mindsets and habits regarding transportation takes considerable time.
- Legal framework and political barriers: Izmir needs more laws and regulations supporting low-carbon transportation options. Additionally, the narrow streets in the city make it challenging to create dedicated bike lanes.
- Financial integration: Achieving financial integration for sustainable transportation solutions needs to be improved.
- Reconciliation of city spaces: Determining how to allocate space within the city is a contentious issue.

These challenges are the primary obstacles to implementing the Mobility Islands concept in Izmir.

Group discussions

Group 1

Group participants discussed the implementation of national strategies that cover multiple municipal borders. They also spoke about the importance of encouraging collaboration and providing corresponding incentives to promote teamwork.

The group also delved into the topic of citizen engagement and shared ideas on how to involve citizens in mobility projects. They highlighted the significance of inclusivity, ensuring that individuals who have a voice and can question the purpose and outcomes are included. Some of the methods recommended include conducting outreach plans, actively listening to citizens' concerns, incorporating local knowledge, and organizing educational activities.

The group also suggested understanding the demographics of the community and focusing on emotional connections rather than solely technical aspects. This approach would help to highlight the personal and societal benefits of sustainable mobility initiatives.

Group 2

The group suggested the idea of a League of Cities and Bench Learning to share best practices and knowledge exchange.

One of the significant challenges identified by the group was silo thinking which can hinder collaborative efforts in net-zero mobility projects. This stems from a need for more information sharing and can restrict expert collaboration. To overcome this obstacle, the group

recommended sharing knowledge and exchanging ideas and information among relevant stakeholders.

Citizen engagement was another crucial aspect discussed. The group proposed several ideas for involving citizens in mobility projects, including lowering barriers to participation, promoting shared transport and ownership models, involving citizens and local businesses, and using judgment and experience to implement lower-risk, more apparent initiatives. The group also highlighted the potential of digitalization in supporting the transformation towards net-zero mobility and suggested empowering citizens to advocate for net-zero mobility as a strategy to address citizen concerns effectively.

Regarding finance and funding challenges, the group acknowledged that securing funding for sustainable transportation infrastructure can be a significant barrier. Issues such as the administration of funding bids and the time taken for project development were mentioned. To address this, the group proposed several solution ideas, including establishing a clear value case, creating a standard template and method for SMCs, aggregating demand based on standard blueprints, and involving investors early in the co-creation of business models.

Group 3

The group discussed the importance of organizing events such as bike-to-work months to encourage socializing and competition. They also stressed the need for clear communication, meaningful consultation, and follow-up to address citizen concerns effectively.

Regarding financing and funding challenges, the group acknowledged that securing funding for sustainable transportation infrastructure can be a significant obstacle. They discussed the need for alternative funding sources and highlighted the importance of considering broader impacts and effects when conducting cost analyses. Possible solutions included public-private partnerships, collaborations between SMCs to attract investors, and capturing socio-economic and environmental benefits.

Additionally, data collection and sharing were seen as crucial for understanding cost savings resulting from reduced traffic congestion, which could potentially free up funds for other projects.

A Roadmap to Net Zero

Blocking Challenges:

- Shaping municipal policies to encourage green initiatives and discourage high-emission vehicles.
- Addressing delivery and freight logistics to minimize emissions for businesses.

- Ensuring accessibility for city dwellers.
- Engaging potential users of various mobility modes.
- Involving local councils in decision-making.
- Garnering community support and participation.
- Engaging planning authorities in sustainable mobility planning.
- Including universities in research and education efforts.
- Partnering with NGOs for advocacy and implementation.
- Focusing on a project consortium in Izmir for funding.
- Utilizing social platforms with citizen-friendly language for outreach.

Project Partnerships:

- Collaboration between government and non-profit organizations (NGOs).
- Collaboration of government authorities and private sector entities.
- User engagement and feedback at all stages and continuously.
- Engagement with businesses to promote sustainable practices.
- Collaborating with other stakeholders to build critical mass and impact.
- Involving NGOs, universities, local businesses, schools, and local government in education initiatives.

Partnership Incentives:

- Standardizing approaches to reduce unit costs.
- Securing high-level internal buy-in and commitment to the vision and partnership.
- Clearly defining roles and responsibilities.
- Implementing a structured project management approach.
- Fostering a shift in mentality and promoting a sense of ownership.
- Evaluating and potentially revising political and legal frameworks as needed.

Partnership Touchpoints:

- Regularly engaging with municipal stakeholders to ensure alignment with green initiatives.
- Collaborating with businesses to optimize delivery and freight logistics for reduced emissions.
- Conducting surveys and feedback sessions with potential users of mobility modes.

- Establishing ongoing communication channels with local councils and planning authorities.
- Organizing workshops and forums with universities, NGOs, and other partners for knowledge sharing.
- Utilizing social platforms with citizen-friendly language for transparent and inclusive communication.

Optimal Results:

- A net zero mobility solution that integrates seamlessly with municipal policies and encourages sustainable practices.
- Businesses with optimized delivery and freight logistics, contributing to reduced emissions.
- City dwellers benefit from accessible and eco-friendly transportation options.
- Increased adoption of sustainable mobility modes by a diverse user base.
- Local councils and planning authorities are actively involved in shaping sustainable transportation policies.
- Strong community support and participation in the net zero mobility initiative.
- Universities, NGOs, and other partners actively contribute to research, education, and advocacy efforts.
- Successful project consortium in Izmir providing necessary funding for sustainable mobility solutions.
- Social platforms effectively engaging citizens and promoting a culture of sustainable transportation.

Detailed Group work result can be seen below:

Group 1

Sharing perspectives

1 A What are the elements in net zero mobility in SMCU?

Climate zone
Active mobility
Increase in shared mobility

Political support
Dis-carbonize electricity production
Reduction of greenhouse gas emissions
New urban forms

B What is the significance of net zero mobility in SMCU?

Improve mobility and health
Reduce greenhouse gas emissions
Improve air quality
Reduce noise
Improve urban form

Discussing the challenges

2 A How can silo thinking hinder collaborative efforts in net zero mobility projects?

Not being high enough on the common goal
Different priorities
Different budgets and time
Different risk tolerance
Different communication channels

B How can we overcome the silo challenge?

Establish a common goal
Create a shared vision
Establish a common language
Establish a common timeline
Establish a common communication channel

Discussing the challenges

3 A Share ideas for involving citizens in mobility projects?

Making sure there is inclusivity
Outreach plan
Understand the demographics
Make sure there is ownership involved
Communicate knowledge and education activities

B What could be a strategy for addressing citizen concerns in net zero mobility projects?

Community Organ
Offer incentives as a substitute
Transparency
Education
Participatory budgeting
Citizen assemblies

Discussing the challenges

4 A Is securing funding for development of sustainable transportation infrastructure a bigger barrier, compared to other net zero projects?

B Brainstorm on solution ideas?

Elements in 'Roadmap to Net zero'

5 Define elements in an net zero mobility solution, based on the core premises, and the challenges discussed. Keep your answers clear, simple and pragmatic.
The limited space in the cities is a known challenge and the many and diverse interests are as well.
A Discuss who (city dwellers, businesses, municipality, visitors, commuters, construction/urban development, others) should be accommodated in a net zero mobility solution?

B Create an overall shared vision for the prioritized groups.

C Define three sub-goals to support the vision.

D Discuss the partnerships needed to reach the sub-goals.

E Identify the first steps needed, in each of the partnerships, to reach the goal.

Local research: Planning authority, Municipality, NGO, etc.

Group 2

Sharing perspectives

1 A What are the elements in net zero mobility in SMCU?

Public transport
Active mobility
Increase in shared mobility

Sharing Culture
much more active travel!
more socialization of people to change

B What is the significance of net zero mobility in SMCU?

It is contributor to GHG reduction to change
The 'light' services in cities, in terms of others
Reduction of greenhouse gas emissions
and fighting of GHI
Logos of ClimateAction Learning

Discussing the challenges

2 A How can silo thinking hinder collaborative efforts in net zero mobility projects?

Low level of communication
Different priorities
Different budgets and time
Different risk tolerance
Different communication channels

B How can we overcome the silo challenge?

Share information
Building relationships
Establish a common goal
Create a shared vision
Establish a common language
Establish a common timeline
Establish a common communication channel

Discussing the challenges

3 A Share ideas for involving citizens in mobility projects?

Participatory budgeting
Citizen assemblies
Community Organ
Offer incentives as a substitute
Transparency
Education
Participatory budgeting
Citizen assemblies

B What could be a strategy for addressing citizen concerns in net zero mobility projects?

Discussing the challenges

4 A Is securing funding for development of sustainable transportation infrastructure a bigger barrier, compared to other net zero projects?

B Brainstorm on solution ideas?

Elements in 'Roadmap to Net zero'

5 Define elements in an net zero mobility solution, based on the core premises, and the challenges discussed. Keep your answers clear, simple and pragmatic.
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Local research: Planning authority, Municipality, NGO, etc.

Workshop on Environmental Sustainability

At the workshop "Environmental Sustainability: Unleashing Innovation for a Net Zero Future in Small and Medium-Sized Cities," our focus extended beyond CO2 reduction, exploring the broader scope of environmental sustainability. We concentrated on crafting cities that offer quality living conditions while respecting the limits of our planet. Our discussions centred on three primary tracks: Municipality Resources, Public Awareness and Behaviour Change, and Engaging Urban Users and Regulatory Frameworks.

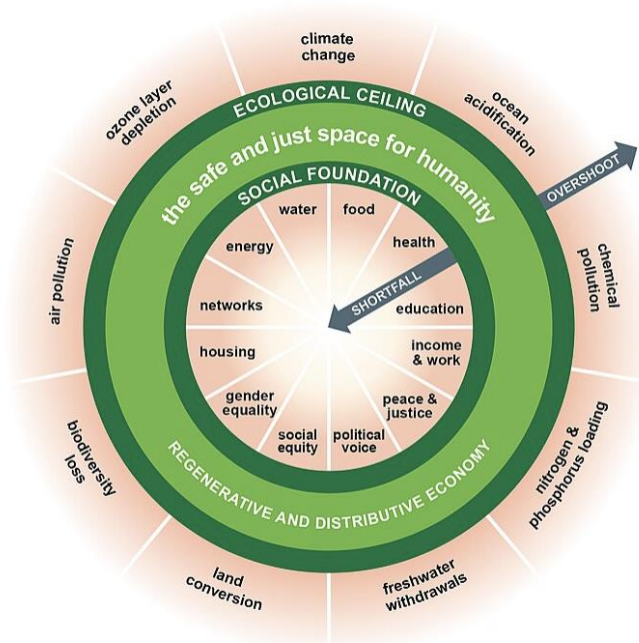
We commenced with insightful presentations on various approaches. Topics such as achieving net zero through the Doughnut Model, Helsinki's Carbon Neutrality plan, and employing people-centred innovation, using ethnography to bridge future goals with everyday lives sparked engaging discussions.

Participants were presented with a case challenge: devising strategies for Helsinki to address emissions from the building sector. The city needs more direct authority due to materials produced outside its realm. This discussion also delved into climate justice, renovations' affordability, and the potential impact on housing costs if emission innovations were mandated for all city buildings.

Presentations

How to Achieve Net Zero through the Doughnut Model

Jacob Rask, Lecturer in Economics, Roskilde University



Jakob Rask's presentation on achieving net zero through the Doughnut Model, based on Kate Raworth's economic concept, focused on the critical issue of overshooting planetary boundaries and the need for a paradigm shift in economics. He highlighted how the 20th-century economic model revolved around growth and market-centric approaches, using concepts like demand-supply and circular flow and depicting humans as rational economic agents. However, this approach resulted in overshooting six out of nine planetary boundaries.

Rask emphasized the transition to 21st-century economics, referencing John Maynard Keynes and Doughnut Economics to align with Keynes's ideas. The Doughnut Model is a compass for human prosperity and challenges the Western mindset, offering a detox program to realign economic thinking. It advocates starting economic discussions from an ecological standpoint. It questions the legitimacy of what's marketable, suggesting multiple roles for individuals in the economy beyond the market or state-centric approach.

He delved into managing shared resources, citing Elinor Ostrom's work on commons management, and highlighted the necessity for humanity to fit within the doughnut by redefining societal needs and adapting the model accordingly. Rask discussed the need for annual updates

on the model, with countries reporting on ecological indicators aiming to shrink the red zone of overshooting.

The 'perfect doughnut' exemplifies Costa Rica's close alignment and the need for regenerative and distributive approaches in various sectors like housing and transport. Rask also addressed personal contribution levels, noting the absence of a personal 'doughnut' model.

Expanding the discussion to a city scale, he highlighted Copenhagen's strides in adopting the Doughnut Model and predicted its leadership within a few years. The city's initiatives to create city portraits aligned with the model indicated potential success, with a five-year timeframe projected for assessing its viability in a Copenhagen context. Rask emphasized the need to tailor the model to individual contexts when scaling it down.

Overall, Rask's presentation underscored the urgency of adopting a Doughnut Economics framework, fostering a holistic approach that integrates societal, environmental, and economic well-being while navigating the boundaries of planetary limits.

Presentation of Helsinki City Vision:

Lina Oilinki, Project Director, Urban Environment Division, Helsinki

Initially aiming for neutrality by 2035 through an open and participatory process involving various city sectors, the plan involved collaboration, inclusive governance, and many ideas focused on promotion, monitoring, research, and design.

However, after two years, it was evident that the timeline would not be met. Critical reflections led to key lessons: the urgency of time, the realization that actions like piloting and networking alone wouldn't suffice, and the need for prioritization and effectiveness.

Subsequently, Helsinki revised its strategy, advancing the deadline to achieve carbon neutrality by 2030 and introducing measures to reduce construction and traffic emissions. Moreover, they set a goal to reach carbon zero by 2040 and began planning for a carbon-negative future.

The new strategy emphasizes understanding primary emissions sources and aligning actions with impactful and scalable goals. It integrates emission-related requirements into the city's core processes without a separate climate budget or dedicated professionals. Instead, it distributes responsibility for emission reduction across the organization.

Key focus areas include heating, mobility, and construction, with initiatives targeting energy efficiency, renewable sources, regulation, and innovative approaches like low-carbon concrete. The strategy involves research, piloting, market dialogue, and regulation as critical steps in achieving emission reduction goals.

Recognizing limitations in influencing global emissions like those from food and services produced outside the city, Helsinki concentrates efforts on areas with tangible impact. The emphasis lies on taking responsibilities seriously and communicating the need for others to do the same.

The presentation stressed a shift toward substantial actions over individual small-scale efforts, emphasizing citizen participation when it significantly contributes to impact and holding accountable other influential actors in emission reduction.

Overall, Helsinki's revised strategy centres on impactful, scalable, and integrated actions within the city's core operations to drive emission reduction effectively toward carbon neutrality.

Mindsets and Change of Behavior

Lise Røjskjær Pedersen, Science Director, BLOXHUB

Lise Røjskjær Pedersen's presentation, "Mindsets and Change of Behaviour," delves into the significance of understanding human behaviour to facilitate mindset shifts and enable change. She contrasts the perspectives of humans as psychological and cognitive beings against the idea of humans as social and cultural creatures. The field of study is diverse, encompassing various approaches, disciplines, paradigms, and assumptions.

The presentation highlights two primary camps in studying human behaviour: psychology/cognitive science, focusing on individual brain processes, and social science, focusing on people as social and cultural beings. Ethnography emerges as a crucial tool, allowing researchers to grasp assumptions and behaviours, select appropriate methods, and conduct structured investigations, moving from short-term fixes to long-term problem analysis.

Pedersen emphasizes a people-centred approach to innovation, advocating for understanding group dynamics, needs, and behaviours. The model proposed involves reframing existing business problems through analytical sessions and grounding interventions in existing behaviours. Ethnographic research immerses researchers in people's lives through exercises, interviews, and observations, revealing insights such as humans' irrationality, pursuit of the right thing, habitual tendencies, community-seeking nature, organizational power dynamics, and the gap between values and actions.

Pedersen draws a connection between people's openness to change and their sense of security. She highlights the importance of this connection in addressing climate change, emphasizing that fear-based rhetoric might not be effective in motivating lasting change. Instead, she underscores the necessity of fostering a feeling of safety for enduring shifts in behavior.

Examples from companies like Lego and Rigshospitalet/Børneriget demonstrate the effectiveness of long-term, systematic studies, where insights gleaned from studying children or patients directly inform innovative solutions.

Presentations of Group discussions

Group A (Municipality and Building Sector)

Group A's discussion focused on the challenge of the building sector's narrow perspective and lack of urgency in addressing climate change, particularly in the context of achieving net-zero regenerative practices. The group highlighted the need to create a sense of urgency akin to the response seen during the COVID-19 pandemic, emphasizing the difficulty in generating urgency in regions where the impact of climate change isn't readily felt, as is the case in Denmark.

The proposed solutions to tackle the environmental challenges in the building sector involve strategic and collaborative efforts. The aim is to address regulatory and policy elements for effective change. The proposed solutions include facilitating easier waste handling at construction sites, adopting a holistic view incorporating Life Cycle Assessments (LCA), incentivizing all value chain actors to renovate buildings, strengthening science-to-business programs, and implementing regulations around biobased building materials with specific CO2 emission targets.

Penalties are proposed for environmentally harmful practices like incorrect trash sorting, a CO2 tax, and setting clear caps on building CO2 footprints to drive innovation in construction practices.

The challenges identified include the need for collaboration with innovative material suppliers, overcoming traditional mindsets among engineers and advisors, lack of data, increased investment costs, and a need for more employees educated in circular practices.

The vision aims for a 40% reduction in CO2 emissions from building materials, with a Key Performance Indicator (KPI) of 16 kg CO2/m².

Partnerships involving various stakeholders such as construction companies, engineers, architects, material suppliers, municipalities, energy, waste, water, and agriculture sectors are highlighted as essential to support the transition to regenerative buildings. These partnerships foster a more holistic approach to building practices.

Group C (Citizens) (Note; group B was merged into group C)

Group C focused on the challenge of urban sprawl. They identified it as a source of climate injustice and a hindrance to affordable housing. The group highlighted how urban sprawl contributes to increased transportation, pollution, changes in land use, and social segregation.

To tackle these issues, the group proposed implementing flexible housing solutions and mixed-use buildings, particularly within the "5-minute cities." These cities promote collective living and reduce the need for extensive transportation. To make their proposed network a reality, urban planners, municipalities, citizens, building owners, and investment funds should collaborate to foster a collective way of living.

The group suggested incentivizing environmental sustainability by breaking personal barriers, ensuring user-friendly processes, promoting transparency, and rewarding participation in citizen assemblies. They also proposed penalties for environmentally harmful practices, including regulations like the "Empty Apartments Act," carbon taxes, limitations on segregated living, laws to raise awareness during renovation processes, and constraints on energy consumption and space per person.

Their vision emphasized natural beauty, equality of opportunities, pollution-free healthy environments, self-sustained energy, proximity to activities, increased citizenship engagement, access to green energy, and better biking lanes and public transportation.

The group identified drivers for change, including awareness, education, transparency, and engagement. All of these are aimed at building stakeholder trust.

The challenges highlighted involved the complexity of understanding the impact of interventions, potential rebound effects despite efforts, the ongoing migration crisis, issues related to trust and transparency, and persistent social inequality.

The chosen challenges of increased transport leading to pollution, social segregation, and land use changes were proposed to be overcome through democratic housing choices, flexible housing models, mixed-use building designs, the establishment of 5-minute city networks, and fostering collective living.

The benefits of partnerships were outlined to include behavioural change, the sharing of expertise, and the realization of sustainable urban development.

Finally, they identified stakeholders and their roles: citizens as the people's voice, municipalities responsible for policymaking and stakeholder engagement, and urban planners offering guidelines to support these endeavours.

Key Takeaways to Overcome Barriers

Municipality and Building Sector

Collaborative Approach: Encourage partnerships across sectors (construction, engineering, municipalities, etc.) to foster a holistic view and shared responsibility in achieving net-zero regenerative practices.

Policy and Regulatory Adjustments: Implement clear regulations focusing on goals rather than specific solutions, incorporating Life Cycle Assessments (LCA) and incentivizing all stakeholders in the value chain for building renovations.

Behavioural Shift: Foster a change in mindset by incentivizing collaboration, involving diverse sectors early in projects, and forming strategic innovation teams to drive urgency and innovation.

Education and Data Accessibility: Address the lack of data and traditional mindsets by promoting science-to-business programs and emphasizing the need for circular education among industry employees.

Penalizing Environmental Harm: Utilize penalties for environmentally harmful practices such as incorrect trash sorting, CO2 taxes, and setting clear caps on building CO2 footprints to drive innovation and compliance.

Citizens

Community-Centric Solutions: Implement flexible housing and mixed-use buildings in "5-minute cities," encouraging collective living to address urban sprawl, transportation issues, and social segregation.

Incentivizing Sustainability: Break personal barriers, ensure user-friendly processes, and reward participation in citizen assemblies to encourage environmental sustainability.

Regulations and Penalties: Implement laws and penalties like the "Empty Apartments Act," carbon taxes, and constraints on energy consumption to discourage environmentally harmful practices.

Vision and Awareness: Promote a vision of natural beauty, equal opportunities, healthy environments, and self-sustained energy while driving awareness, education, and engagement among citizens.

Partnerships and Trust: Collaborate among urban planners, municipalities, citizens, and investors to realize sustainable urban development, emphasizing the need for trust, transparency, and stakeholder engagement.

Detailed groupwork findings:

Group A

MUNICIPALITY

1. Discuss elements in effective regulations and policies that

THE STICK

A. Incentivize environmental sustainability:

- Easier waste handling on construction sites for public buildings
- A more holistic view, LCA, inclusive buildings
- Incentivise all actors in the value chain to renovate buildings
- Strengthen science to business programs
- Regulation around embodied building material, < 5 kg CO2/m2 target, and a digital building platform
- Provide partnership consultations

B. Penalize environmentally harmful practices:

2. The Inevitable Vision

THE CARROT

Vision

40% lower CO2-emission from building materials
KPI: 16 kg CO2/m2

Drivers

- Strict building codes for companies
- POC - become part of the first trial > Enhancing technology and leapfrogging
- Cities promoting new building sites and opportunities

Challenges

- The construction industry need to collaborate with innovative material suppliers
- Engineers and advisors are being too traditional and old school
- A lack of data
- Increased cost of investment
- A lack of circular educated employees

3. Select the one challenge that, if overcome, could result in the most significant impact

THE HOOK UP

The selected challenge & impact

The building sector being too narrow and lacks a sense of urgency

How to overcome

A need for a behavioural change in the industry:

- Incentivize collaboration
- Invite different actors into the projects early
- Forming strategic innovation teams

Partnership benefits

To support regenerative buildings:

- Construction companies
- Engineers and Architects
- Material suppliers
- Municipalities
- Energy
- Waste
- Water
- Agriculture

Partner: Role: Partner: Role: Partner: Role: Partner: Role:

Group C

CITIZENS

1. Discuss elements in effective regulations and policies that

THE STICK

A. Incentivize environmental sustainability:

- Personal barriers
- User friendly
- Transparent processes
- Reward participation in the citizen assembly

B. Penalize environmentally harmful practices:

- Empty Apartments Act
- Carbon taxes
- Limit segregated living situations
- Laws about renovation process awareness
- Limit energy consumption, durability, and m2 per person

2. The Inevitable Vision

THE CARROT

Vision

Natural beauty and tranquility
Equal opportunities
Healthy environments without pollution
Sustainable energy
Live close to activities
Citizenship engagement in the cities
Access to green energy
Being surrounded by nature
Better bikelanes - Public transportation

Drivers

Awareness - Education - Transparency - Engagement
>> Building trust

Challenges

Complexity - How much do we actually impact?
Rebound effects - We need to build
Migration crisis
Trust and transparency
Social inequality -

3. Select the one challenge that, if overcome, could result in the most significant impact

THE HOOK UP

The selected challenge & impact

More transport - less pollution
Social segregation
Land use change

How to overcome

Democratic choosing of housing - Flexible housing - Mixed use of building - 5 minute city networks - Collective living

Partnership benefits

Behavioural change
Sharing expertise
Realization

Partner: Universities Role: Citizens Role: The voice of people
Partner: Urban Planners Role: Guidelines
Partner: Municipalities Role: Policymaking
Partner: Stakeholder Engagement Role:

Final remarks

As mentioned in the intro, tackling climate change and achieving global net zero targets is a complex challenge.

That the challenges for SMC's are special, were the starting point for the EU SMC Net Zero project. Barriers and challenges, mentioned in the market analysis conducted in the beginning of the SMC Net zero project, were discussed at these three workshops with representatives from both cities and enterprises.

Great ideas and solutions were presented and discussed at the workshops and are documented above, but it also became even more obvious that SMCs are working individually to overcome the same challenges and while some cities have solution ideas for some challenges other cities have solutions for other.

One of the biggest barriers identified was silo-thinking internally in the municipalities but it's obvious that collaboration and knowledge sharing between cities, across regions and borders, would help cities reach their net zero targets.

The EU net zero project activities have created a network and a forum for sharing ideas and solutions like the above described.