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Metropolitan Climate Challenge **Expert Group**

Key Messages 2022-2023



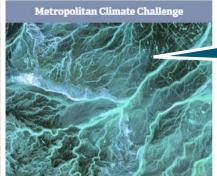
CARBON SINKS &

STORAGES

Metropolitan Climate Challenge Expert Group – one of METREX Expert Groups

Current Expert Groups



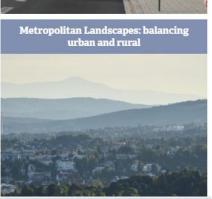


From Roads to Streets

Metropolitan Climate
Challenge Expert Group







Expert Groups

Bringing Members together to focus on specific thematic or territorial issues. The Groups meet online and during the bi-annual METREX Conference. The Groups are encouraged to collect relevant knowledge and experience, consider the implications and publish their findings.

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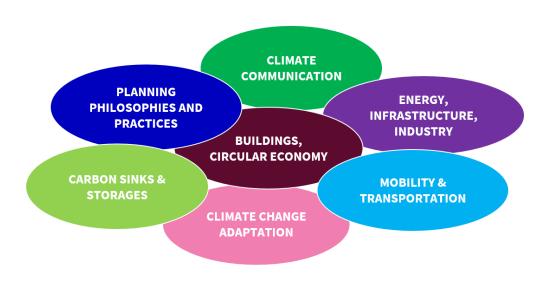
Expert Groups - METREX (eurometrex.org)

The Metropolitan Climate Challenge Expert Group

- METREX Metropolitan Climate Challenge Expert Group est. 2022
 has offered a platform to co-operate and share knowledge and
 experience about climate issues between Metrex members'
 practitioners. Group's goal has been to find the best ways to
 strengthen metropolitan regions' and cities' ability to reduce their
 emissions and improve their resilience.
- The goal is to learn from the best of the best about metropolitan regional scale solutions and methodologies to tackle the climate challenge through spatial planning both in regional and city level.
- This document, METREX Metropolitan Climate Challenge Expert Group 2022-2023 "Key Messages" is part of reporting back in writing to capture and deliver the key lessons learned during the group's climate challenge webinars, clinics and workshops 2022-2023.
- The results of the group's climate work are collected in this report under 7 subthemes presented in the image on the right. Each subtheme is presented on one page containing a background text and findings and quotes from the presentations and workshops.
- We hope that this report and findings will support our colleagues around Europe to find inspiration and solutions in their important work towards sustainable, climate-conscious regions.

Statistics of the METREX Climate Challenge Expert Group 2022-2023:

- 10 webinars / Climate Challenge Clinics
- 4 live meetings / workshops at METREX conferences
- ~30 participants representing
 - o 11 countries and
 - 15 regions
- More than 40 back office coordination meetings
- Coordination Team of ~10 members from Finland and Sweden
- Chair of the group: Christina Suomi from City of Helsinki, Finland



Key Messages - process

Launching webinar: Workshop: choosing topics

1. Webinar: Sustainable mobility/ congestion charges

2. Webinar: Doughnut economy model in spatial planning

3. Webinar: Circular economy strategy

4. Webinar: Renewable energy production in metropolitan areas

5. Webinar: Buildings & Construction emissions

6. Webinar: Mobility/ Reducing private driving

7. Webinar: Adaption

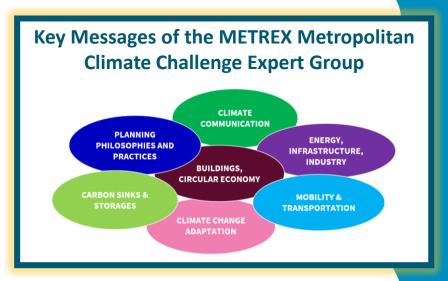
8. Webinar: EU policy lobbing

9. Webinar: Carbon sinks and storages

"Key messages" from the climate challenge webinars

Combined memo for reporting back of the main findings of the climate challenge webinars





= this document









Webinars and live/hybrid workshops with

- Climate Challenge Clinics
- Benchmarking and case studies
- Joint EU project proposals and
- Communication of our joint messages

Webinar and Climate Clinic topics and presenters

- 1. Webinar: Sustainable mobility/ congestion charges 6/2022
- 2. Webinar: Doughnut economy model in spatial planning 9/2022
- 3. Webinar: Circular economy strategy 10/2022
- 4. Webinar: Renewable energy production in metropolitan areas 12/2022
- 5. Webinar: Buildings & Construction emissions 2/2023
- 6. Webinar: Mobility/ Reducing private driving 3/2023
- 7. Webinar: Adapting to Climate Change 4/2023
- 8. Webinar: EU policy making and lobbying 5/2023
- 9. Webinar: Carbon sinks and storages 10/2023

Presenter/Climate Challenge Owner: Ilona Mansikka, Helsinki-Uusimaa Regional Council; Consulting from Peter Austin, City of Oslo and Per Kristersson, Göteborg Region

Presenters: Leonora Grcheva, Doughnut Economics Action Lab; Hannele Tiitto & Ruut-Maaria Rissanen, Regional Council of Tampere Region (Finland)

Presenters: Representatives from The City of Amsterdam; Line Kvartborg Vestergaard, University of Copenhagen

Presenters: William Stokman, Noordzee Kanaal Gebied; Amanda Nicolaisen, Jonathan Eilert Raaberg & Julie Lorenzen Schnoor, University of Copenhagen

Presenters: Eric Huybrechts, the Paris Region Institute; Robin Rushdi Al-Sáleh, Codesign AB/Vakansa AB & Alpo Tani, The City of Helsinki

Presenters: Miloš Mladenović, Associate Professor at Aalto University; Kimberly Nicholas, Associate Professor, Lund University and Visiting Scholar, Stanford University

Presenters: Maaria Parry, Helsinki Region Environmental Services Authority HSY; Joanna Friberg, Gothenburg Region; Marta Olazabal, BC3 Basque Center for Climate Change

Presenters: Wilhelmiina Koivuniemi, Senior EU Advisor, Helsinki EU Office; Mariikka Manninen, Regional Planning Architect, Helsinki-Uusimaa Regional Council; Henk Bouwman, Secretary General, METREX

Presenter/Climate Challenge Owner: Maria Sirviö, Helsinki Uusimaa Regional Council; Presenters: Jean Benet & Alexandra Cocquière, L'Institut Paris Region; Maria Tiainen, Ministry of Environment of Finland

Climate Challenge Clinic - a concept developed for peer support and experience sharing



In the Climate Challenge Expert Group we have developed a new concept called Climate
Challenge Clinic (CCC) based on peer support and exchange of experiences.

Three roles in it are

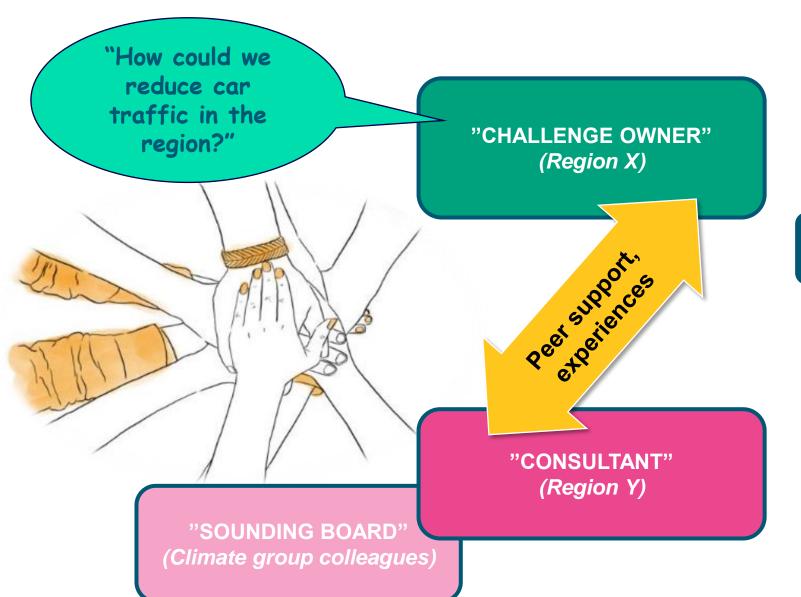
- "Challenge owner" who presents the region's climate challenge.
- "Consultants" = act as external lecturers
- "Sounding board" formed by group members
 / colleagues offering peer support in the form
 of presentations and group discussions and
 best practices.

Benefits:

Climate Challenge Clinic offers an open and interactive way to deal constructively with different climate challenges in different regions. In the clinic, experiences of both working and non-working climate solutions can be effectively shared in two hours between the colleagues from different regions and countries.



Climate Challenge Clinic concept

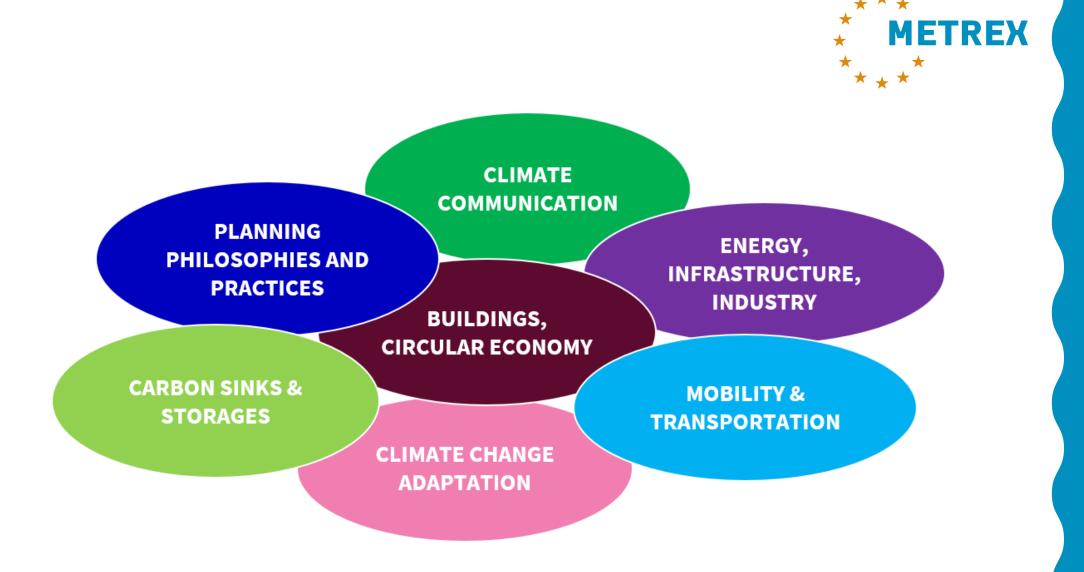




Supporting participants:

- CHAIR of the meeting who leads the clinic
- FACILITATORS helping in the group discussions
- SECRETARY who writes a memo

Key Messages from the 10 webinars



Key messages / take aways

- 1. Planning approach is stepping into a new era
- 2. Co-operating is essential
- 3. Getting carbon neutrality from A to B
- 4. Preparing for agile adaptation
- 5. Fitting fossil-free energy systems into built environment
- 6. Cutting the carbon peaks of building
- 7. Carbon sinks and storages are vital in reaching carbon neutrality

1. Planning approach is stepping into a new era

PLANNING PHILOSOPHIES AND PRACTICES

Current planning approach is strongly challenged by climate crisis

- Spatial planning has always been familiar with long time frame, planning decisions are typically made with targets several decades ahead
- Transition of urban structure in cities is slow, but how we use and modify space within the cities can be changed much faster
- Solving ongoing climate crisis means that spatial characteristics of carbon neutral or even carbon negative need to be acknowledged and integrated into planning
- Stronger strategic decision-making based on knowledge and know-how is required since there is clear evidence that climate targets cannot be met without prioritization

It needs to be recognised that **PLANNING HAS DEEP FUTURE ORIENTATION** and solutions should reflect
more of the coming world with all the targets that
have been set than current world that is largely
shaped by path dependent mechanisms

A NEED FOR HOLISTIC APPROACH to metropolitan land use planning that TAKES INTO CONSIDERATION ENVIRONMENTAL, CLIMATE AND SOCIAL PERSPECTIVES AT THE SAME TIME

THINKING BETWEEN DEPARTMENTS AND BREAKING UP SILOS

UNDERSTANDING HUMAN
BEHAVIOUR is fundamental
for transformation.

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BOTH CARROTS AND STICKS ARE NEEDED

to change habits and practices.

Encouraging is not enough – undesirable practices need to be limited as well.

THE IMPORTANCE OF FLEXIBILITY AND DYNAMIC PLANNING where plans can adapt to changing situations

Important to have **GOOD EXAMPLES** from cities working with climate transition in an inclusive and socially just way. Cities need to also overcome governance challenges.

Key messages from the webinars 2022-2023, summary

2. Co-operating is essential

Climate Communication

- Solving climate crisis is a horizontal and cross cutting challenge in societies.
- Without evolving practices of functional co-operation it is not possible to reach the set emission reduction targets.
- In spatial planning there is greater need than ever before to communicate between different fields of expertise and with increasing amount of main stakeholders.
- Changes caused by climate change are starting to show in everyday environment. Variable methods of communication are needed for reaching the public. "You care if You know."

creating positive visions of life in cities that have taken sufficient climate transition actions - emphasizing the positive outcome rather than the demands to change todays living habits.

FOCUSING ON WHAT CAN BE GAINED RATHER THAN WHAT HAS TO BE GIVEN UP



Models like the Doughnut economics model or the Wellbeing economy model can help to VISUALISE THE HOLISTIC APPROACH

Instead of communicating about a tool that the public and politicians are sceptical about, **COMMUNICATE AND CO-CREATE DESIRABLE FUTURE** with low congestion, high liveability etc. – build and focus on commonly accepted future scenarios.

Is conflict only negative in communication? Conflict makes democracy. NEED TO THINK ABOUT AND FIND WAYS TO DEAL WITH CONFLICT, INSTEAD OF AVOIDING OPEN DISCUSSION about difficult subjects.

It is essential to **ENGAGE THE PUBLIC EARLY IN DESIGN OF CLIMATE-POSITIVE CHANGES** that influence everyday lives of citizens.

Policy fairness is the most important factor for public acceptability – need to think about who is losing the most. SHOULD WE TALK ABOUT FAIRNESS INSTEAD OF ACCEPTABILITY?

3. Getting carbon neutrality from A to B

Mobility & Transportation

- Mobility and transportation planning has been an elemental part of functional spatial planning practices, but now the need for truly integrated planning of land use and mobility is more essential than ever
- Technical aspect of vehicle development (emobility, hydrogen) is an accelerating and ongoing process, which needs to be acknowledged in spatial planning
- It is evident that transformation toward emobility is not happening in required time frame from climate action point of view. Tools of strategic planning are needed.
- **Public transportation and governance models** related to mobility play an important role. "15 minute city" -concept brings all everyday life functions close by.

It is not sufficient to only rely on electric also need LESS PRIVATE CARS AND CHANGES IN LIFESTYLES AND HABITS, CHANGE IN WHOLE PARADIGM

It is highly important to understand the unavoidable NEED OF REPLACING SIGNIFICANT PARTS OF CURRENT

LAND USE

MOBILITY SYSTEM

CONGESTION TAXING is a potential way of both **MITIGATING CONGESTION AND CLIMATE EMISSIONS** and also **COLLECTING FUNDING** for infrastructure investments and operation of public transport.

CARROTS need to be combined with

REDUCING AND RESTRICTING CAR PARKING

AND CAR DRIVING IN CITIES

THE NUMBER ONE WAY TO CHANGE TRAVEL BEHAVIOUR IS TO CHANGE

promotes)

vehicles or other technical solutions, we

SOCIAL SUSTAINABILITY/EQUITY PERSPECTIVE IS AN IMPORTANT ASPECT TO TALK MORE **ABOUT IN MOBILITY** (transport poverty and whose mobility our current planning systems

Key messages from the webinars 2022-2023, summary

Climate Change Adaption

- Changing climate requires spatial adaption in order to prepare for changes in temperatures and more extreme weather events
- Adapting to climate change often means increasing need for space that needs to be allocated in spatial planning processes
- In densely built urban fabric it is important to find combinations of different land use functions in order to support both resilience as well as good everyday living environment in changing circumstances
- There is a lack of understanding concerning the magnitude of actions needed. Processes need to be coordinated and connected between different governance levels: state, regions, cities and municipalities.

CREATING COMMON VISIONS for climate change adaptation and mitigation is crucial

ADAPTATION IS ABOUT CREATING FUTURE and articulating the future vision is crucial

Implementation of adaptation measures require

VARIETY OF EXPERTISE FROM ENGINEERING TO

BIOLOGY AND SOCIAL SCIENCES

REGIONAL CLIMATE RISK ASSESSMENTS ARE THE STARTING POINT OF ADAPTATION PLANNING as the effects of climate change

vary from place to place

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FINDING AND EMPHASIZING SYNERGIES
BETWEEN ADAPTATION SOLUTIONS,
RECREATIONAL VALUES, BIODIVERSITY and
CARBON SINKS is a potential that cities should
utilize

Climate change adaptation plans are improving, but there is still SPACE FOR IMPROVEMENT IN CLIMATE CHANGE ADAPTATION PLANS ESPECIALLY WHEN IT COMES TO ADDRESSING VUNERABLE GROUPS

5. Fitting fossil-free energy systems into built environment *

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Energy system

- Energy transition towards fossil-free energy system has extremely important role in climate work of cities and regions
- Transformation away from fossil fuel usage means growing need for space. New energy systems have different spatial requirements than the fossil dependent system, so new areas will become impacted by energy production and networks. There will also be a huge demand for storages (wind power hydrogen).
- In coming years, energy transition will be a highly important theme in regional planning and it also has a strong social dimension

REGIONAL LEVEL LAND USE PLANNING IS NEEDED FOR INTERMUNICIPAL ENERGY NETWORKS, AND ENERGY PLANNING AND REGIONAL LAND USE PLANNING NEED TO BE BETTER INTEGRATED. Energy systems should also be better taken into consideration in other types of governance of land use, such as regional agreements.

It needs to be understood WHAT CLIMATE AND
ENERGY TRANSITION IN LARGE SCALE INDUSTRY
MEANS TO FUTURE LAND USE

FOR ENERGY TRANSITION, PLANNERS NEED SHORT, MID-TERM AND LONG-TERM STRATEGIES. We can't just rely on new, future innovations as transformative actions are needed on very short notice and fast, if we are going to achieve climate targets.

6. Cutting the carbon peaks of building

Building sector and Circular economy

- Ongoing urbanisation requires active ongoing construction in cities and in metropolitan areas. New building stock is typically energy-efficient, but high emissions of construction phase is a growing challenge
- Current areal climate targets don't have quantitative emission reduction targets for building sector, but legislation for regulation is under development.
- Spatial planning practices play a significant role in regulation towards usage of biobased materials, circular economy solutions and short supply chains.

Reducing emissions from buildings is required through entire life cycles, but we also need to REDUCE EMISSIONS BY PRIORITISING RENOVATIONS INSTEAD OF NEW BUILDINGS AND REUSE EXISTING BUILDINGS AND ENABLE INCREASED SPACE SHARING

The aim should be in **FINDING WAYS OF FLEXIBLE USE OF EXISTING BUILDINGS AND MINIMIZING THE NEED FOR NEW CONSTRUCTION**

There should be some kind of **SUSTAINABILITY LADDER FOR REGIONAL PLANNING** with the use of existing urban structure as the base and completely new areas as the last option.



Steering instruments towards low carbon buildings should ENCOURAGE
RENOVATION RATHER THAN DEMOLITION and master plans should, for instance, more often explore how to utilise and repurpose existing buildings

When demolition is necessary, we should **PRIORITISE "BUILDING FROM BUILDINGS",** i.e. using existing construction materials.

7. Carbon sinks and storages are vital in reaching carbon neutrality

Carbon sinks and storages

- Since cutting emissions to zero is challenging, carbon sinks and storages are essential additional means to reach carbon neutrality.
 A European/ national policy in wide collaboration is needed in order to have fair game rules.
- Land take puts pressure on carbon sequestration. Land use planning can be a tool for maintaining carbon sinks and storages.
- There can be conflicts between different sustainable land use interests. It is important to weigh whether the new land take will bring enough benefits against the disadvantages.
- New ways of steering the use of important carbon sinks and storages (forests, swamps etc.) are needed in regional planning.

MUNICIPAL BORDERS SHOULD NOT DEFINE HOW TO SECURE CARBON SINKS AND STORAGES. Municipalities should have more clear roles within the regional entity. Also those municipalities with a lot of green area should benefit. This requires new economy models.

Maintaining and increasing sinks and storages at regional level is possible if AREAS IMPORTANT FOR CARBON SEQUESTRATION ARE IDENTIFIED AND PRESERVED IN REGIONAL LAND USE PLANS

REGULATION AND POLICIES CAN HELP REDUCE NEGATIVE IMPACTS OF LAND USE ON CARBON SEQUESTRATION

Some examples:

land use change fee/tax, zero net land
take –objective, new EU regulation
(Nature Restoration Law and Soil
Health Law, Taxonomy)

If new land take is connected with the existing urban structure and mobility is based on public transportation THE GOALS OF OVERALL SUSTAINABILITY CAN BE ACHIEVED AND SIGNIFICANT CARBON SINKS AND STORAGES SAVED AT THE SAME TIME

COMPENSATION CAN BE USED TO OFFSET
THOSE NEGATIVE EFFECTS ON CARBON SINKS
AND STORAGES THAT CANNOT BE
COMPLETELY AVOIDED WITH CAREFUL LAND
USE PLANNING. However, compensation
should always be the last option!

Wrapping up, Final conclusions: Feedback from two last workshops

Evaluation of the group's work 2022-2023

- most relevant themes:
- According to the results and voting from the group's two last workshops the most interesting themes have been carbon sinks and adaptation to climate change
 - The most relevant perspective involves recognizing and emphasizing synergies between adaptation solutions, recreational values, and biodiversity & including carbon sinks
 - The second most relevant topic is securing carbon sinks and storages: municipalities should have clear roles within the regional entity and the municipal borders should not define how to secure carbon sinks and storages
 - Other important perspectives regard mobility: Relying solely on technical solutions in mobility like electric vehicles is insufficient; a shift to fewer private cars and changes in lifestyles and habits, representing a paradigm shift, is essential
 - Understanding the implications of climate and energy transition in large-scale industry is crucial for shaping future land use
 - Emission reduction in buildings must span entire life cycles





Wrapping up, Final conclusions: Feedback from survey 2023

According to the results of a feedback survey executed 12/2023...

Group and its activities in general:

- The participants have found the group valuable for exchange of information and experiences related to climate issues
- The participants have found significance in comparing their region with other regions and using them as positive examples
- The webinars organized have featured interesting and useful themes, fostered new contacts and facilitated networking opportunities
- Some challenges have been recognized in the group's work. A notable issue is the diverse conditions between different regions, e.g. differences in legislation and regulations.

Challenges recognized:

- According to the participants, moving from theory to practice has proven to be a complex task.
- The participants have observed, that achieving inter-municipal and interregional coordination poses challenges and requires a significant amount of time.
- There is a significant gap between the promises made by the cities and regions regarding climate actions and the actual implementation in practice.





Wrapping up, Final conclusions: Feedback from survey 2023





Using the information gained from the group's work:

- The participants have used the information they have gained from the groups' activities as a valuable reference, providing a broader understanding of specific subjects.
- The information has been instrumental in shaping organization's action planning, with a focus on learning how to implement new initiatives and advancing climate change mitigation efforts meaningfully.
- The insights gained have been used to propose solutions in various projects
- The most relevant information from the group has been used in presentations to superiors and in decision-makers
- The information on EU legislation and framework has been useful



Wrapping up, Final conclusions: Hopes and expectations, next steps of the Group

Wishes for the future activities of this group (according to the two last workshops of the year 2023 and a survey 12/2023)



General thoughts and wishes

- Going deeper into a couple of relevant themes, from general principles to practise: Instruments & solutions
- Integrating all 7 climate themes presented in this report together in spatial planning.
 - Collecting a planner's to-do –list
- European legislation from spatial planning / impact assessment / funding point of view
 - Closer look at European rules? Hurdles of sustainability in legislation? EU funding priorities? New METREX expert group focusing on new EU legislation and its impacts?
- Examples of more active measures than preservation or "zero land take"
 - Ways to actively improve the situation from climate/nature point of view by e.g. changing the use of land (agricultural → forest/recreational area), nature based solutions etc..
- Bringing up more the economical point of view, which has a strong connection with many climate topics
- Inviting experts from the renewable energy sector
- How to be proactive in reaching the climate goals?
 - · Metrex MC partnerships?
 - Spreading the message to MEPs, people, youth…? Reporting in different forms for different target groups: for MEPs, for practitioners and for youngsters. → next step a booklet? Or a video? Theatre piece? Poem?



Wrapping up, Final conclusions: Hopes and expectations, next steps of the Group

Wishes for the future activities of this group (according to the two last workshops of the year 2023 and a survey 12/2023)



Wishes about themes

- · Carbon Sinks and Storages in planning
- Climate Communication: holistic approach models like Doughnut Economics
- Good examples from cities working with climate transition in an inclusive and socially just way.
- · Circular economy in building & planning sector by reuse of existing areas and buildings
- · Resilience in terms of soil health, food autonomy and climate adaptation
- Nature-based solutions, multi-use areas
- New economical models, Sustainable/post-growth economy

Wishes concerning the working practices of the group

- Trying to come up with some concrete project ideas together
- Share more work and projects with the potential to be replicated with other entities.
- Documents should be available to participants, e.g., on the website.
- · Planning dates & times together



Some case examples from the webinars

New regional plan for Ile-de-France region/Greater Paris SDRIF-E:

In line with the Green Plan and the Regional Plan for Adaptation to Climate Change, SDRIF-E adopts new rules to prevent urban sprawl and protect natural, agricultural and forest areas. The formula enables the structuring of the so-called ZAN area (zero net articial) and ZEN area (zero net emissions) by placing the circular economy at the core of the economic model of Ile-de-France region.

Link: https://www.iledefrance.fr/participer-la-vie-citoyenne/je-participe-la-vie-de-la-region/le-sdrif-e-ile-de-france-objectif-2040

More information: Jean Benet& Alexandra Cocquière, L'Institut Paris Region

In Metropolregion Rheinland – Dusseldorf Region:

The Dusseldorf Klimapakt: Companies enter into agreements with the public sector (Region+City+Chamber together) to minimize their carbon footprint and receive support in return, such as advice and financing for climate projects such as solar panels.

Links: Werden Sie jetzt Klimapartner! - Düsseldorfer Klimapakt (klimapakt-duesseldorf.de) & Düsseldorfer Klimapakt - Landeshauptstadt Düsseldorf (duesseldorf.de)

More information: Dietmar Schulmeister, Metropolregion Rheinland

In Stockholm Region:

Klimat Arena working group develops a new circular planning process that takes into consideration circular economy in buildings and land use planning, integrating new kind of incentives and restrictions

Link: https://klimatarenastockholm.se/arbetsgrupp-cirkular-planering/

Stockholm City Environment Program introduces car-free areas and works with innovative solutions to manage this.

Link: https://start.stockholm/globalassets/start/om-stockholms-stad/politik-och-demokrati/styrdokument/miljoprogram-2020-2023.pdf

More information: Elisabeth Lidbaum, Region Stockholm

In Helsinki-Uusimaa Region:

The Finnish Environment Agency is developing a **Carbon Map tool** that planners can use to assess the effects of different planning alternatives on carbon sinks and carbon storages now and in the future. The easy-to-use map tool can also be used to standardize the way of evaluating the effects of plans on carbon sequestration.

We have also produced our own carbon maps of Helsinki-Uusimaa Region for use of our municipalities' planners.

Link: https://www.syke.fi/fi-FI/Tutkimus kehittaminen/Tutkimus ja kehittamishankkeet/Hankkeet/Kaavoittajan karttatyokalu HIILIKARTTA

More information: Ilona Mansikka, Helsinki-Uusimaa Regional Council

METREX Metropolitan Climate Challenge Expert Group Key Messages 2022-2023

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Climate Challenge Expert Group Coordination Team *** (10/2023) METREX

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