



RESPONSE

Integrated Solutions for Positive Energy
and Resilient Cities

Integrated Solutions for Positive
Energy and Resilient Cities

D10.3

RESPONSE activities connecting with EU projects & initiatives - V1



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Glossary

Abbreviation	Full form
CERTH	The Centre for Research & Technology, Hellas
CINEA	European Climate, Infrastructure and Environment Executive Agency
DM	Dijon Metropole
EC	European Commission
EU	European Union
H2020	Horizon 2020 Programme
LHC	Lighthouse City
PED	Positive Energy District
RINA	Registro Italiano Navale
SCC	Scalable Cities
SCM	Smart Cities Marketplace
SME	Small and medium-sized enterprises
SPI	Sociedade Portuguesa de Inovação
TG	Task Group

Executive Summary

The deliverable D10.3 – RESPONSE activities connecting with EU projects & initiatives - V1, is an output of the task T10.3 – Connecting to Smart City projects at EU level (SCC/H2020) for TA#1-TA#5 towards integrated planning policy, regulation and procurement.

RESPONSE actively seeks synergies with other relevant EU initiatives and projects to foster collaboration and share best practices. This document provides a comprehensive overview of RESPONSE's networking endeavours aimed at fostering synergies and collaborations with several H2020-funded projects and outlines the participation and insights gained by RESPONSE's partners in events organised by different entities such as other Scalable Cities (SCC) projects, the Board of Coordinators, SCALE Secretariat and the Smart Cities Marketplace (SCM), during the forty-two-month period of the project.

Specifically, it outlines the concerted efforts directed towards engagement with projects represented within the SCM. Lastly, it consolidates the devised marketing strategies and activities essential for nurturing and expanding the RESPONSE Community.

Scalable Cities delivers extensive, enduring assistance to the Lighthouse projects engaged in the Horizon 2020 Smart Cities and Communities Lighthouse Group. Scalable Cities fosters networking among all project stakeholders, directing them towards widespread replication across Europe. As a result of these activities, it elevates the effectiveness and impact of the Smart Cities and Communities Group.

The current document (D10.3) is a public deliverable, addressed to all RESPONSE target groups and it represents the first of two versions and the final version D10.11 – *RESPONSE activities connecting with EU projects & initiatives – V2* will be developed and submitted in M60.

1. Chapter 1 – Introduction

RESPONSE actively seeks synergies with other relevant EU initiatives and projects to foster collaboration and share best practices. To this goal, RESPONSE collaborates with other H2020 SCC projects, the SCALE secretariat and the SCM to share knowledge and experiences with peers and to share resources to maximise the impact of the project Innovation Solutions and outcomes. RESPONSE participates in the online meetings of the different SCM Task Groups (TGs). These groups meet regularly in online meetings to plan and implement joint activities.

1.1 The Smart Cities Marketplace and the SCALE Secretariat

Led by cities, the SCC is an initiative aiming to foster collaboration among stakeholders, policymakers, industries, researchers, and citizens. In partnership with the European Commission (EC) and the European Climate, Infrastructure and Environment Executive Agency (CINEA)¹, SCC provides large-scale, long-term support for the 124 unique cities, 20 projects, 52 Lighthouse Cities (LHCs) and 82 fellow and multiplier cities involved in the Horizon 2020 Smart Cities and Communities Lighthouse Group. The Smart Cities and Communities lighthouse projects receive funding from the EC under the Horizon 2020 research and innovation program to showcase scalable and replicable solutions and business models. Created with the aim of fostering unity among all project stakeholders and facilitating networking, SCC plays an important role in guiding them towards replicating successful initiatives across Europe. By enhancing collaboration and coordination, SCC contributes to elevating the performance and significance of the Smart Cities and Communities Group as a whole. These initiatives aim to deliver tangible benefits in terms of energy and resource efficiency, while also fostering the creation of new markets and jobs.

The SCM², supported by the EC, is a significant initiative that brings together cities, industries, SMEs, investors, researchers, and other key players in the smart city realm. It aims to support the acceleration of the green transition of European cities with the mission of enhancing citizens' quality of life, bolstering the competitiveness of European cities and industries, and advancing Europe's energy and climate objectives. This platform provides valuable insights into European smart city best practices, enabling the exploration of approaches suitable for your specific smart city project. Furthermore, the Marketplace serves as a community of experts who can assist in shaping your project, preparing your plan and business case for financing, and presenting it to potential investors.

In synergy with existing EU initiatives³, the Marketplace offers different services, including opportunities such as calls for free technical assistance, personalized 1-to-1 consultancy services for city-led consortia nearing the financing stage, financing masterclasses, and finely-tailored matchmaking for urban project funding.

Finally, SCALE is the Secretariat of the Smart Cities & Communities Lighthouse Group, providing large-scale and long-term support for cities and projects involved in the H2020 SCC Lighthouse Group.

¹ https://cinea.ec.europa.eu/index_en

² <https://smart-cities-marketplace.ec.europa.eu/>

³ REPowerEU - https://ec.europa.eu/commission/presscorner/detail/en/ip_22_3131

2. Chapter 2 – The Cross-SCC projects cooperation

The European Smart Cities and Communities initiative is one of the largest and most comprehensive Smart Cities research and development programs to date. Since 2015, a total of 120 cities and 515 project partners have piloted and implemented more than 550 solutions and projects in the calls of the Smart Cities Lighthouse projects. These projects leveraged over €1 billion in investments, additionally to 420m € Horizon 2020 co-funding. The know-how from eight years SCC Lighthouse implementation also led to a noticeable contribution to the current “Climate-Neutral and Smart Cities” programme under the EU’s new work program Horizon Europe (2021-27); More than 50 of the current 120 “Climate Neutral and Smart Cities” had already participated in the SCC Lighthouse Initiative.

RESPONSE has collaborated closely with other H2020 SCC projects, the SCALE secretariat, and the SCM and has participated in several joint initiatives. This cooperation allows the exchange of experiences and knowledge between other SSC projects and Lighthouse Cities, receive peer feedback, and insights that can support the project progress and implementation and optimize the outcomes. This collaboration has been done through participation in the regular online Task Groups (TGs) meetings such as the of the Board of Coordinators (EIFER), and the TG on Replication (Dijon City, Turku City and Brussels City), TG on Communication & Dissemination (DM and SPI), TG on Business Models and Finance (RINA) and TG on Monitoring and Evaluation (CERTH).

2.1 The Board of Coordinators - City Coordinators Group (CCG) Task Group

The Board of Coordinators or City Coordinators Group (CCG), monitors the activities of SCC and is assisted by the SCALE Secretariat, which also functions as the primary contact for all inquiries. The CCG convenes cities to tackle specific challenges and foster collaborative design of shared solutions. In 2024, the primary aim of the Group is to facilitate knowledge sharing and exchange. The CCG meet three times per year, alternating between in-person meetings and online sessions. Each meeting is centred around a priority topic identified in previous discussions. Moreover, every CCG member gains access to a repository housing materials and presentations. Additionally, they receive regular emails providing updates on funding and other pertinent opportunities.

The Board of Coordinators define the priorities to be implemented by the different TGs. These TGs are composed of representatives from Smart Cities and Communities projects and usually meet monthly to exchange and discuss ideas. Currently, there are 5 TGs active. EIFER, serving as the coordinator of RESPONSE, is a member of the City Coordinators Group Task Group and actively participates in the monthly meetings.

2.2 Replication Task Group

The Replication Task Group actively engages with cities, pertinent actors, and stakeholders beyond the demonstration areas. The main goal is to promote the technologies and solutions showcased in Smart Cities and Communities projects, facilitating their replication and adoption on a broader scale.

The two RESPONSE lighthouse cities - Dijon and Turku - as well as Brussels City, as the fellow cities’ coordinators participate in this Task Group's regular meetings.

2.3 Communication and Dissemination Task Group

The Communication and Dissemination Task Group is focused on planning and executing joint communication and dissemination initiatives. Its core objectives include crafting communication and promotional toolkits, orchestrating joint participation in significant events, and implementing cohesive communication strategies. Furthermore, the group is tasked with identifying key messages and disseminating project results and data effectively.

RESPONSE participates in monthly meetings, in which 2 partner organisations attend these regular meetings: DM is responsible for WP10 – *Extending outreach for Smart and Connected Communities and Cities*, and SPI is responsible for WP11 – *Project Communication, Dissemination and Exploitation*.

RESPONSE benefits from this collaboration with TGs, allowing it to enhance the promotional impact and reach a wider audience through the organisation of joint participation in external events, receiving support from other projects to the dissemination of RESPONSE activities and events (webinars, workshops and other events) coverage in SCC newsletters, resharing posts on social media, and joining forces to the overall impact.

2.4 Business Models and Finance task Group

The focal point of the Scalable City expert assessment, "State of the European Smart Cities – Innovative Business Models and Financing Schemes," was to identify, understand, and showcase potential business cases and financing schemes within the Lighthouse Program particularly focusing on Positive Energy Districts (PEDs). Further emphasis was placed on comprehending the value and service chains, challenges, requirements and potential avenues and vehicles for upscaling and commercialization.

The essence of a "smart" Positive Energy District lies in tailoring it to a specific city's framework conditions, "local fabric" and needs of stakeholders. It requires a meticulous process consisting of many solutions rather than an off-the-shelf product. An important step was to identify the basic elements then highlighting the importance of connectivity and interoperability of the district e.g. by applying AI based management systems, urban data platforms and service and operation models.

The assessment showed that the focus of cities is often directed towards operational aspects, including financing and value creation, rather than business models, market readiness and profits. At the same time a strong focus on business modelling and bankable cases is essential to successfully upscale and roll-out the piloted solutions and to attract private "post grant" investments. The piloting gap between the piloting phase towards operating and upscaling the solutions was identified as one of the major challenges to the Lighthouse and Smart City projects (see graphic below). Highlights and insights from many years of project implementation are described in detail within eleven smart city "signature cases" also addressing the journey towards upscaling and commercialisation.

Some of the key findings were:

- Mind the Piloting Trap: Cities emphasize value creation & operations rather than profits and business models;
- Smart and positive energy districts are not a product you can buy, it is a process that needs to be built and serviced;
- The Interoperability of solutions and products requires service and operation models;
- Cities need to moderate and intermediate local innovation eco-systems and collaborations and set innovation frameworks;
- Lost in Translation: Cities need to build and include expertise, capacity and common language with businesses and investors;
- Cases create significant impact for cities & risk reduction for business but lack impact on commercialisation.

To conclude, there is a Necessity of Financial and Organizational Vehicles and service models which require a joint effort and common understanding. Lighthouse cases pave and lead the way providing excellent examples on how to address the value chain towards upscaling. "Unlocking" the real potential and assets of smart city projects requires the sharing of (process) learnings and cases between national, European and international municipalities and programs such as the German Program "Smart Cities Made in Germany" (MPSC).

For RESPONSE the following BMs were selected to be included in the SCC report:

- PED Energy Management tool box and AI based optimization - Smart Infrastructure and management including AI based prediction and optimisation end energy community for RE self-consumption;
- Heat as a service model including storage in buildings - RE generation within student village from wastewater and PV, thermal storage and smart energy management development of a full-service model;
- Air Quality Sensor - Assessment of air quality sensors as well as value and use cases of the data.

RESPONSE represented by RINA participates in the regular meetings of the Business Models and Finance Task Group.

2.5 Monitoring and Evaluation Task Group

The Monitoring and Evaluation Task Group is responsible for gathering practical data, establishing monitoring and reporting procedures and tools, and formulating impact assessment methodologies. Additionally, the group facilitates the exchange of data collection practices, interfaces with control systems and databases, and develops algorithms for dataset cleaning and dissemination tools. It also fosters peer-to-peer learning initiatives and collaborates with external experts to enhance its capabilities.

RESPONSE represented by CERTH participates in the TG on Monitoring and Evaluation. This TG facilitates the cross-project collaboration of the organisations responsible for monitoring and evaluating each SCC project.

In October 2021, RESPONSE (CERTH) presented the USE framework that was co-developed by the POCITYF and the RESPONSE projects in the monthly SCC Monitoring & Evaluation TG meeting. The presentation was titled “A Uniform Smart City Evaluation (USE) framework to assess the energy transition status of cities: needs, methodology and steps forward towards implementation”.

In September 2022, RESPONSE (CERTH) presented the VERIFY tool that was co-developed by the POCITYF and the RESPONSE projects in the monthly SCC Monitoring & Evaluation TG meeting. The presentation was titled “VERIFY: An online platform for holistic Life Cycle Assessment and Costing in Energy Systems”.

3. Chapter 3 – Joint activities implemented

3.1 Joint participation in external events

As already mentioned above, RESPONSE participates in monthly meetings of the Communication and Dissemination TG aimed at planning and jointly organise SCC projects' participation in relevant events, webinars, and workshops. The objective is also to be updated on each project's individual activities and support the projects' dissemination by sharing invitations to webinars and similar events, coverage in SCC newsletters, resharing posts on social media, and joining forces to the overall impact. Below is a list of all joint events in which RESPONSE participated.

3.1.1 Energy Cities 2022 Annual Forum, 21-22 April 2022

The Energy Cities annual conference, "Grafting Cities", is dedicated to the Energy Cities'⁴ members and to European cities that want to accelerate their transition, through the art of grafting. Dijon Metropole (DM) organised and hosted the RESPONSE Workshop on Positive Energy Districts (PEDs) development in the framework of Energy Cities' 2022 annual forum. The lighthouse city of Turku and the fellow city of Brussels also attended the forum.

3.1.2 Join Smart Cities Marketplace Forum, Brussels, 26-27 April 2022

The European Innovation Council was organised by the SCM Forum in partnership with the Covenant of Mayors Office. The event took place on-site, between 26 - 27 April 2022 in Brussels. The objective of the SCM Forum is to share knowledge and challenges, and to explore best practices for fostering collaboration between public and private partners, as well as effective models for managing risks. This will be facilitated through the Matchmaking mechanism of the Marketplace, leveraging primarily private financing, in addition to complementing and bolstering EU instruments. Jean-Patrick Masson (vice president of Dijon Metropole) presented RESPONSE in a session about city governance.

3.1.3 ASHRAE "Building Decarbonization 2022 Conference", Athens, 5-7 October 2022

The "BUILDING DECARBONIZATION 2022" International Conference aimed to gather engineers, architects, academics, and other professionals and stakeholders dedicated to advancing the state-of-the-art in the built environment. This event, organized by the ASHRAE Task Force for Building Decarbonization (TFBD) in partnership with the Hellenic Chapter, provides a platform for collaboration and innovation in addressing the pressing challenges of decarbonizing buildings. The National Technical University of Athens (NTUAS) participated and represented RESPONSE in this event together with other H2020 SCC projects, taking part in activities organised jointly with these other projects.

3.1.4 EU Week of Regions and Cities, 11 October 2022

The European Week of Regions and Cities is an annual event organized so that cities and regions can demonstrate their ability to stimulate growth and employment, implement European Union cohesion policies, and show the relevance of the local and regional level in fostering effective European governance.

During this event, Dijon Metropole together with EDF and Brussels City organised and hosted an online workshop – A fair energy transition: developing PEDs in deprived areas. The workshop aimed at demonstrating the

⁴ <https://energy-cities.eu/>

RESPONSE PED projects in the Fontaine d’Ouche district in Dijon and in the Northern Districts of Brussels, as partner cities in the framework of the H2020 project RESPONSE. The workshop focused on the social aspect and the integration of territories in the energy transition and held great discussions about energy solutions.

The online workshop was organised by Dijon Metropole, City of Brussels and EDF Energy France. The speakers Sarah Bello and Jean-Patrick Masson from Dijon Metropole, Fabian Maingain from the City of Brussels, and Eric Tourte from EDF Bourgogne Franche Comté, participated in this event as partner cities in the framework of the Horizon 2020 project RESPONSE. Lea Kleinenkuhnen, RESPONSE project coordinator in Brussels, moderated the event.

3.1.5 Smart City Expo World Congress (SCEWC) 2022, Barcelona, 15-19 November 2022

The Smart City Expo World Congress stands as the premier global event dedicated to urban innovation, boasting the title of the largest and most influential gathering of its kind. The objective of this event is to unite visionaries from leading companies, governments, and organizations, fostering collaboration and driving cities toward a brighter future. Several RESPONSE partners’ organisations attended the event and participated in the joint booth with all SCC projects involved. The project coordinator EIFER attended the event and presented RESPONSE in different sessions. The City of Turku, VTT, City of Zaragoza and Dijon Metropole also participated in the event.

3.1.6 Scalable Cities Joint event, Valencia, 29-30 March 2023

The SCC communities gathered in Valencia for a two-day summit, emphasising the scaling up of solutions, technologies, and methodologies. More than 500 innovations were showcased, drawn from 18 Smart Cities and Communities projects. These initiatives aimed to deliver impactful solutions pertaining to energy and mobility, spanning both district and city scales. RESPONSE partners City of Turku, City of Brussels, RINA and ICPE Romania participated in the event.

3.1.7 Kick-off Meeting of the Horizon Europe funded ASCEND project, 2 October 2023

Participation of RESPONSE in the Kick-off meeting of the Horizon Europe-funded ASCEND project. During the event, RESPONSE was presented by Hadrien Rouchette from Dijon Metropole in a dedicated session, co-organised by the SCC.

3.1.8 EU Week of Regions and Cities event, Brussels, 9-12 October 2023

As part of the European Week of Regions and Cities held in Brussels from 9 to 12 October, RESPONSE partners (TUAS and the city of Brussels) participated in Agora and Booth sessions and organised a workshop to discuss the project’s contribution to a fair energy transition.

The energy transition should be reachable for everyone. Most PEDs are implemented in new or recent neighbourhoods, where the population is rather well off and already aware of climate change. However, in the H2020 RESPONSE project, the cities of Turku and Dijon are setting up major collective self-consumption operations in areas where people with specific challenges live: a deprived city district in Dijon and a student village in Turku.

The session highlighted the experience of Dijon and Turku with citizen engagement and empowerment. Georg Houben from EC also participated in the session, to establish the link between the EC’s strategy on these issues and its practical application at a local level through SCC projects. With the participation of Georg Houben, it was also an opportunity to talk about Europe’s support for the local climate transition, through its funding programmes, the SCC community and many other initiatives.

The event was an opportunity for disseminating the lessons learned from RESPONSE resident engagement activities and reflecting with the EC representative for future funding and scaling-up opportunities.

3.1.9 Smart City Expo World Congress (SCEWC) 2023, Barcelona, 7-11 November 2023

From the 7th to 11th of November 2023, RESPONSE and SCC projects participated jointly in the Barcelona Smart City Expo World Congress, together with more than 30 initiatives of the EC. This annual event gathers in Barcelona leaders from pioneering companies, governments and organisations for an event dedicated to cities and urban innovation. The objective was to foster global collaboration in urban innovation and equip cities to confront the needs of the energy transition.

3.2 Joint Marketing Campaigns - Video

During an in-person meeting at the Smart Cities Expo World Conference in November 2022, held in Barcelona, discussions on the Communication and Dissemination Strategy for 2023 for the Joint SCC community of projects underscored the importance of a unified visual campaign. This campaign would effectively present project outcomes and solutions, and address the need for on-the-ground communication while facilitating sharing across European cities.

The Communication TG explored various promotional activities and planning for 2023. Out of these discussions emerged the idea of a video campaign, seen as a feasible approach for collaboration among ongoing SCC projects seeking to showcase their work and activities within their respective cities and districts.

The primary objective of this joint video campaign was to demonstrate the impact of deployed solutions on citizens. The Communication TG team has established an overarching theme: “What are the SCC projects accomplishing in their cities and neighbourhoods?” These joint videos aimed also to promote the solutions among other stakeholders, show a “from citizen to citizen” point of view and engage local citizens and other stakeholders in further development of these project solutions. Due to the diverse nature of the SCC projects and the scope of work they are doing, the TG decided not to create a joint script but follow a common format.

Despite the short deadline to produce the videos, some projects and cities recorded the videos. Unfortunately, due to authorization issues on the part of the EC, it was not possible to use these videos in the format initially designed. However, RESPONSE published the videos on the project website, as well as on the YouTube channel in order to promote the implemented activities.

4. Chapter 4 – Conclusion

Since the inception of the project, RESPONSE has intensified the collaboration efforts with other SCC projects and the SCM. As RESPONSE progresses through its implementation phase, the chance to engage with other LHCs and share insights regarding processes, technologies, regulatory hurdles, and other lessons learned proves to be incredibly valuable.

This collaboration has allowed the sharing of knowledge and fundamental experiences to overcome the difficulties sometimes encountered during the implementation of the project. In the next period, RESPONSE will continue to actively participate in the TGs meetings as well as in all joint activities organised within the scope of this collaboration.



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