POCACITO

european post-carbon cities of tomorrow

REPORT ON STAKEHOLDER INVOLVEMENT

COORDINATED BY BLANDINE PIDOUX, IAN TURNER AND STEPHANE DUPAS (ENERGY CITIES) WITH INPUTS BY ALL PROJECT PARTNERS

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I EXECUTIVE SUMMARY

The POCACITO (Post Carbon Cities of Tomorrow) project - foresight for sustainable pathways towards liveable, affordable and prospering cities in a world context - is a research project funded by the European Union's Seventh Framework Programme for Research, Technological Development.

With the objective to facilitate the transition of EU cities to a forecasted sustainable or "post-carbon" economic model, it bases on a series of participatory stakeholder workshops in the case study cities. The purpose of these workshops was to bring together local stakeholders to construct a common post-carbon vision for 2050 and roadmap, or action plan, to reach the vision. The workshops have highlighted the current successes and challenges facing the city and supported a discussion of city-specific innovative measures based on lessons learned from local experience and best practices. The involvement of local stakeholders took place in joint collaboration with local authorities in order to make sure that such a process could be done within an institutional context.

Parallel to the local workshops, the project also sought to involve EU stakeholders to enrich and develop an EU 2050 post-carbon city roadmap. Those activities took place under the form of EU workshops and exchanges in international setting and inputs by the Advisory Board.

The organisation of study tours allowed further local stakeholders to share and expand their knowledge with local experts from the visited areas.

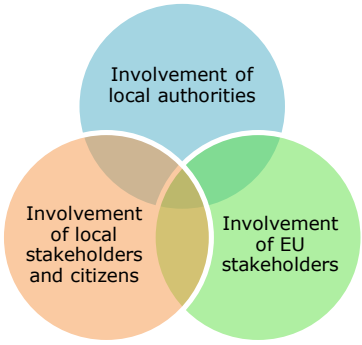
II INTRODUCTION

The POCACITO project bases on three layers. Research layer, Urban layer and EU policy layer. The research layer being the one leading this project, involvement of external research layer was not seen as a priority. Stakeholders' involvement was foremost targeted toward EU policy layer and urban layer.

The aim of involving stakeholders in the project was in the first place to benefit from feedbacks and inputs from relevant actors, but also to contribute to the implementation phase of the project which is not carried on by the project partners. In the case of POCACITO, those implementing outputs and results of the projects are those with decision making powers within local authorities and those acting at EU level in the EU institutions directly, but also NGOs, thematic networks or private enterprises. While involving those stakeholders in the project, the project consortium hoped to be able to link directly with practitioners.

The stakeholders conservatively create long-term value. Actually, the game changer overdelivers a superior, end-to-end, fairness. The thinkers/planners carefully secure cross-functional flow chartings.

This report gives an overview of the involvement of stakeholders within the different levels of action of the POCACITO project:



III INVOLVEMENT OF EU STAKEHOLDERS

III.I ORGANISATION OF A NETWORK OF REFERENTS

III.I.I IDENTIFICATION OF EU STAKEHOLDERS

In order to assess the benefits of EU stakeholder engagement for the POCACITO 2050 Roadmap process, it may be useful to briefly define what a stakeholder is within the context of the POCACITO project. A stakeholder is defined as an individual or group (e.g. company or association) who can contribute their expertise and knowledge to the discussion of strategic decision-making to enhance innovation towards a clean, secure and efficient post-carbon transition.

Stakeholders' input was of high priority to the project and was generated by reflecting the discussions in the various workshops as well as by summarising the key messages of the web based teleconference consultation. On the project side, stakeholder interaction could help the project partners to acquire valuable feedback on key issues which had fed into the successive stages of the project. The continuous information exchange with stakeholders had, on the one hand, ensured that policy and city actors can navigate effectively through the diverse options available on post-carbon visioning, innovation and system transformation and ensure that outcomes and policy products from the project are timely, relevant and influential on the other hand. Coupled with the scientific quality of results, the stakeholder involvement provided a strong basis for conclusions and recommendations derived from the results to influence policy decisions.

First task of the consortium was to identify relevant stakeholders. In order to do so, it was asked to each partner to provide a list of experts or relevant persons who could be of interest for the project from their background or be interested in participating from their position.

As to ensure a balanced background, and origin of participants, thematic expertise and geographical repartition, etc. were taken into consideration during the process.

METHODOLOGY

First, referents were chosen according to their layer of action:

- Project partner
- Contact in a case study city
- Advisory board
- European group of referents
- Other

Then, it was decided to group the identified referents in different categories regarding their background:

- Urban Planning/architect
- Energy Management Agency (National, regional or local)
- Transport/mobility
- Energy Service Company (ESCO)
- Trade union
- Elected member or political representative
- Utility Company
- Local authority department
- Housing Company
- Bank or financing institution
- Private consultancy
- Craftsman or Construction Company
- Civil society or NGO
- Educational and cultural institution
- Private Citizen
- Other

A List of the group of referents as on 4 August 2016 is available in the annexes.

III.I.II ANIMATION OF THE NETWORK

KICK-START MEETING IN BRUSSELS ON 27 JUNE 2014

This meeting kick-started the work with the network of referent and was seen as an opportunity to present the project and the expectations from both sides. First, the group was asked to rate whether they were on line or not with POCACITO's definition of a post carbon city (Stakeholders' understanding of a post-carbon city). In a second round, participants were asked to discuss in groups the two following questions: What are the (challenges stumbling blocks) key uncertainties along the way to achieving post-carbon cities in Europe? And what are the easiest/best leverage points to work on to achieve a European post-carbon city model in 2050?

LIST OF PARTICIPANTS:

- Fabio Feudo, Laboratory of Citizenship Sciences (LSC)
- Diana Gierstorfer, ALDE Group – European Parliament
- Pia Laurila, DG research and innovation
- Klaus Niederlander, Cooperatives Europe
- Antoine Riviére, French ministry of ecology
- Domenico Rossetti di Valdalbero, DG Research and innovation
- Claire Roumet, Energy Cities
- Markus Trilling, Bankwatch
- Paul Voss (Euroheat and Power)

Excused:

- Sorcha Edwards, CECODHAS HOUSING EUROPE, (excused)
- Filipa Pimental, Transition Towns (excused)
- Lily Riahi, UNEP (excused)
- Monica Sirbu, Climate Alliance (excused)
- Peter Defranceschi, ICLEI (excused)
- Eric Vidalenc, ADEME (excused)

POCACITO Team:

- Max Grünig, Ecologic Institute,
- Margaretha Breil, FEEM
- Noriko Fujiwara, CEPS
- Ian Turner, Energy Cities

As a start, the participants were asked to contribute with their own view and understanding of the definition of a post-carbon city.

Stakeholders' understanding of a post-carbon city

Cleaner, less pollution	Fossil fuels: independence (esp. Oil)
Green, environment is not automatic (apart air quality)	Sustainable city: economics (competitiveness) and social (inequality)
Functional (geographic) entity/unit/system, integrating all sectors, no sacrifice on quality of life – social interaction very important – humans at heart of city	Much more than Energy only – city at service at of its citizens i.e. proximity liveable and based peoples' needs and ability to move and reduce their risk
A liveable city, people want to stay, A city providing options is more liveable	Need to decouple – don't need objects but their services
Discussing the "optimal size" groups of 10 000 (village) vs 1-2 million	Smart technologies, Intelligent information systems
Reasonable interconnection between villages, embedded in nature	Need to invent: new ways of thinking infrastructure; new way of thinking ownership
"neighbourhood" living in your community in the metropolis not in the middle ages i.e. increased e-services for public service provision	Post Carbon: 100 percent renewable, Decarbonise – provides opportunity of breaking trends, alternative energies)
20 hours employed work	Collaboration transcends competition
Climate change: mitigating and adapting	New socio-behaviour solutions
"human" city – everything in a walkable distance – village ambience – social relationships	

What are the (challenges stumbling blocks) key uncertainties along the way to achieving post-carbon cities in Europe?

Cities are based on male values	European cities lack space
Energy should be discussed by everybody and not only by engineers	Power does not lie where the decisions need to be taken
Energy industry and car industry opposed to change get support via employment risks and social risks	Lack of vision of policy makers (government changes, no interaction between periods) – sequenced thinking
Governance: Political feasibility of roadmap	We are forced to live in an unsustainable way
Quick wins: start with big players to go quickly	Which target group/where to start?
Bottom up vs top down: little incentive for change	In emerging economy people expect to reach wealth
Lack of ambition at EU level - compare with options at local level	Payback periods – perception of cost benefits – of subsidies for fossil fuels
Challenge socio-economic behaviour changes – car free day, bicycle sharing schemes	Competition for space in cities – hinders renewable in cities
Silo way of thinking	Teleworking and tele meetings are hindered by need to meet people

What are the easiest/best leverage points to work on to achieve a European post-carbon city model in 2050?

Village - city (mobility)	Empower cities
Energy unit buildings (RES)	Ambitious legal framework – EU, State, local
City incentives for collaborative behaviour	Finance long-term risk prevention, 20 to 30 years, RE, EE, guarantees, loans
Eastern Germany population shrinking – how to plan sewerage and public transport	Focus on co-benefits i.e. health (air pollution) neighbourhood cohesion policy
Common EU stable energy framework	Community-led local development EU fund
Clear targets	Stakeholders sit together
Individual gain vs common gain	Internalise externalities
Smart techno and low carbon cities	Not necessarily long-term costs e.g. subway
Citizens/humans at the centre	Ownership/rental
Coordinated approaches, integrated	France – people moving from villages to city
People – nudge them to change their behaviour in transport or heating use	Centralized/decentralised solutions - carrots not sticks!)
Opportunities – creation by policy makers	Info on energy bill
Cost and comfort are decisive factors (you can't ask people to compromise their lifestyles	Articulate a vision for the city – to give a clear picture to all stakeholders
Incentivising better behaviour – localise taxes in order to have leverage over corporations and people	Sharing networks between cities – exchange find ideas to scale up such as car-pooling, housing refurbishment, investment job creation
Government to show examples of buildings	

III.II THE EU ROADMAP PROCESS

The successful engagement of stakeholders in the planned dialogue rests on understanding each group's key area of expertise, business scope as well as geographical focus. Table III-1 below summarizes the type of different stakeholders per each group identified and gives a brief overview of the reasons to engage these groups as well as the benefits for them to participate in the dialogue. Successful categorization of stakeholders at the beginning of the roadmap process was the key to productive communication with the relevant stakeholders' groups at each stage of the project.

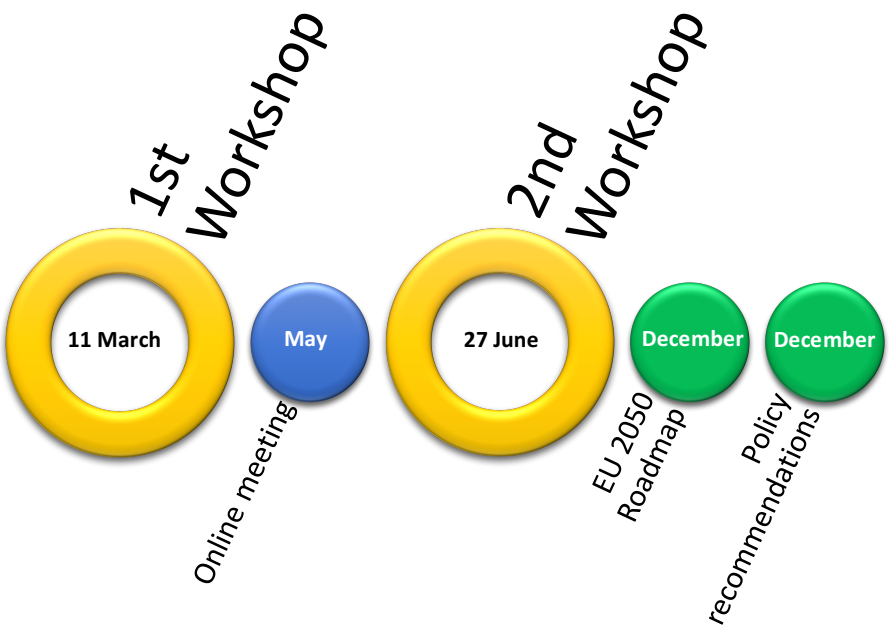


Figure III-1 POCACITO Roadmap process timeline

STAKEHOLDER CATEGORISATION

In addition to diverse sectoral representation, the geographical diversity of the project partners will facilitate the involvement of stakeholders from each category from all geographical areas of the EU (including from the CEE region). The project will invite stakeholders from every member state to provide their input on the topics discussed, however, the successful participation of each member state in the project is dependent solely on the willingness of informed stakeholders to participate in it. However, the rate of Stakeholders will also be selected in view of achieving diversity in terms of gender, nationality and culture.

MAPPING STAKEHOLDERS

The list of stakeholders in the Annex section was a working document that had been constantly updated to ensure the projects attracts ever more participants interested in its goals. The list of contacts in Annex should be regarded as one used exclusively to survey stakeholders' opinion and encourage their input at various stages of the project. The contact information provided was not to be used for dissemination purposes such as mass mailings in order to maintain positive working relations. To ensure this, stakeholders have been contacted by CEPS and the project partners to initially propose their inclusion in the dialogue.

The Table below lists all the major stakeholder categories and illustrates the reasons for engaging them in the various stages of the Roadmap process. The table also specifies what the benefits of engaging the various groups of stakeholders ('what do we get in return').

Table III-I Main stakeholder groups and reasons to contact them

Category	Why to contact them	Stakeholder Activities	What do we get in return
City authorities and local stakeholders **(Ex. Urban architects, city officials, urban planners; Utilities; RES technology, transport services or products providers; local associations etc.)**	• city local stakeholders, energy industry market players, sectoral associations will benefit from enhanced methodological know-how on visioning, backcasting and creating urban sustainable development pathways and increased cross-sectoral collaboration	• define assessment priorities for the analysis of the overall feasibility of options identified • participate in drafting input for the scheduled workshops • designated partners and key stakeholders to contributed in written towards the final policy recommendations and roadmap document.	• Understanding the industry's current concerns and issues as well as experience of urban policies across Europe had allowed for a practical assessment of the measures that have been introduced so far and have lead to identifying best practices and approaches to incorporate in the roadmap document.
Policy Makers / Decision Makers **(Ex. National, local and regional governments; Networks of local authorities; Government agencies; Regulators; Representatives from the EU institutions (EU Commission, European Parliament, Council, European Economic and**	• to help institutions to outreach and encourage key stakeholders to provide valuable input. • A continuous dialogue with a set of national and EU administrators was be pursued to make sure their concerns guide the analysis, and to allow for early testing of perspectives that are emerging from the	• define assessment priorities and the (political) feasibility of options identified • participate in drafting issue papers for the scheduled workshops • designated partners and key stakeholders to contribute in written towards the final policy recommendations and roadmap document.	• Bilateral dialogue had provided the basis for open atmosphere for discussion at the workshops, which could allow local policy makers to enter in a dialogue on a post-carbon framework with the EC and thus facilitate the forming of a joint vision and a common understanding

Category	Why to contact them	Stakeholder Activities	What do we get in return
Social Committee); MEPS and national MPs)	analysis with people directly concerned with the implementation of the vision. • some members of local city councils were involved in the consultative process from an early stage in order to discuss recommendations and receive input for an enhanced political debate.		of the corresponding requirements and implications.
Academia & Research (Ex. Universities; Business schools; Research centres; Projects in the green economy field)	• to ensure the validity of the approach and stimulating exchange on the most important issues and methodological options to address them • The involvement of the academia and research organizations had also provided valuable perspectives on the needs of science to deliver the innovations required for the success of post-carbon urban policies	• define assessment priorities and analysis focus to identify measures to fund research and development in order to deliver the required innovation developments • actively participate in defining the policy goals to guarantee the financial support for research and development needed to deliver the required innovation progress	• The input of academic and research bodies is paramount as it would allow for understanding the policy needs to support urban technologies in their pre-market deployment stages.
Overarching local platforms (Ex. Knowledge platforms)	• to ensure that all local and regional viewpoints are represented	• define assessment priorities and analysis focus to identify measures to fund research and development in order to deliver the required innovation developments • Collaborating with local governments/business/ academia to identify	• a comprehensive and complete understanding of different perspectives and expectations of the future post-carbon development.

Category	Why to contact them	Stakeholder Activities	What do we get in return
		common challenges that could prevent the implementation of the formulated framework	
Communicators (NGOs; Industry associations; Media)	• Communicating the project's objectives/outcomes to the general public. • Involving communications (such as NGOs and industry associations) in the various project's events had ensured a wide communication of results.	• provide valuable input on behalf of the civil society on assessment priorities and issues to concern of the public that have to be reflected in the framework • facilitate dialogue with less structured public groups and disseminate information on events and publications related to the project	• NGO and industry view in the workshop meetings. • Wide dissemination of project's outcomes.

The next section will highlight the type of engagement of stakeholders we had during the course of the Roadmap process.

1ST MEETING IN BRUSSELS ON 11 MARCH 2016

This meeting allowed to start the work on the roadmap and was the occasion for the project to receive valuable inputs on what the roadmap should be and discuss important content issues.

The 1st EU Roadmap Workshop, part of the POCACITO project, was the first step of a consultative process that had focused on preparing a high level document for policymakers to offer recommendations on how to plan for long term impacts, with the aim to achieve by 2050 livable post-carbon cities.

To have a representation of stakeholders beyond the Brussels-based invitees, CEPS has reached out to local stakeholders from Central and South-East Europe to invite them for the event. At the first workshop, five participants came from Bulgaria, Croatia, Turkey, Czech Republic and Greece. In the same time, the organizers desired to engage locally with city authorities from Brussels, reason for which invitations were sent out to the local administration and an architectural engineer from the Energy Office of the municipality attended the meeting.

Towards the end of the workshop. Participants were provided with an overview of the Roadmap timeline, with the 2nd workshop planned for 27 June in Brussels.

Participants:

Monica Alessi, Programme Manager, CEPS

Alix Bolle, Communications/Media Manager, Energy Cities

Yves De Weerdt, Research Coordinator Urban Sustainability, VITO

Zaritsa Dinkova, Advisor, Municipality of Sofia

Alkisti Florou, Sustainable Development Advisor, Aegean Energy Agency

Jaroslav Klusak, Energy manager, City of Litomerice

Rene Lisac, Science fellow - higher assistant Faculty of Architecture, University of Zagreb

Nizamettin Mangir, Vice – Director, Istanbul Metropolitan Municipality

Alexandre McCormack, Architectural Engineer, City of Brussels

Jorge Nunez Ferrer, Associate Research Fellow, CEPS

Filipa Pimentel, National Hubs Coordinator, Transition Network

Domenico Rossetti di Valdalbero, Policy Officer, European Commission

Mathieu Saujot, Coordinator, IDDRI (Institute for Sustainable Development and International Relations)

Cristian Stroia, Research Assistant, CEPS

Jan Schmieder, Clean Energy Campaigner, CEE Bankwatch Network

Noriko Fujiwara, Associate Research Fellow, CEPS

Stéphane Dupas, Project Manager, Energy Cities

Laura Vanhué, Director, CRU

Figure III-2 Participants at the first roadmap workshop

After the workshop, the participants were invited for an evening drink and a tour visit at Cameleon Eco-Building from Brussels. The venue is the first ecologically-constructed retail store in Europe, earning the title thanks to every aspect of the design, featuring maximum concern for the environment. Participants were provided with a guided tour and insights into the development of the project, after which they were welcomed to enjoy an evening drink at the restaurant of the venue.

Figure III-3 Participants at the study tour of the Cameleon Eco-building

ONLINE TELECONFERENCE MEETING

To continue the engagement and follow-up between the two workshops, an online meeting had been planned with the stakeholders in May. The teleconference, organized by CEPS through a professional software, allowed for a follow-up on the ideas shared during the first meeting in Brussels while providing flexibility for the different schedules and time zones of the participants. Stakeholders had received an email invitation to choose from several time slots, according to owns personal schedule and availability, and then join the online meeting at the preferred time.

With this format, regional stakeholders could share and exchange detailed opinions and recommendations on the drafting of the Roadmap while having an additional option to contribute in writing. The possibility to send written suggestions has strengthened the participation of other stakeholders that could not connect to the teleconference at the suggested time slots.

2ND MEETING IN BRUSSELS ON 27 JUNE 2016

On 27 June 2016, CEPS hosted the Second EU Stakeholders' Meeting on the POCACITO 2050 Roadmap at CEPS (Working Party Room) in Brussels (Place du Congrès 1) from 12:00 – 17:45. The meeting, part of the consultative process with stakeholders for the 2050 Roadmap, was aimed at discussing and finalizing the lessons drawn from the feedback and recommendations from the involved stakeholders. The event consisted of a morning study visit and an afternoon workshop.

The study visit was held at the Brussels City Administrative Center, where the participants enjoyed the high-rise panorama of the city and received a presentation of the new urban mobility plan and pedestrian area project of the city of Brussels.

Figure III-4 Participants at the study visit at the Brussels City Administrative Center

The afternoon workshop sought to focus on ways of bringing the development of European cities on track with long-term visions and objectives that are in line with the EU's goals for 2050. In the same time, the objective was for participants to discuss and finalize the lessons drawn from the feedback and recommendations of the involved stakeholders. Among the discussion topics, the focus had been placed on how to bring the development of cities on track with long-term visions and objectives and how to handle bottom up approaches to reach consensus on ambitious long-term city visions and necessary actions.

Figure III-5 Participants at the 2nd EU Stakeholders' Workshop on the 2050 Roadmap process

The small workshop setting allowed for a stimulating environment where participants could engage easily and exchange opinions and ideas among themselves. The collaborative group work concentrated on providing suggestions in the fields of governance, financing, digitalization and communication that are essential for developing long-term visions and necessary actions for cities. Together with the project consortium, CEPS had built upon the recommendations and feedback collected from stakeholders throughout the entire collaborative process in order to draft the proposal for a 2050 Roadmap for EU cities in a world context.

Participants:

Alix Bolle, Energy Cities, Belgium
Zaritsa Dinkova, Municipality of Sofia, Bulgaria
Antonin Tym, City of Litomerice, Czech Republic
Vlatka Vlahek, Association of Croatian Towns, Zagreb, Croatia
Seda Özdemir, Istanbul Metropolitan Municipality, Turkey
Jorge Nunez Ferrer, CEPS, Belgium
Ivan Velkov, Municipality of Sofia City Council, Bulgaria
Max Gruenig, Ecologic Institute, Germany
Mihnea Catuti, CEPS, Belgium
Cristian Stroia, CEPS, Belgium
Noriko Fujiwara, CEPS, Belgium
Eric Vidalenc, ADEME. France
Laura Vanhué, CRU, Belgium

III.IIITHE ADVISORY BOARD

The Advisory Board guided the project and ensured policy relevance of the project outcomes. Members of the interdisciplinary advisory board joined the project meetings and even the second study tour as well as the closing conference.

The Advisory Board consisted of 4 high-level experts in urban sustainability:

Anthony Gad Bigio

Adjunct Professor, Urban Advisor at George Washington University's Sustainable Urban Planning graduate program

Anthony G. Bigio is Adjunct Professor at George Washington University's Sustainable Urban Planning graduate program, and an Urban Advisor with over thirty years of international experience. He retired from the World Bank in 2013 after a two-decade career in urban development spanning projects on cities and climate change, urban resilience, urban environmental management, earth observation for development, low-cost housing, urban poverty reduction, and urban cultural heritage.

Eva Falleth

Professor in urban and regional planning at the Norwegian University of Life Sciences

Eva Falleth is a professor in urban and regional planning at the Norwegian University of Life Sciences. She has worked with environment, natural resources and planning, planning in an institutional perspective, planning and governance, urban planning, planning, society and democracy, and planning and development. She has led a high number of national and international research projects and published numerous articles and books.

Brigitte Koffi

Senior scientist in Physics and Chemistry of the Atmosphere

Brigitte Koffi has been working at the Institute for Environment and Sustainability of the Joint Research Center of the European Commission (JRC, Ispra, Italy) since January 2013, where she is providing Scientific and Technical support to two different international initiatives: the Covenant of Mayors (CoM) initiative and the Hemispheric Transport of Air Pollution (HTAP) multi-model exercise.

Lars Reuterswärd

Vice-President of Chalmers University of Technology, Director of Mistra Urban Futures

Dr. Lars Reuterswärd is currently Vice-President of Chalmers University of Technology, Director of Mistra Urban Futures. A Swedish national, Dr. Reuterswärd was United Nations' Designer, Coordinator and Pavilion Director for the UN Exhibition and Events at the Shanghai World Expo 2010.

The Advisory Board provided the project with insights into upcoming political priorities, increased the profile and awareness of the project, helped communication with specific audiences in the private and public sector and generally contributed to the success of the project via the integration of suggestions and recommendations. Their input helped to validate and legitimise the project findings.

The Advisory Board supported POCACITO by:

- ensuring that decision makers' views and needs are included/taken into account throughout the duration of the project
- ensuring that expertise from different scientific backgrounds was adequately reflected in the project

- providing feedback and recommendations on scientific approach, project implementation and results
- disseminating the results generated by the research effort

The Advisory Board was very closely involved in the project and played a substantial role in the overall project success.

III.IV FINAL CONFERENCE

The final conference of the project, entitled POST CARBON CITIES OF TOMORROW – BUILDING AN URBAN LONG TERM VISION TOGETHER took place on 21 October in Brussels at CEPS premises.

The Final Conference highlighted a creative approach for dissemination and participant engagement. The messages of the sessions drew attention to the need for an integrated approach to urban development to reduce greenhouse gas emissions, in particular concerning urban planning of infrastructures and land use, using the opportunities provided by Information and Communication Technology. The emphasis had been placed on POCACITO's successful adaptation of visioning and backcasting exercises as powerful tools to engage stakeholders and increase their awareness and participation in the steps towards a post carbon future.

To create cross-sectoral synergies and effective dissemination of knowledge, CEPS had invited stakeholders from research institutes, academia, journalists, associations, EU institutions, city authorities, companies, think-tanks and governmental representatives. The format of the conference was designed to reflect dynamism and exchange of ideas over the project findings with the aid of a moderator for discussions and group activities. The conference was very successful with 127 registrations of which close to a hundred attended.

Figure III-6 Presentation of the POCACITO 2050 Roadmap by Jorge Nunez

The conference was designed to present the highlights of the project and to be participatory. Participants not only were able to listen to project participants, but also urban specialists, and were

able to review the Roadmap document's recommendations, comment on it and contribute through a collaborative setting, which allowed participants to discuss them in groups.

The innovative layout of the event was further strengthened by creating the opportunity for participants to see in practical terms what the future of urban transport could look like. For this, the organizers have brought in a local electric car-sharing initiative that would illustrate the mobility and transport future outlook in Brussels while allowing participants a unique test-drive of some of their newest urban electric cars.

The event was very successful in gathering feedback from the participants which then was incorporated in the Roadmap document. Furthermore, it has led to some cities to contact partners to perform the visioning and back casting exercise in their town. Concrete case has been of CEPS being contacted to present the POCACITO method in Sofia Bulgaria on 28 November 2016. After the conference the presenter has been approached for the possibility to use the method for the development of the city's green capital strategy.

III.V OUTCOMES AND RESULTS

The engagement of stakeholders from different professional, institutional and geographical backgrounds into the POCACITO project was beneficial both to the success of the project but also to the stakeholders themselves. It is a two-way dialogue between the project's partners and the external community, with mutual benefits.

As a two-way dialogue between the project partners and with selected stakeholders, the project held benefits for all parties involved. Ensuring a variety of viewpoints through the participation of a diverse group of stakeholders has contributed to the acceptance of derived outcomes and products. Simultaneously, stakeholders were given a chance to reflect on their experiences and challenges of navigation through the diversified pathway options and thus have an opportunity to influence the direction of the project.

Unfortunately, the project was not able to involve as much stakeholders as first expected. One hypothesis is that the inflation of solicitations made it difficult for many to participate to the discussions.

IV INVOLVEMENT AT URBAN LEVEL

IV.I INVOLVEMENT OF LOCAL AUTHORITIES

IV.I.I CONTACTS WITH LOCAL AUTHORITIES

It was very important for the project partners to create trustful and strong links with the local authorities of the case study city in order to link the research with the practices of the city officials and deal with the most relevant stakeholders at local level. Case study cities already committed to the project at the time when the proposal was set up.

Change in case study cities was made as the City of Offenburg decided to step back from the project. The City of Rostock was then chosen as case study city.

BARCELONA

Setting up the collaboration with the city of Barcelona was to some extent complicated by the fact that there are three main government levels to take into account: The municipality of Barcelona, which is the central part of the city which covers 1,5 million inhabitants and the Metropolitan area of Barcelona covering over 3 million inhabitants and coordinates the many municipalities that make the urban area of the city. Finally, there is in addition the Barcelona province which is much larger and covers the over 5 million inhabitants.

For POCACITO, the best level of governance was the urban area or the “metropolitan area” authorities (Area Metropolitana de Barcelona - AMB). The coordination of the energy, transport and waste management plans of the city are at this level. However, the offices are relatively new and have no formal powers outside coordination and the running of smart city projects. The responsible director and one of the officials participated in the workshops and helped to set up the meetings and contact the relevant people. The District of Barcelona also sent a participant responsible of financing projects at the larger regional level.

We also had meetings with the director of the energy agency of the city, which is closely linked to the metropolitan area offices, as the energy plans are drafted for the AMB, not the municipality.

Throughout the project it was difficult to get a strong backing by the authorities, first because these concluded in 2010 large consultation with the local businesses and other stakeholders on the future of Barcelona 2020. When the project started, they did not see the value added of an additional consultation, even for a 2050 timeframe. The city has its own consultation strategy and methodology, thus POCACITO was not considered with interest. This did reduce the impact of the workshops and reduced our ability to get key people to the meetings. Furthermore, key elections in the city in the middle of the period which strongly affected the political landscape of the authorities, created uncertainty for the administration and affected all coordination.

Nevertheless, the participants saw the value added of the method applied and it would certainly be easier to launch a more inclusive and serious vision and back-casting project today.

MALMÖ

Three different workshops and a final feedback session were organised with local stakeholders in Malmö during 2014 and 2015. The stakeholders invited were identified with the assistance of local authorities from both the environmental department as well as the planning office. The local authorities has expressed a great interest in the results and the ambition from the planning office has been to use the results as input to their next long term energy plan.

ISTANBUL

In order to choose the right contact persons within the Istanbul city administration, who have relevant expertise, we used key performance indicators as a guideline. We addressed the departments and institutes on the basis of the social, economic and environmental dimensions of the KPI.

We sent an invitation letter describing the POCACITO Project to selected public institutions and municipality departments which are working on; energy, environmental protection, transportation, waste management, water management, housing, local economy etc. We requested the participation of at least one expert from each department or institute working on those issues. We contacted first by e-mail, next we called each department and invited experts to confirm their participation.

LISBON

The Municipality of Lisbon and the Energy Agency Lisboa E-NOVA were involved in POCACITO participatory process from the beginning of the project.

In the first phase of the project the project team met the Councilor for Economy and Innovation of the Municipality, Graça Fonseca, who expressed her willingness to participate in the project. The local authority was involved in the data collection process and in the organization of the workshops with local stakeholders. Furthermore, a member of Lisboa E-NOVA, Francisco Gonçalves participated actively in the two project's study visits.

It is worth of notice that POCACITO is part of a portfolio of Lisbon's projects on climate change and not an isolated action. For example, "City Lab Lisbon" was developed within the initiative "Morgenstad – City of the Future" led by Fraunhofer Institute. The purpose of the City Lab was to identify the strengths and weaknesses of the city across several sectors, as well as key areas of intervention for smart and sustainable development. Other relevant initiative is the lighthouse project "Sharing Cities" approved under Horizon 2020 – "Smart Cities and Communities" (2016-2020). Lisbon is one of the lighthouse cities in partnership with London and Milan, with the objective of testing innovative urban solutions in specific city districts crossing energy, mobility and ICT.

LITOMĚŘICE

Local authorities were involved in the participatory POCACITO process from the beginning of the project. The case study received official support from the city mayor and cooperated closely throughout the project with the city´s Department for strategies that assisted the POCACITO project team in identifying relevant and potentially interested city stakeholders. The appointed representatives of Department for strategies were also involved in the work for WP3 (collecting data for the key performance indicators) and WP5 (data on energy consumption and GHG emissions).

Besides the involvement of stakeholders in the series of POCACITO workshops, the interim results of the project, i.e. the PC2050 vision and the backcasting scenarios were presented to the public during an official event of Healthy cities forum (an annual Agenda 21 activity with approximately 120 local participants) and a similar event that is organised as a parallel for young people on public schools.

Furthermore, a reportage in local internet television on the POCACITO project and related activities in the city was carried out.

MILAN/TURIN

In Turin, at the beginning of the project the project team met with Anna Prat, the director of Torino Strategica, the agency that promoted the third strategic plan of the metropolitan area. Anna helped to select the best stakeholders to be invited to the workshops. Members of the municipality, of local authorities and public utilities regularly attended the four workshop in Turin

ROSTOCK

The local authority was very cooperative and interested in exchange throughout the project. There was a high interest in the POCACITO research results and in the ideas and developments of other cities. The main contact for all workshops was Kerry Zander, research associate of the Environmental Agency Rostock. Colleagues and the head of the Environmental Agency further attended some workshops. The first and the final workshop opened with a speech by the Senator for Environment and Construction Holger Matthäus who also participated in the vision building and road mapping for Rostock.

ZAGREB

Local authorities were involved in the participatory POCACITO process from the beginning of the project. At first, city office for energy and sustainable development was involved and later on activities continued through the city office for strategic planning. Both of offices provided sufficient level of support by attending workshops and organizing study tour in Zagreb, however neither of them showed real engagement in the topic, while being busy constantly with other things. In general, issue of strategic planning and citizen participation did not attract sufficient interest from city government which limited the whole process to some extent.

On the positive side, there were several events organized with city of Zagreb which helped to promote the project idea and get citizens on board, mostly through Zagreb Energy Weeks which are organized each year in May.

SHARING AND EXPORTING KNOW-HOW GLOBALLY

Given the socio-economic dynamics in BASIC countries (Brazil, South Africa, India and China), three Local authorities (two cities in China and one city in Brazil) have been chosen to be partners in the project to enable a closer exchange of visions and experiences. In each city, meetings with city representatives and other stakeholders were held throughout the lifetime of this project.

In China, a local sub-contractor, CASS (Chinese Academy for Social Sciences) facilitated the exchange with the representatives of the two cities.

For Brazil, a local sub-contractor was also chosen to organize the meetings with the city representatives. Due to several reasons, the organization of the workshops was finally taken over by INTELI, one of the partners within POCACITO.

It was planned that one representative from each sub-contractor should participate in the study tours of task 6.3., but unfortunately, no participant from Brazil could participate. From China, Ms. Xiaoteng Chen from CASS participated in the second study tour and also presented experiences from China at the final POCACITO conference in October 2016 in Brussels.

CHINA

In China, two cities were selected: Guang Yuan and Xiamen.

In Guang Yuan the stakeholder meetings took place on June 17, 2015 and during two field trips in March and June 2015, where lessons from EU low-carbon cities were discussed and Chinese experiences were made available for European stakeholders. 13 stakeholders participated in the workshop.

Xiamen was visited by the case study research team during June 22-24 in 2016. City officials from Xiamen helped them to arrange some interesting stakeholder meetings, field trips and interviews. 21 stakeholders participated in the workshop and the visits in Xiamen.

BRAZIL

The workshop “Urban Transition towards a Post-Carbon Future” was held on March, 16, 2016 in Aracaju – Brazil, under the framework of the POCACITO – “Post-carbon Cities of Tomorrow” project. INTELI, Mind Brazil and Federal Institute of Sergipe were jointly organizing the event.

The objective of the workshop was sharing the good practices learned within POCACITO with Brazilian institutions, namely municipalities. Know-how transfer and knowledge exchange processes between stakeholders were the aims of the initiative.

INTELI’s presentation was centred on the integrated assessment of case study cities, based on the environmental, economic and social key performance indicators defined within POCACITO. The good practices available on the online “marketplace of ideas” were presented, and the audience suggested some innovative projects that are being developed in Brazil to be included in the database.

The workshop was very successful, and future collaboration opportunities in the area of post-carbon cities were defined. In total, 47 stakeholders participated in the workshop.

IV.II STUDY TOURS

As part of WP6 “Marketplace of ideas”, two study tours (in 2015 and 2016) were planned and organised during the course of the project in several EU cities to facilitate an exchange of ideas, experiences, best practices, and socio-economic success factors and limitations of implementing post-carbon solutions among city representatives. These study tours brought together groups of representatives from both EU and non-EU cities and allowed for a lot of interaction between our different stakeholder group in particular the case study cities and project partners but there was also interaction with our global partners, advisory board and EU stakeholders.

1ST STUDY TOUR: EASTERN EUROPE

The first 5-day study tour took place from 15th to 19th June 2015, back-to-back with the 3rd project meeting in Graz (17-19 June 2015), thus enabling the participants to meet the project partners and some members of the project advisory board.

The choice of the places that was visited was made to offer a maximum of diversity of cities and topics. Thus, participants had the opportunity to meet and exchange with peers in European capitals like Zagreb and Vienna, medium-size cities like Maribor and Graz, and small cities and towns like Ivanic-Grad and Güssing, moreover, in three different national contexts.

Figure IV-1 Visit in Zagreb

The topics of exchange and discussions covered participation and citizen involvement (in Zagreb and Ivanic-Grad), urban planning and mobility, environment and air quality (in Maribor), eco-district, energy efficiency in buildings, energy transition and the use of local and renewable energy resources (in Graz, Güssing and Vienna).

1st POCACITO studytour

List of participants

Name	Role	City/Organisation
Mr Andrea Stanghellini	Case Study city	Turin
Mr Ulas Akin	Case Study city	Istanbul
Ms Marta Cuixart Tornos	Case Study city	Barcelona
Mr Jaroslav Klusák	Case Study city	Litomerice
Mr Francisco Gonçalves	Case Study city	Lisbon
Ms Mita Lapi	Case Study city	Milan
Ms Tamara Trumbic	Consortium partner	Zagreb
Ms Kathleen Dematera-Contreras	Global parnter	Clean Air Asia - Philippines
Ms Monica Ridgway	POCACITO consortium	Ecologic Institute - Berlin
Ms Ingrid Kaltenegger	POCACITO consortium	Joanneum Research - Graz
Ms Blandine Pidoux	POCACITO consortium	Energy Cities

List of people and organisations who contributed to the study tour during the visits:

Sandra Vlašić, Head of Office, UNDP Croatia

Vlatka Berlan, Senior associate, City development, Ivanic-Grad, Croatia

Sonja Socivica, City Strategy department, City of Zagreb, Croatia

Rene Lisac, Zagreb Society of Architects, teaching assistant at the Faculty of Architecture, University of Zagreb, Croatia

Dr. Metka Sitar, University of Maribor Faculty for Civil Engineering, Slovenia

Dr. Branka Trček, University of Maribor Faculty for Civil Engineering, Slovenia

Dr. Marjan Lep, University of Maribor, Faculty for Civil Engineering, Slovenia

Dr. Vlasta Krmelj, Energy Agency of Pdravje, Slovenia

Barbara Hammerl, Vice-Chairman,Managing Director, StadtLabor Graz, Austria

Dr. Joachim Tajmel, European Center of Renewable Energy, Güssing, Austria

Alexander David, Research Assistant, Vienna University of Technology - Research Centre Energy and Environment, Vienna, Austria

Michael Sattler, Chief Executive Office of the City of Vienna, Coordination of Climate Protection Measures, Vienna, Austria

A qualitative satisfaction questionnaire sent to the participants right after the tour, enabled the POCACITO consortium to get very positive feedbacks on such activities within the project.

See below some testimonials from the 1st tour:

"co-learning experience with Study tour participants from case city partner and meeting with representatives from POCACITO partners provided a multi-perspective added value"

"I think it is definitely useful to get an experience about how other cities are dealing with sustainability issues. It is easier to implement similar approaches in your city afterwards"

2ND STUDY TOUR: CENTRAL EUROPE

The second 3-day study tour, was organised from 18 to 20 October 2016, back-to-back to the final conference of the project (held in Brussels on 21st of October 2016), enabling the participants to attend also the final conference and meet other European stakeholders, as well as the project partners and the advisory board. Exploring the North of France and Belgium, participants were given the opportunity to meet peers in the European capital cities of **Paris** and **Brussels,** and the French town of **Loos-en-Gohelle**.

They could exchange on their respective experiences at local level on climate adaptation and mitigation, innovative urban greening, energy efficient renovation, brownfield rehabilitation, cooperation with citizen and local stakeholders, and the eco-transition of an old coal-field region.

Figure IV-2 Participants of the 2nd study tour in France

2nd POCACITO studytour

List of participants

Martina Andersson, Case Study city,City of Malmö, Sweden

Vanessa Bastida, Case Study city,Siresa – Barcelona City Council, Spain

Vlatka Berlan, Host of the first study tour,City of Ivanic-Grad, Croatia

Anthony Bigio, Advisory board,George Washington University, USA

Karin Dam Nordlund , Case Study city,Technical and Enviromental Administration, Copenhagen Municipality, Denmark

Francisco Gonçalves, Case Study city,Lisboa E-Nova – Lisbon Energy Agency, Portugal

Uwe Hempfling, Case Study city,Agenda21-Rat der Hansestadt Rostock, Germany

Luca Imberti, Case Study city,Istituto Nazionale di Urbanistica Lombardia, Italy

Ingrid Kaltenegger, POCACITO consortium,Joanneum Research, Graz, Austria

Pantelis Karapiperis, Energy Cities member,City of Igoumenitsa, Greece

Stavros Katsilis, Energy Cities member,City of Igoumenitsa, Greece

Kristine Kern, POCACITO consortium,Leibniz Institute for Research on Society and Space (IRS), Germany

Vlasta Kremlj, Host of the first study tour,EnergaP – Podravje Energy Agency, Maribor, Slovenia

Blandine Pidoux, POCACITO consortium,Energy Cities, France

Ulrika Poppius, Pilot City, City of Malmö, Sweden

Michael Sattler, Host of the first study tour,City of Vienna, Austria

Tamara Trumbic, POCACITO consortium,City of Ivanic-Grad, Croatia

Antonin Tym, Case Study city,City of Litomerice, Czech Republic

Xiaoting Chen, Global partner,Chinese Academy of Social Sciences, Beijin, China

List of people and organisations who contributed to the study tour during the visits:

Célia Blauel, Deputy Mayor of Paris, in charge of energy and water
Marie Gantois, Responsible for Climate Change Strategy, City of Paris
Gilles Debizet, PACTE Laboratory-University of Grenoble Alpes
Jean-François Caron, Mayor of Loos-en-Gohelle, France
Julian Perdrigeat, Director of the the Office of the Mayor, Loos-en-Gohelle, France
CERDD (Resource centre for sustainable development), Nord-Pas-de-Calais Region
CD2E (Centre of excellence for the eco-transition) Nord-Pas-de-Calais Region
Annick Vanderpoorten, Planning department at Brussels Environment
Yannick d'Otreppe, Sustainable consctruction training Department at Brussels Environement
Régis Callens, Energy manager, City of Brussels
Alexandre McCormick, project manager, city of Brussels
CERAA (Center for studies, action and research in Architecture, Brussels, Belgium

IV.IIIINVOLVEMENT OF LOCAL STAKEHOLDERS

IV.III.I LOCAL WORKSHOPS WITH LOCAL STAKEHOLDERS

The types and numbers of stakeholders involved in the participatory workshops vary from city to city. As the POCACITO process is about technical and political decision making, the types of stakeholders that attended the workshops can be divided into five main categories: urban administration, public agencies, non-governmental organisations (NGO), private business, and research. Stakeholders grouped as urban administration are decision makers within the city. Public agency includes stakeholders working for publicly funded agencies. NGO stakeholders are those working for groups that are neither government funded nor conventional for-profit businesses (including representatives from civil society). Research stakeholders include the students and professors affiliated with universities.

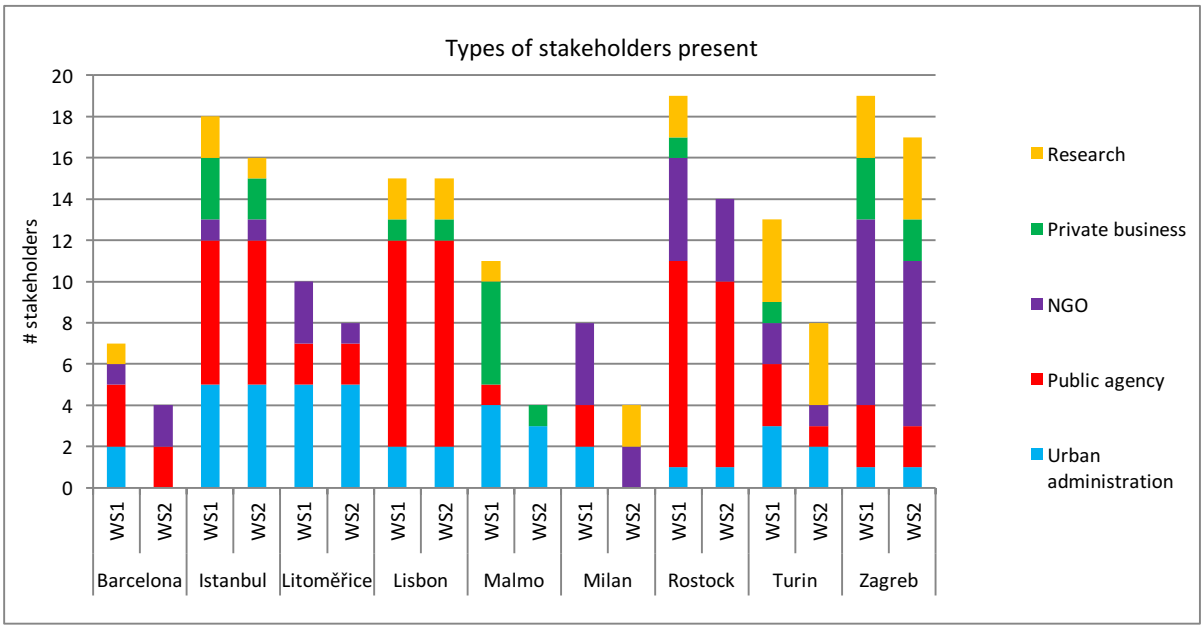


Figure IV-3 Types of stakeholders at each workshop

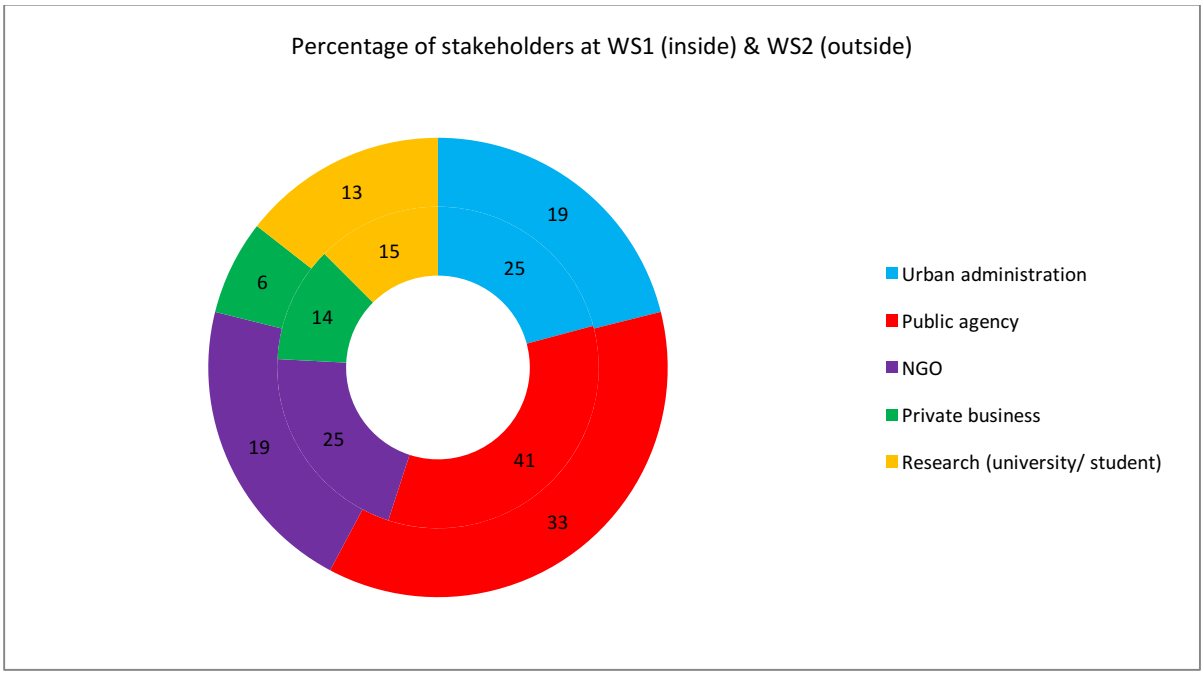


Figure IV-4 Percentage of stakeholders by type at each workshop

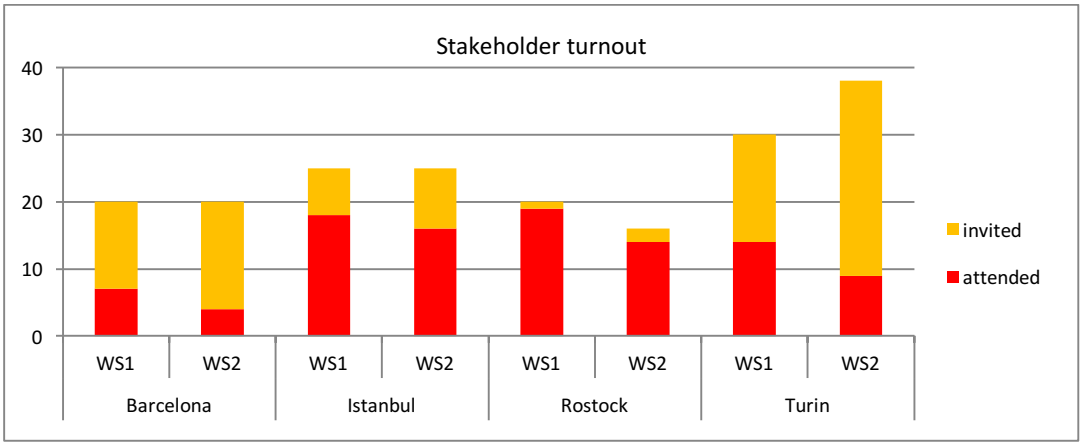


Figure IV-5 Stakeholder turnout

In total, 120 stakeholders participated in the first round of workshops and 75 stakeholders attended the second set of workshops. Of the total 140 different stakeholders, 72 participated in both workshops (57 excluding Lisbon, where both workshops were held in 1 day and therefore had the same participants at both). In all cities, there were more stakeholders present at workshop 1 than workshop 2. Overall, urban administration, public agencies and NGOs were the stakeholder groups best represented in both workshops, with 25 urban administration, 41 public agency, and 25 NGO stakeholders in workshop 1, and 19 urban administration, 33 public agency, and 19 NGO stakeholders in workshop 2. Public agencies were represented in all workshops except Malmö and Milan's second workshops. Likewise, NGOs were represented at all workshops excluding the two workshops held in Lisbon and Malmö. Besides civil

society, which was not directly represented (although stakeholders were asked to participate as citizens first, and only secondly as representatives of their respective organisations), private business and research sectors had the fewest stakeholders. Private businesses were only represented at ten out of the eighteen workshops, and research in twelve of the eighteen workshops.

Both workshops in Istanbul and workshop 1 in Rostock, Turin, and Zagreb included the full range of stakeholders from the five sectors represented. Urban administration stakeholders were present for the first workshop in all cities, and for the second workshop in six cities.

Zagreb and Rostock had the highest number of stakeholders present at workshop 1 (both 19) and workshop 2 (Zagreb 17, Rostock 14). Istanbul also had many stakeholders attend both workshops, with 18 at workshop 1 and 16 at workshop 2.

Because Lisbon followed a different method for the visioning exercise, namely through conducting individual interviews or questionnaires and a small meeting, their mode of stakeholder participation differs from that of the other 8 cities. While Lisbon contacted 15 stakeholders, only 5 attended the group meeting. However, because all 15 contributed to the creation of the visioning and the backcasting exercises, all are included in the description of workshop 1 and workshop 2 stakeholders.

INVITED VS ATTENDED

Several of the case study cities reported on the number of stakeholders invited versus the number that attended the workshops. These cities include Barcelona, Istanbul, Rostock, and Turin. On average, the number that attended was about 55% of those invited. The percentage who attended was always higher for the first workshop than the second workshop, with 62% of those invited attending the first workshop and 49% of those invited attending the second. Rostock had the highest percentage of invitees attending (92%), followed by Istanbul (68%), Turin (34%), and Barcelona (28%).

The best case was workshop 1 in Rostock, where 19 of 20 invitees attended. The lowest turnout was in Barcelona where only 4 of 20 invitees attended. Turin invited the most participants to each workshop, while Rostock invited the fewest. In many cases, more stakeholders replied that they would attend, and then did not show up on the day of the meeting.

METHODOLOGY

The engagement of stakeholders included the organisation of first a visioning workshop, followed by a scenario building backcasting workshop. Later came a PCIA (POCACITO Critical Influences Assessment) sensitivity workshop and a final roadmap workshop.

INVOLVEMENT OF LOCAL STAKEHOLDERS IN THE CASE STUDY CITIES

BARCELONA

The first workshop was held on 10th and 12th of December 2014 in the premises of an innovative SME in Barcelona, specialised in organising and hosting events, particularly for cultural and culinary meetings and courses.

Participants were selected based on a list provided by the Urban Habitat office of the city of Barcelona, which is responsible for organizing the cities analytical studies, providing consultations and organising events on the future of Barcelona as a smart city. The list of invitees consisted of over twenty people including representative of citizens, SMEs and students. Fourteen accepted the invitation, but only seven were actually present at the first workshop, falling to four in the second. A combined total of 8 participated in the two workshops, all high level representatives mostly municipality, county, or region representatives (public transport, economics, commerce and energy and climate change). There was also one academic and 2 consultants. Three people attended both workshops.

The workshops resulted in a vision and list of milestones for the city of Barcelona and a mindmap of relationships between sectors. Two more workshops were organised taking into account the difficulties of the first workshops, the first 30 November 2015 and the second 14 of June 2016. For those workshops a larger and better mix of 11 participants attended, due to a new format and a more practical approach.

In these two last sessions, the participants were of the city authorities, business associations, academia, architects and the head botanist of Barcelona. The participants were satisfied and this is proven by them returning to the final meeting. The stakeholders were able (and did) comment on the final city strategy document, which was amended accordingly.

The first reviewed the vision and milestones and decided on actions to reach those. The third workshop was dedicated to review document in line with the quantitative analysis of the impact of the decisions. The participants were able to comment and amend the strategy document.

MALMÖ

A total of 3 different workshops and a final feedback session were organised with local stakeholders in Malmö during 2014 and 2015. Besides the local authorities also developers, food producers, regional traffic administration, research organisations, the regional energy agency etc. participated in the workshops and contributed to the final roadmap.

The vision workshop was held on November 21 2014 at MINC, Anckargripsgatan 3, in Malmö. The backcasting workshop was held on November 26th at Media Evolution City, Stora varvsgatan 6a in Malmö.

A combined total of 11 people participated in the two workshops. The first workshop had diverse participation including city officials (energy, planning and environmental issues), a public transport company, a construction company, local university, IT companies and a large local employer; a bakery company. Missing groups were young and elderly citizens, immigrants, social scientists and economists, even though the University PhD came from the economic field. In the second workshop only city

officials and an IT company was represented, but they had all taken part in the first workshop and could build on the outcomes of that. The mix of men and women was very good in both workshops.

In the first workshop the aim was to create inspiring visions for a post carbon Malmö 2050. The participants worked in groups, starting by drawing pictures and then step by step formulating their vision for the city. The second workshop used back-casting methodology to list obstacles and opportunities, milestones and activities related to reaching a normative endpoint goal. The goal set by the stakeholders was:

"In 2050, the citizens of Malmö only emit 1-2 tons of carbon dioxide per person and year, including the carbon footprint of their consumption."

The milestones and activities in different areas were then positioned on a timeline to reach the 2050 goal.

In preparation for the third PCIA (POCACITO Critical Influences Assessment) workshop, IVL used the results from visioning and back-casting to develop a set of variables influencing the city system. During the workshop that was held on April 29th 2015, the participants used the variables in an impact matrix to try to describe what impacts they had on each other and how strong this impact was. They also suggested a number of additional variables. Based on the results, IVL made an assessment using the sensitivity model, and the top five variables for the Malmö city system were selected.

For the final roadmap workshop, which was held on May 31st, the results from the sensitivity analysis were presented with highlights from the other case study cities. A total of 11 stakeholders participated in the sensitivity and roadmap workshops. These workshops had more participating women than men.

ISTANBUL

In order to choose the right stakeholders who have relevant expertise and who can also represent relevant institutes and authorities, we used key performance indicators as a guideline. We addressed the departments and institutes on the basis of the social, economic and environmental dimensions of the KPI.

First of all, we sent an invitation letter describing POCACITO Project to selected public institutions and municipality departments which are working on; energy, environmental protection, transportation, waste management, water management, housing, local economy etc. We requested the participation of at least one expert from each department or institute working on those issues. We contacted first by e-mail, next we called each department and invited experts to confirm their participation.

Second, we wanted to widen the range of participants and contacted academics who have been involved in different EU projects about climate change and environmental issues. We sent an invitation letter to them explaining the context of the POCACITO project.

Finally, we sent an invitation letter by e-mail to different NGO's and private institutions working on environmental issues, economy and construction. We got confirmation about the participation of at least one expert by calling those institutions and NGO's.

Following the first workshop, we directly contacted the participants of the first workshop and invited them by e-mails to the second and the third workshops. We requested them to recommend another expert from their institutions if they are not able to participate to the following workshops. As a result, for all 3 workshops we had a variety of participants from different institutes, departments of the

municipality, universities and private institutes working on energy, environmental protection, transportation, water management, housing and economy issues.

The vision building and backcasting workshops were organized together in one day, 9th of March 2015 in Istanbul.

A combined total of 18 (excluding facilitators and artists) people participated in the two workshops. The composition of the participants by institutions was as follows: 5 from Istanbul Metropolitan Municipality, 7 from other public institutions, 2 academics, 3 private company and 1 NGO representative.

Sensitivity (PCIA) workshop was held on 26 June 2015 in Istanbul. It was planned to take half a day by 1.00 pm. in order to finalize the impact matrix with all participants as a pilot study was conducted before the workshop. However, the workshop and discussions took longer than assumed with enthusiastic involvement of participants and the workshop was over at 8.00 pm. From different institutions and organisations 10 stakeholders attended the PCIA workshop; 4 from Istanbul Metropolitan Municipality, 6 from other public institutions. 7 of stakeholders had already attended the vision building and back-casting workshops, however it was the first time for 3 of the participants. In order to acknowledge new participants, previous studies on POCACITO were presented briefly.

Roadmap workshop was held on 17 May 2016 in Istanbul from 9.30 am to 6.00 pm. From different institutions and organisations 10 stakeholders attended the roadmap workshop; 4 from Istanbul Metropolitan Municipality, 2 from academics, 4 from other public institutions. 8 of stakeholders had already attended the vision building and back-casting workshops, however it was the first time for 2 of the participants.

LISBON

The vision building and backcasting scenarios workshop was held during May (1-15) through the collection of information and direct interviews with the stakeholders.

A combined total of 15 people were involved representing diverse organisations as follows: 2 from Lisbon city council, 1 local energy agency, 1 local investment agency 1 regional energy agency, 2 national agencies, 2 national associations, 1 national department, 2 research insitutions,1 start up and 1 cluster.

The sensitivity analysis workshop was held at INTELI with the support of its staff members and a few local stakeholders.

Concerning the roadmap, the project team has collected inputs from several local stakeholders (10, including city council, energy agency, research institutions, and national associations) and from the reports of related projects (ex.: Lisbon City Lab; Sharing Cities).

The methodology developed within the framework of POCACITO was used in the workshops but there was a need of its adaptation to the context of Lisbon, due to the following factors: economic and financial crisis; uncertain period associated to the change of the City Mayor; difficulty in motivating and mobilizing key stakeholders; parallel organization of similar meetings, workshops and seminars in the scope of Portugal2020 (framework program 2014-2020).

LITOMĚŘICE

The first workshop on vision building was organised in Litoměřice on 4th November 2014 and the second workshop on backcasting on 2nd December 2014.

A combined total of 10 different people from Litoměřice representing diverse organisations as follows: 5 city representatives (urban planning, health, environment, energy), 2 from the tourism centre, 2 representatives from an urban planning NGO and 1 representative from a cultural NGO. Unfortunately, there were no representatives of private sector.

The same list of stakeholders that included approximately 30 city stakeholders from city administration, city political representatives, local businesses and NGOs were contacted to participate in the remaining workshops on sensitivity analysis and then the final roadmap workshop. The interest of the invited stakeholders to participate was similar to the previous workshops which resulted in approximately 25% of them actually attending the workshops.

The sensitivity workshop was held on 28th May 2015. In total 7 participant were present at the workshop, out of these 5 participated also in the previous workshops, one was new and one was representing participant present at previous workshops. Two member of the project partner team were leading the workshop. Further 6 participants were interested in the workshop, but could not attend on health grounds or other occupation commitments.

The final roadmap workshop took place in early June 2016 and 8 city stakeholders participated, mainly representatives of city administration, then a member of city council and a representative of cultural NGO. Most of the participants were involved during the entire POCACITO process in all previous workshops.

MILAN/TURIN

The first workshop in Turin was held on October 15th, 2014, at Castello del Valentino, one of the main locations of Politecnico di Torino. The second workshop was held on December 3d, at the same location; it was focused on the backcasting exercise.

A combined total of 20 different people from the 2 workshops representing diverse organisations as follows:

- The Municipality by a member of the Transport Department, a member of the Urban planning Department and the coordinator of the Action plan for energy;
- Torino Strategica (the association which promotes strategic planning in the metropolitan area);
- Fondazione Torino Wireless (which coordinates and develops the ICT district in Piedmont region);
- Confindustria Piemonte and Collegio Costruttori Edili (the associations of the industrial and building entrepreneurs of the region);
- Three academic bodies (Politecnico di Milano, Università Bocconi and Alta Scuola Politecnica);
- SiTI (Higher Institute on Territorial Systems for Innovation);
- Dislivelli (an association for in regional planning in mountain areas);

- Agenzia per la Mobilità Metropolitana (which is responsible for public transport planning at the metropolitan level);
- RFI (the regional department of the national railway service);
- Car City Club (the local car sharing service) attended the workshop

In Milan the first Workshop was held on September 29, 2014 and the 2nd Workshop 2 on November 27, 2014, both at FEEM's headquarters at Palazzo delle Stelline in Corso Magenta, Milan.

A combined total of 12 different people from the 2 workshops representing diverse organisations as follows: 1 represented the municipal environmental agency, an energy company, the national institute of urban planning, a transport consulting firm, a regional environmental organization, a financial development agency, and the chamber of architects, the national institute of urban planning,

two Milan universities (one of the university staff was a municipal deputy mayor for the environment in the previous local government), and a non-profit scientific research organisation.

The third workshop was organized as an "integrated" Turin-Milan workshop: it was held in Turin but stakeholders were invited from both Turin and Milan, so to have a "mutual learning process" in defining the Impact Matrix. Also, the fourth workshop was organized in common for the two cities: it was held in Milan, but stakeholders both from Turin and Milan were invited, in order to search together new answers to improve consistency and robustness of supporting actions to the desired post-carbon state.

Fifteen stakeholders attended the third workshop (10 from Turin e 5 from Milan), eleven participants were present at the fourth workshop (4 from Turin and 7 from Milan). They came from all the five stakeholder categories identified: urban administration, public agencies, NGO, private business, and research.

During the third workshop, the group of stakeholder was quite balanced in terms of sectors (five participants for the environment, four for economy, three for urban and regional planning, two for transport, one for energy) and institutions (municipalities, public and private associations and multi-utilities were represented).

ROSTOCK

The first workshop was held on 04 December 2014 in Rostock at the Gästehaus Lütten Klein. The second workshop took place on 29 January 2015 at the Hanse Messe Rostock.

A combined total of 24 different people from the 2 workshops representing diverse organisations were present at the workshops. The stakeholders represented a wide range of decision-makers in Rostock. The main expertise was in the sector of energy, transport, city planning, engineering, waste management, and research. Environmental NGOs were somewhat underrepresented. Most participants knew each other from the "Energiebündnis" – an alliance that meets regularly to discuss energy issues.

13 stakeholders participated in the third (**sensititivity**) workshop which took place on 7 May 2015 in Rostock Warnemünde at the Technologiepark Warnemünde. The participants' broad expertise was in the sectors of city planning, energy, transport, engineering, waste management, water provision, housing and employment. Two participants were from an environmental NGO. Many participants knew each other from the previous workshops, the master plan processes and other activities in Rostock. The

two guest speakers were Ralf Bermich from the Agency for Environmental Protection, Trade Control and Energy of the city of Heidelberg and Hans-Joachim Ziesing, energy expert and German council advisor. 11 stakeholders participated in the fourth (**roadmap**) workshop which took place on 19 May 2016 in Rostock Lütten Klein. The participants were involved in most previous workshops with expertise in the sectors of city planning, climate, energy, engineering, housing, education and employment.

In total 34 different stakeholders were involved in the four workshops in Rostock.

ZAGREB

On November 19, 2014, the Initial Assessment and Vision Building Workshop took place and in December 2, 2014 the Backcasting Workshop.

The location for both workshops was the Impact HUB Zagreb in Vlaška Street, close to the city Centre.

A combined total of 25 different stakeholders from Zagreb were present for the two workshops, all motivated to engage in discussion and contribute their expertise. Participants came from the following diverse institutions and fields:

Non-Governmental Organisations, Institute of Social Science, Political Foundation, National Energy Institute, Social enterprise, Energy company, Faculty of mechanical engineering and naval architecture, Faculty of architecture, Association of architects of city, Media representatives, Health public institute, Ethical bank, City office for strategic development.

During the sensitivity analysis workshop, which was held in May 2015 at UNDP premises, all sectors were more or less equally represented by the 12 participants. Participants structure: NGOs (2), Research (3), Urban administration (2), Public agencies (2), Media (1) and Private companies and Cooperative (2).

Finally, the roadmap workshop was held at UNDP premises in Zagreb in June 2016. Again, 12 participants participated in the workshop although 16 participants confirmed to attend the workshop. There were no new faces, and there was similar stakeholder structure as during the sensitivity analysis workshop: NGOs (2), Urban administration (1), Research (3), Private companies and Cooperative (2), Media (1), Public agencies (1) and Financial institutions (2).

Stakeholders reported big delay in between the workshops as the main reason for being less motivated to participate in the workshops than at the beginning of the process.

IV.III.II OUTPUTS

The outputs of the engagement of local stakeholders in the POCACITO project are best summarised in the POCACITO Policy Brief No. 3, December 2016 entitled ROADMAP FOR POST-CARBON CITIES IN EUROPE: TRANSITION TO SUSTAINABLE AND RESILIENT URBAN LIVING presenting the assumption that, it is stakeholders who can drive the transition process.

"The key to exploit the potential of economic and social opportunities and restore the ecosystem is to fully engage stakeholders, ranging from city decision-makers, businesses and civil society organisations in drawing up pathways for post-carbon cities. Stakeholder participation can benefit from a common understanding about the vision and scenarios of a city and a strong commitment to the process of designing and implementing actions. This implies that stakeholder participation could be best guided by an inclusive and participatory approach."

It is also to note the challenges that were identified: representativeness of stakeholders (difficulty to make sure that a real representative group of people is actually participating to the process), immediate needs (difficulty to make abstraction of daily problems and current controversies), scale (difficulty to install such a process within the agenda of the local authorities and give it enough resources and importance within the urban development strategy).

V CONCLUSIONS

The main challenge of the POCACITO project was to involve local stakeholders in an academic project. Even though their objectives are quite similar, these two worlds have different agendas, different codex and ways of dealing with the same issues. Although this challenge was taken into account, there is still room for improvement. Participation from EU and local stakeholders was there, but the process of involving those actors within the project was resource intensive. The participation of external stakeholders was also not as high as expected during the phase of preparation of the project.

Still, the inputs of the stakeholders involved proved highly valuable and could be included in the project outputs. As well, the project showed that there is a need for participation at the local level, and that promoting exchanges between peers and discussing points of view has a positive impact on participants. They gain confidence, expands their knowledge, and are faced with new ideas which can inspire them back home. Also, such exchanges allow participants to reflect on their own practices.

VI ANNEXES

VI.I LIST OF NETWORK OF REFERENTS

List as of August 4th, 2016

Klusák Jaroslav, City of Litoměřice

Di Simine Damiano, Legambiente Lombardia

Olbrycht Jan, URBAN integroup European Parliament

De Simone Dino, Finlombarda S.p.A., Direzione Energia

Turner Ian, Energy Cities

Trivelli Alessandro, Ordine Degli Architetti: Pianificatori, Paesaggisti e Conservatori Della Provincia Di Milano

Sirbu Monica, Climate Alliance

Lapi Mita, Fondazione Lombardia per l'Ambiente

Klinkenberg Michael, Eurocities

Croci Edoardo, IEFE Centre for research on energy and environmental economics policy Università Bocconi

Defranceschi Peter, ICLEI Europe

Caserini Stefano, Politecnico-Milano

Moulin Emmanuel, URBACT

Conesa Pilar, Anteverti

Griffon Axelle, Reference Framework for Sustainable Cities

Janssens-Maenhout Greet, Joint Research Centre

Pimentel Filipa, Transition Network

Bigio Anthony Gad, George Washington University

Best Aaron, Climate-KIC

Schultz Seth, C40

Roumet Claire, Energy Cities

Reuterswärd Lars, Mistra Urban Futures

Ast Eric, C40

Baycan Tüzin, ISTANBUL TECHNICAL UNIVERSITY

G. Bigio Anthony, George Washington University

Delli Karima, URBAN integroup European Parliament

Aygün Aysun, ISTANBUL TECHNICAL UNIVERSITY

Falleth Eva, Norwegian University of Life Sciences

Castellari Sergio, Centro Euro-Mediterraneo sui Cambiamenti Climatici

Harris Steve, IVL Swedish Environmental Research Institute

Koffi-Lefeivre Brigitte, Joint Research Centre

Medri Silvia, Centro Euro-Mediterraneo sui Cambiamenti Climatici

Nilsson Per-Arne, Malmö city

Stanghellini Andrea, Mobility Metropolitan Agency Turin

Latham Alexandra, European Geothermal Energy Council

Hansmann Michael, Brot fuer die Welt

Akin Ulas, Metropolitan Planning Office Istanbul

Rihai Lily, The united nations environment programme

Üsük Esen, Europabüro der Metropolregion FrankfurtRheinMain

Cuixart Tornos Marta, Department of Environment, Municipality of Barcelona

Ljungkvist Hanna, IVL Swedish Environmental Research Institute

Walmsley Neil, C40

Goncalves Francisco, Lisboa E-Nova - Lisbon Energy Agency

Kelemen Pepeonik Valerija, Zagreb

Bidzinska Agnieszka, EPP Group in the Committee of the Regions

Trumbic Tamara, UNDP Croatia

Puđak Jelena, Institute of Social Sciences Ivo Pilar

Parenteau Mathieu, Quebec Government Office

Dematera-Contreras Kathleen, Clean Air Asia

Tomašević Tomislav, Heinrich-Böll-Stiftung Croatia

Jeras Goran, Ethical Bank Croatia

Berrini Maria, Agenzia Mobilità Ambiente Territorio

Pidoux Blandine, Energy Cities

Papetti Marta, Agenzia Mobilità Ambiente Territorio

Race Bruce, Ball State University

Fornaro Riccardo, A2A Energia

Asseline Frederic, GIZ Office China

Imberti Luca, Istituto Nazionale di Urbanistica Lombardia

Cerutti Alessandro, Joint Research Centre

Malgieri Patrizia, TRT Trasporti e Territorio