THE OTHER SIDE OF CLIMATE NEUTRALITY



INTERVIEW WITH **GEORGIA AYFANTOPOULOU** STÉPHANE CHANUT

WITH THE COLLABORATION OF MARIA MORFOULAKI **ELPIDA XENOU VASILIS MIZARAS** AFRODITI STAMELOU,

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POLIS' Climate Neutral Cities Mission Taskforce is established at the end of 2022 and POLIS started to work with cities more in concrete ways and supporting them with their climate work on citv and developing contracts, goals and KPIs.

This interview is bringing two associated members research centres in the spotlight talking about the climate importance of neutrality and their perspective on the crucial steps to becoming climate neutral city.

Embarking on the path to climate neutrality is no small feat. Recognizing the magnitude of this endeavour, POLIS launched the groundbreaking Climate-Neutral Cities Taskforce in November 2022. This visionary initiative aims to provide support to the membership as they strive to achieve ambitious transport decarbonisation targets.

With a collaborative approach, POLIS also has joined forces with esteemed research institutions, pooling their expertise and resources to drive transformative change in the field of transport. As we navigate the road to climate neutrality, it is indeed crucial to hear from the trailblazers themselves. That is why we sat down with representatives from esteemed research institutions, CEREMA and CERTH, to gain a unique perspective on the challenges and opportunities that lie ahead.

These visionary organizations shed light on their invaluable contributions to climate goals and targets, sharing their insights and expertise to shape the sustainable cities of tomorrow.



Georgia Ayfantopoulou

Research and Deputy Director Hellenic Institute of Transport of Centre for Research and Technology Hellas (CERTH/ HIT)



POLIS: The EU Mission for 100 climate-neutral and smart cities by 2030 is a big scale-up exercise with cities in the driving seat. What is your view, as a institution. research on the importance of the initiative?

Georgia Ayfantopoulou: The EU Mission is a catalyst for developing an integrated policy/government approach producing a powerful impact through combined actions for climate neutrality. Within this frame, HIT plays an active role in glueing together local authorities and the private sector. More specifically, HIT supports the Municipality of Thessaloniki towards its climate transition by drafting the Action Plan for the Mission. At the same time, the EU Mission facilitates the exchange of knowledge between European and Greek cities, which share similar goals and needs. HIT is a very active part of the broader European community of experts who are trying to transfer knowledge, and capacity building and guide the cities to achieve the goals of climate neutrality and smart mobility.

Stéphane Chanut: As a national expertise and research centre focused on ecological and energy transition for resilient and climate-neutral cities and regions, Cerema is following with great interest the EU Mission for 100 climate-neutral and smart cities by 2030. We think this is a crucial step to pave the way to climate neutrality for Europe and even more (associated countries) with its 100 +12 (out of 377) selected Mission cities. Cerema is involved in the implementation of Climate City Contracts and wishes to play an important role in this mission alongside these first selected cities but also those who wish to engage in this process.

POLIS: What are the measures to reach climate goals?

Georgia: The development of both Sustainable Urban Mobility Plans (SUMPs) and Sustainable Urban Logistic Plans (SULPs) at the regional level is an important mechanism for identifying the

appropriate measures for a city's unique typology and local ecosystem. Through the experience of several projects in this area, it became clear that even the simplest measure will bring a different impact in each city. What is very important is first to ensure that the relevant stakeholders have the needed knowledge and capacity to plan such a measure. Then, they should co-design and cocreate each measure taking into account the needs of the citizens, the policy and business barriers, and the cultural particularities of each case. It is very crucial for reaching the goals of climate neutrality, to set communities that will ensure this lifelong capacity building and knowledge exchange on smart and sustainable alternative measures.

Stéphane: The set of measures may further development implementation of Sustainable Urban Mobility Planning. In France, since 2019, reduction of transport-related greenhouse gases has been included in SUMP obligations, which has contributed to strengthening its operational objectives, from deploying Low-Emission Zones (LEZ) - in France, all cities with a population of more than 150,000 must have one in place by 2025, reducing air pollution in port areas; and helping households and businesses purchase clean vehicles.

POLIS: And how can we measure success and maximise resources available achieve these climate goals?

Georgia: The ex-ante, ex-durante, and expost evaluation proposed by CIVITAS should be adopted within the SUMP cycle as part of the measure plan and development. The ex-ante evaluation should take into account the experience of the cities that have already successfully developed this measure highlighting the prerequisites for its success.

> People walking and riding bicycles on the seaside street of Thessaloniki

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cities in motion





Stéphane Chanut

Head of Mobility, Public Spaces and Safety Activity Cerema - Technical Direction for Regions and Cities

Specific parameters regarding the and administrative. policy, business aspects should be clarified. The needed cooperation schemes, the infrastructures but also the citizens' views and reactions should be taken into account for the ex-ante assessment of each measure. The ex-durante evaluation using quantification of each target should take place for any possible modifications to be decided before the full operation of the measure. Finally, the close monitoring of the measure results after its final development could also maximize its final impact.

Stéphane: The key is the assessment, we need to translate the objectives into evaluation criteria and to have reliable and shared tools. Two elements, in particular, seem to us to require evaluation: the impact of SUMP measures on CO2 emissions and the resources, especially financial, needed to implement these measures. The search for efficiency requires that these two points should be considered together. In addition, in the absence of true standardisation at the European level, it seems useful to be clear about the perimeters and evaluation methods used in the various national contexts.

POLIS: From inter-departmental cooperation to fostering essential exchanges among local international stakeholders, how do researchers view the significance of transcending the conventional outlook innovation and embracing collaboration that is at the core of the Mission's approach?

Georgia: The planning of any measure should consider the parties that should be cooperated to achieve the maximum effect as well as the needed policy modifications, the new business models, and more. The collaboration between the different sectors of the city administration, together with the industrial partners who will bring the technology of a new system under the guidance of a research expert, comprise

the ideal combination for the introduction of successful innovative smart measures in the city traffic system. The role of partners such as research institutes has also great significance, as they can constitute the intermediate among bodies public and private cooperative schemes and secure the confidentiality and trust among the parties involved. Also, the exploitation of research institutes' competence and infrastructure can support significant the mobility planning process. One key example is that of the Thessaloniki Mobility Living Lab, operated by HIT, which fosters the triple helix for innovation and may become a cornerstone tool for the climate neutrality objective.

Stéphane: To achieve climate neutrality, cities and employers must collaborate sectors to enhance sustainability of employee commuting and work-related travel. It is also crucial to focus on improving urban logistics and freight services through river and rail transportation. In France, these concerns are addressed in the operational objectives of the Sustainable Urban Mobility Plans (SUMPs). To effectively tackle these challenges, collaboration with the academic sector is essential to foster reflection, share knowledge, and promote mobility management practices. This partnership ensures that expertise and insights are disseminated to drive progress in these areas.

Montpellier

Catia Rennesson, Cerema

cities in motion

POLIS: Could please you provide some insights into your concerning work sustainable urban mobility and achieving climate goals in city planning? Additionally, it would be valuable to know what kind of support cities can anticipate receiving from your organization in these endeavors.

Georgia: HIT has developed an evaluation framework based on the proposed CIVITAS principles for assessing through an ex-ante, ex-durante and expost procedure - the implementation of climate-neutral smart and sustainable mobility measures.

Additionally, specific frameworks, KPIs and monitoring tools were developed for the evaluation of the capacity-building procedures, the co-creation and codevelop methodologies as well as the engagement and marketing techniques that are used for maximizing the effects of the measures. The proper cooperation of the SSH with STEM experts is also monitored through this framework.

The knowledge gained by the abovementioned initiatives is provided through the competence centre of HIT where all the relevant material. tools and methodologies included. are Some indicative examples are:

- The development of evidence and data-driven planning tools that will help the transition towards city-led innovative mobility planning;
- The development of online tools and for capturing methodologies readiness of Europen cities in implementing city-led innovative policy responses and harnessing innovation;
- The development of data-driven system dynamics tools for capturing the impacts of a policy response to the city's main sustainability areas;
- of The development dedicated guidelines for SULPs, European roadmaps, and updated SUMP guidelines;

• HIT may facilitate the data collection and analysis by operating CO2 monitoring platforms (for mobility and cross-sectoral) as well as contributing to the local ecosystems with the mobility living lab.

Stéphane: To help cities to reach their climate goals, Cerema has developed a large range of tools and methods:

- To collect and analyse (household mobility surveys, traffic and data collection) surveys modelisation tools and assessment tools, especially standardised methods (DEEM) estimate to energy consumption, local pollutant emission and greenhouse gas emission for each trip declared in the mobility survey;
- better understand To people's behaviour and imagine innovative ways to change it toward more sustainable behaviour:
- To develop strategic mobility policies and plans for people and goods (urban
- To implement these policies and related actions (for example for active mobility).

Finally, as a research and resource centre for state and local authorities. Cerema aims to share tools, methods, data and best practices through its website and various types of publications most of which are freely available.

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