

SPARCS

D6.11 Report of Cooperation with Networks of Cities or Sectors

30/09/2022

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Description of the related task and the deliverable. Extract from DoA	<p>T6.4 interaction with regional and local smart city initiatives (GOPA Com., VTT, ESP, LPZ, CMM, RVK, KLD, KFS, LVIV, KONE, SIE, PIT, CIT, RIL, ADV, WSL, LSW, CEN, NEW, CVUT, NECU, LCE and CiviESCO) [M1-M60]</p> <p>The task commits to strong interaction with initiatives such as the MorgenStadt Network and Nordic Edge cities. Given the enormous dissemination and multiplication potential that the smart cities' networks have, SPARCS would like to be a more active member of the collaborative platforms and networks from the start. In terms of communication (more in WP8), the commonly coordinated activities include a presence at joint events, joint workshops, mutual exchange of visibility and shared communication tools, as well as other joint tools such as newsletters. These activities will enable the SPARCS Project as well as its member cities to exchange information and experiences with other cities and initiatives under a different umbrella (e.g. nature-based solutions, regional or local initiatives), and therefore could contribute to enhancing innovation and acceleration of replication.</p> <p>T6.5 Networking and participatory knowledge exchange and learning (GOPA, ESP, LPZ, CMM, AdEPorto, RVK, KLD, KFS, LVIV, BABLE, SPI, NEW, CVUT, VERD, NECU, CiviESCO) [M1-M60]</p> <p>The objective is to facilitate the networking and knowledge exchange between SPARCS cities and other Lighthouse project cities (77+) and cooperate with WP7 on the exploitation of existing networks and initiatives. Target is not only to cooperate only on project level, but rather to establish a direct relationship among the individual cities, both LHC and FC of the H2020 SCC1.</p> <p>This deliverable is a report of cooperation with networks of cities or sectors and provides a summary of the different activities organised in cooperation with various networks and platforms; particularly on the regional and local levels.</p>		
Participants	GOPA Com., VTT, all other partners as contributors		
Comments			
V	Date	Authors	Description
0.1	31/08/22	VTT	Revision
0.2	12/09/22	CVUT	Review of deliverable
0.3	26/09/22	VTT	Revision of deliverable



0.4	29/09/2022	WP leader	Deliverable checked by WP leader and released to the Coordinator and the Quality Manager for quality check and subsequent submission to the EC.
1	30/09/22	VTT	Coordinator submits the deliverable to the EC

Dissemination level

PU	Public	PU
CO	Confidential, only for members of the consortium (including the Commission Services)	



About SPARCS

Sustainable energy Positive & zero cARbon Communities demonstrates and validates technically and socio-economically viable and replicable, innovative solutions for rolling out smart, integrated positive energy systems for the transition to a citizen-centred zero carbon and resource efficient economy. SPARCS facilitates the participation of buildings in the energy market, enabling them to take advantage of new services such as the virtual power plant concept. SPARCS will create VirtualPositiveEnergy communities as democratic energy playgrounds (positive energy districts can exchange energy with energy entities located outside the district). Seven cities will demonstrate 100+ actions turning buildings, blocks and districts into energy prosumers. Positive impacts include economic growth; improved quality of life; and environmental benefits towards the EC policy framework for climate and energy, the SET plan and UN Sustainable Development Goals. SPARCS brings together citizens, companies, research institutions, urban planning offices and decision-making entities to bring about the transformation of cities to carbon-free inclusive communities. Lighthouse cities such as Espoo (FI) and Leipzig (DE) will implement large demonstration initiatives under the project. Fellow cities Reykjavik (IS), Maia (PT), Lviv (UA), Kifissia (EL) and Kladno (CZ) will prepare replications with hands-on feasibility studies. SPARCS will identify bankable solutions that will accelerate market uptake; and pioneer innovative, exploitable governance and business models that will boost transformation processes, joint procurement procedures and public participation mechanisms in an overarching city planning instrument that will ultimately achieve the bold City Vision 2050. SPARCS engages 30 partners from 8 EU Member States (FI, DE, PT, CY, EL, BE, CZ and IT) and 2 non-EU countries (UA, IS). The partners represent key stakeholders within the value chain of urban challenges and smart, sustainable cities, bringing together three distinct but also overlapping knowledge areas: (i) City Energy Systems, (ii) ICT and Interoperability, and (iii) Business Innovation and Market Knowledge.

Partners



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EXECUTIVE SUMMARY

Fostering and maintaining strong connections with various initiatives and platforms has always been key to the success of SPARCS. From shared communication activities to individual exchanges with other networks of cities and sectors, this collaboration is pivotal to fostering innovation, boosting knowledge exchange and accelerating replication potential. Coordination of common activities and shared communication efforts help find synergies across projects and networks with the aim to connect, identify relevant expertise and contribute to the overarching objective of promoting smart urban areas.

This report summarises the most relevant cooperation with regional and national networks under T6.4 and also presents the networking and participatory knowledge-sharing activities under T6.5. SPARCS has established strong ties with a large number of networks and projects. This rigorous involvement provides visibility to SPARCS in terms of coordinated activities related to events and communication, solution development, implementation and replication.

This report will be further updated in M60 as a *D6.12 Report of Cooperation with Networks of Cities or Sectors - updated version*.



1. INTRODUCTION

1.1 Purpose and target group

This deliverable is generated by T6.4 and T6.5. While the former commits to solid interaction with smart city initiatives on a regional level – for example the MorgenStadt Network and Nordic Edge cities, the latter facilitates the networking and knowledge exchange between SPARCS cities and other Lighthouse Project cities.

SPARCS is an active member of the collaborative smart city platforms and networks, and leverages their significant dissemination and multiplication potential. Recently in March 2022, three SPARCS cities (Espoo, Leipzig and Reykjavik) joined to **the 100 Climate Neutral and Smart Cities Mission**. Communication activities, as governed in WP8, involves commonly coordinated activities such as a presence at joint events, joint workshops, mutual exchange of visibility, and shared communication tools such as newsletters. These activities enable SPARCS and its member cities to exchange with other cities and initiatives. As such, SPARCS participates in mutual exchanges, provides input for other SCC project communication tools, attend sister-project workshops and conferences, and ensures broader collaboration on shared activities and tools. Hence, lessons learnt and best practices are shared across various local, regional and city-specific networks to enhance innovation and accelerate replication.

This report looks at individual actions by SPARCS consortium partners that contribute to achieving the above-mentioned goals.

1.2 Contributions by partners

Table 1. Contributions by partners to this deliverable.

Partner	Contributions
GOPA Com.	Editor of the deliverable. Content planning, summarising inputs from partners, contribution to the content
CVUT	Contribution to the content, quality check of the deliverable
VTT	Contribution to the content, quality check of the deliverable
All other partners	Confirming activities



1.3 Baseline

As stated in D6.8 and D6.9, the existing networks of the partners were identified at the launch of SPARCS. High priority was given to contacting and cooperating with the ones most directly relevant to our projects' overall targets.

Navigation and organisation of the information flow between all the individual partners and work packages was simplified by excellent coordination work, which also ensured that requests have been handled flexibly and reactively. Coordination also facilitated work at a more granular (city) level, matching technical expertise with other technical experts from among these many initiatives. While D6.11 focuses predominantly on regional and national cooperation with networks, an exhaustive list of all cooperation efforts is presented in D6.9 (M24 – M36).

1.4 Relations to other activities

This report will be updated regularly according to the progress of the cooperation activities and released M60. This deliverable has links with the following activities:

- Task 6.2 → elaborating and consolidating joint recommendations based on the defined cross-cutting issues;
- Task 6.3 → contributing to relevant policy-making and developing cooperation with relevant initiative and horizontal cross-cutting initiatives;
- D6.1 → presenting the coordination of collaboration efforts;
- D6.2 → presenting the Collaboration Task Force and outlining individual memberships in initiatives for H2020 SCC1 among others;
- D6.3 → focusing on fostering collaboration with horizontal cross-cutting and policy-making initiatives in the areas where there is the highest learning potential;
- D6.4 → cooperation handbook presenting the activities of the Lighthouse Project and Fellow Cities cooperation including working groups and platform results;
- D6.9 is presenting a comprehensive overview of the cooperation with all other EU initiatives, regional and local initiatives;
- WP8 Dissemination and Communication; and
- Overall cooperation with SCC1 Lighthouse City Projects (under Scalable Cities).



2. COOPERATION OF NETWORKS WITH CITIES AND SECTORS

Regional collaboration by partners is continuously developing and strengthening within SPARCS. These cooperation activities play an important role in knowledge exchange as well as in the dissemination of SPARCS activities and results.

2.1 Overview of regional cooperation with networks

The initiatives have been revised in August 2022 and newer ones will be added in the coming months.

Table 2: Regional ambassadors

Initiative	Type	Task	Organization(s)
RNAE (National network for all energy agencies) (Portugal)	Regional	6,4	AdEPorto
SMS - Association of Local Administrations (Czech Republic)	Regional	6,4	CVUT
CZGBC (Czech Green Building Council) (Czech Republic)	Regional	6,4	CVUT
SEMMO (Municipal Energy Managers Association) (Czech Republic)	Regional	6,4	CVUT
6aika. Six City Strategy – Open and Smart Services 2014–2020 (Finland)	Regional	6,4	Espoo
Finland's Lighthouse and Fellow cities Group	Regional	6,4	Espoo
Kaupunkiakatemia / Urban Academy	Regional	6,4	Espoo
Sustainable City (Greece)	Regional	6,4	Kifissia
Association for Sustainable City Development (SBAA) (Greece)	Regional	6,4	Kifissia
Union of Towns and Municipalities of the Czech Republic (Czech Republic)	Regional	6,4	Kladno
Energy Community Platform (Czech Republic)	Regional	6,4	Kladno
Energy Efficient Cities of Ukraine (Ukraine)	Regional	6,4	Lviv
Visegrad+ Network of Urban Labs (Hungary, Poland, Czech Republic, Slovakia, Ukraine, Armenia, Georgia)	Regional	6,4	Lviv
Mayors for Economic Growth (Ukraine, Georgia, Azerbaijan, Armenia, Belarus, and Moldova)	Regional	6,4	Lviv
Association of Ukrainian Cities (Ukraine)	Regional	6,4	Lviv
UkrElectroTrans Corporation	Regional	6,4	Lviv
ANMP – Associação Nacional de Municípios Portugueses (National Association of Portuguese Municipalities) (Portugal)	Regional	6,4	Maia
Eixo Atlantico (Portugal, Spain)	Regional	6,4	Maia
RAP – Rede de Autarquias Participativas – Portuguese Participatory Municipalities Network (Portugal)	Regional	6,4	Maia



CEE Bankwatch Network (Central and Eastern Europe)	Regional	6,4	NECU
Nordic Smart City Network (Nordic countries)	Regional	6,4	Reykjavik
SUSTAINORDIC, Sustainable Construction Materials and Architecture	Regional	6,4	Reykjavik
NTNU Smart Sustainable Cities competence cluster (Norway)	Regional	6,4	RIL
Energiemetropole Leipzig - Network on regional energy actors in the Middle Germany (Germany)	Regional	6,4	Seecon
Smart Waste Portugal Cluster (Portugal)	Regional	6,4	SPI

2.2 SPARCS Cities – collaboration with regional and local smart city initiatives

Regular, proactive collaboration is being maintained with Scalable Cities, IEA Annex 83, COST Action on PEDs. Regional exchanges of knowledge, coordination and joint organisation of events and workshops and campaigns are also ongoing with the aim to support replication. Continuous mapping of regional activities and local initiatives aims to gather local exchanges and input and share respective knowledge on the local and regional levels. Regional cooperation takes the form of events, webinars and knowledge exchange activities. This section includes highlights from October 2019 – September 2022.

SPARCS created an **event participation and event tracking package** to assist project partners in optimising planning, participation and subsequent reporting on events, webinars and workshops. A **dedicated section on the SPARCS website** was created in order to facilitate regional cooperation, knowledge sharing and engagement amongst project and initiatives. This section is constantly being populated with new events, webinars, workshops and joint activities, and will be expanded further to enable direct city-to-city exchange.

Due to the pandemic, many events, workshops and exchanges in 2019 and 2020 in particular were cancelled or postponed without further notification. Following the series of lockdowns in Europe as of March 2020, many of the events have been cancelled or moved online.

Nonetheless, SPARCS coordinated a workshop during European Sustainable Energy Week (EUSEW) 2019. In addition, SPARCS was introduced at the **Barcelona 2019 Expo** as a part of the H2020 Lighthouse initiatives, and participated in many of the on-site workshops and activities. GOPA Com. coordinated the efforts for participation in Barcelona 2019 Expo, introduced project partners to the Expo, moderated workshops



and sessions, and ensured that information on SPARCS was properly displayed and represented.

SPARCS partners (VTT and GOPA Com.) coordinated, designed and planned an online **P2P workshop** with POCITYF that took place during the EIP-SCC General Assembly and coincided with the URBIS Conference in Brno (03.09.2020). Utilising the newest online workshop tools, altering between panel sessions and PetchaKutcha storytelling and collaborative sessions, the workshop showcased a full range of P2P applications in smart cities, and presented many SPARCS aspects to other H2020 project partners and stakeholders. In addition, SPARCS also organised a **citizen engagement webinar** together with WP5 (FHG) and other H2020 projects (20.07.2020). Moreover, SPARCS organised an **online workshop with the EU Mission Board** on *Citizen engagement practices towards climate neutrality* together in collaboration with RIL (24.03.2020).

2.2.1 Espoo

- ❖ Espoo's representatives presented SPARCS during the online version of **Nordic Edge 2020**. Elina Wanne, SPARCS Project manager for the City of Espoo, participated in two separate sessions of Nordic Edge 2020: 'The Resilient and Sustainable City' and the '[EIP-SCC on a Mission](#)' panel discussion about becoming a Smart City. She underlined that Espoo through support from SPARCS focuses on creating sustainable, positive energy districts (PEDs), and cultivating e-mobility and new ways of citizen engagement.
- ❖ Espoo's commitment to the **Covenant of Mayors 2020** advanced the city's position as a pioneering city for the UN Agenda 2030 and set the Espoo demonstration projects and SPARCS results on the global map. SPARCS and Espoo's actions are part of the development programme '**Sustainable Espoo**¹', involving all departments in the local administration. The objective of this programme is to implement actions towards the **carbon-neutrality by 2030**, including fossil-free district heating.
- ❖ SPARCS was introduced at the 'Electromobility Integration in the Energy Systems' session at the **ETIP SNET Regional Workshop** (21.04.2021).
- ❖ Participation in the PED City Panel Workshop arranged by JPI Urban Europe (November 2021);
- ❖ Espoo hosted the forward-looking Espoo annual conference **Eurocities 2022** in June 2022. While the Eurocities Network is cross-cutting (horizontal) in essence, it

¹ http://www.espoo.fi/en-US/City_of_Espoo/Decisionmaking/The_Espoo_Story/Sustainable_Espoo



occupies a pivotal role with regard to city-to-city interaction. Eurocities provided an opportunity to present SPARCS at a large-scale international conference with a large visitor base. The important themes of the event included youth participation, joint development and the leadership of cities in the fight against climate change. The title of the conference was 'An Era of New Beginnings, Dream–Act–Lead–Together'.

Four SPARCS co-creation workshops were organised during the week on the following topics: 1) New European Bauhaus: co-creating inclusive, aesthetic and sustainable cities; 2) Cultural sustainability – co-creating innovative and creative cities; 3) Economic Sustainability – co-creating sustainable growth in cities and 4) Social Sustainability – co-creating inclusive cities for all. Representatives from the City of Espoo led the New European Bauhaus (NEB) co-creation workshop that featured a SPARCS-based challenge '*How to scale up local renewable energy production in the urban environment?*'. In addition, a representative from VTT led the workshop on cultural sustainability under the challenge '*How can culture, especially through citizen involvement, be an accelerator for climate neutrality in cities and metropolises?*'? Project members from VTT, FHG and Espoo showcased SPARCS in the exhibition hall at a specifically dedicated stand.

- ❖ Espoo participated in the **Environmental Forum** 'Changing our Behaviour for the Good of the Planet' in Grenoble, France (2022 European Green Capital) (April 2022). This enabled dissemination of SPARCS actions towards other European cities and learning new best practices.
- ❖ As part of the **ICLEI Network**, Espoo took part in its World Congress in Malmö, Sweden in May 2022. This event provided another opportunity to share SPARCS experiences.
- ❖ Participants from Finnish Lighthouse regularly meet to discuss current happenings. In April 2022, a **Mobility Hub Workshop** was organised to discuss mobility in the Nordics and how to align it with the 2050 framework. This resulted in new insights regarding challenges in different cities and projects, including energy communities. These topics are also aligned with the work of SPARCS. Collaboration with other Finnish Lighthouse projects has been ongoing, and has provided a convenient channel to transfer information and arrange collaborative dissemination events.
- ❖ Espoo is active in the following regional networks: 6aika, Six City Strategy – Open and Smart Services 2014–2020 (Finland), Finland's Lighthouses and Fellows Group, Kaupunkiakatemia / Urban Academy



2.2.2 Leipzig

Leipzig is a partner in the federal German ‘**Connected Urban Twins (CUT) Project**’ which aims to develop innovative applications for urban development and citizen engagement (January 2021 – 2025). As SPARCS and CUT share some common topics, especially around district energy data, Leipzig is working to create synergies between both projects. The development of a digital twin in Leipzig can benefit the objectives of SPARCS, while SPARCS actions can potentially contribute towards CUT’s objectives.

2.2.3 Maia

Maia encouraged its citizens to take action for sustainable mobility during European Mobility Week 16-22 September 2022. Mayor António Silva Tiago; Mário Nuno Neves, the Councilor for Transport and Mobility; and Marta Peneda, the Councilor for Quality of Life, Environment, Climate and Energy participated from the municipality. Maia used the event to announce its plans to launch a system of **public transport on demand** in its territory and a youth competition for ideas to identify challenges, proposals, projects and concepts that contribute to a more sustainable and efficient mobility.

Maia organised and participated in a variety of other regional events where it took the opportunity to present SPARCS and its activities:

- ❖ Participation in the ‘Fair and Inclusive Citizen Engagement for a New City Vision in the Energy Transition’ workshop (October 2021);
- ❖ Online participation at the 19th European Week of Regions and Cities (October 2021);
- ❖ Meeting with a local initiative under **BaZe-Living Lab Maia – MeT – Maia in Transition** to discuss the possibility of future joint initiatives and knowledge sharing regarding citizen engagement methodologies (03.11.2021);
- ❖ Online participation at the **Portugal Smart Cities Summit 2021** (16-19.11.2021);
- ❖ Online participation on **Questions & Answers Session with Matthew Baldwin**, European Mission on Climate-Neutral and Smart Cities, organised by the Cities Coordinators Group (17.12.2021);
- ❖ Bilateral meeting with **COME RES (INEGI)** regarding barriers and drivers to the establishment of energy communities in Maia (20.12.2021);
- ❖ COME RES - participation at a meeting of the **Portuguese National Discussion Group on Energy Communities** (February 2022);
- ❖ Participated in **AGORA Strategic Dialogue: ‘Identifying the Crossroads between Urban Circularity, Mobility and Energy’** (February 2022);
- ❖ Maia’s City Digital Transformation experience was presented in the context of a national meeting of the **Portuguese ICC Cities – Intelligent Cities Challenge** (July 2022).



- ❖ Maia is active in the following regional networks: ANMP – Associação Nacional de Municípios Portugueses (National Association of Portuguese Municipalities) (Portugal), Eixo Atlantico (Portugal, Spain), RAP – Rede de Autarquias Participativas – Portuguese Participatory Municipalities Network (Portugal)



Figure 1: Maia's participation in EU Mobility Week 2022

2.2.4 Reykjavik

The city of Reykjavik is a leading partner in the **PaCE project20** that is exploring the phenomenon of populism in Europe and how democracy should respond; including through use of digital technologies. PaCE is especially relevant to SPARCS with regard to ideas on democracy and citizen engagement. Reykjavik's activities are highlighted as follows:

- ❖ Together with Alexandra Briem City Council President, Reykjavik participated and made several presentations about SPARCS at the **Eurocities Conference** in Leipzig. During the same trip, Reykjavik met with the city project team from Leipzig to discuss potential replications and know-how transmission (3-5.11.2021);
- ❖ Presentation held about Reykjavik's participation in horizontal learning platforms (Eurocities, C40s Reinventing cities, etc.) at the **WP6 Meeting** (November 2021);
- ❖ **E-mobility Hub Concept Workshop** for SPARCS cities organised by Espoo (December 2021);
- ❖ Discussion with Kifissia regarding potential exchange on Mobility Hubs and bike sharing (December 2021);
- ❖ Meetings held with the **Housing and Construction Authority and the Federation of Icelandic Industries** to coordinate green housing efforts between the State and the municipality. The collaboration is ongoing. (December 2021);
- ❖ Presented SPARCS at a meeting with a representative from the **Ministry of Infrastructure** where the SPARCS project leader provided input about potential



partners for the Nordregio's Regional Cooperation Programme 2021-2024 (December 2021);

- ❖ SPARCS was presented at a meeting with the **Director of the Department of Environment and Planning** (December 2021);
- ❖ Talk held with **Espoo** to hear more about their mobility hub project (March 2022);
- ❖ Presentation at the **Government Innovation Day** about the Reykjavik Green Deal and how city policy supports innovation within the City (e.g., through projects like SPARCS). The event was part of Iceland Innovation Week (May 2022).
- ❖ Reykjavik is active in the following regional networks: Nordic Smart City Network (Nordic countries), SUSTAINORDIC, Sustainable Construction Materials and Architecture

2.2.5 Kladno

Both Kladno and CVUT are part of the **Energy Community Forum** organised by the Czech Ministry of Industry and Trade. The platform – composed of around 40 regional and national partners – focuses on suggesting specific measures to support cities and municipalities in energy policy and project realisation. This creates a solid basis for better understanding of what the city needs and should do in the future. Kladno has been invited to share its practical experience with SPARCS and energy communities (January 2021).

Kladno participated in a number of other regional events including:

- ❖ Knowledge exchange with Leipzig on energy and mobility solutions (September 2021);
- ❖ Participation in the Covenant of Mayors event '**The New EU Policy Support Facility for Municipal Climate Adaptation**' (October 2021);
- ❖ Knowledge exchange meetings with the City of Brno and its public utility companies such as SAKO (waste and energy) and Teplárny (heating company) (October 2021);
- ❖ Participation in PED-EU-NET network discussions (October 2021);
- ❖ Joining the **SCALE City Coordinators Group** event regarding the launch ceremony (October 2021);
- ❖ Presentation of SPARCS and Kladno citizen engagement at **EU Regions Week** (October 2021);
- ❖ Presentation of SPARCS and Kladno **Future of the Czech Energy** that had 100 in-person attendees and was [streamed](#) to around 600 others (October 2021);
- ❖ Participated in the **PED City Panel Workshop** arranged by JPI Urban Europe and a national training on energy under SEMMO (November 2021);
- ❖ Organizing the **EU Green Week** workshop Digital solutions in supporting cities' energy transition to climate neutrality (May 2022); and
- ❖ Presentation of Kladno SPARCS at the **World Urban Forum in Katowice** under the Smart City umbrella (June 2022).



- ❖ Kladno is active in the following regional networks: Union of Towns and Municipalities of the Czech Republic (Czech Republic), Energy Community Platform (Czech Republic)

2.2.6 Kifissia

- ❖ Discussions with local energy provider about energy communities where SPARCS was introduced and the energy status in Greece and the formation of the energy communities were discussed (November 2021);
- ❖ Discussion with another Greek municipality where SPARCS was introduced (November 2021);
- ❖ Participation in the PED City Panel Workshop arranged by JPI Urban Europe (November 2021);
- ❖ Mobility Hubs & Bike Sharing Meeting with Reykjavik to exchange experience and discuss the potential for joint market consultation (December 2021 – January 2022);
- ❖ E-mobility Hub Conceptualisation Workshop organized by ESP, KONE, VTT and PIT (December 2021);
- ❖ Discussion with the Deputy Mayor for the Environment and Recycling about ongoing information exchange and collaboration (December 2021 – January 2022);
- ❖ Talks in Kifissia with JPI Urban Europe for the AGORA Strategic Dialogue: Identifying the Crossroads between Urban Circularity, Mobility and Energy. SPARCS and its ongoing work were presented (December 2021 – January 2022);
- ❖ Participation in the first CIVINET Forum held in Greece focusing on sustainable mobility (December 2021);
- ❖ SPARCS presented at the online event of the Municipality of Trikala for **Vilawatt Project** (March 2022);
- ❖ Organised a joint event for energy communities and RES with local energy providers HERON and DECIDE (April 2022); and
- ❖ Presented SPARCS and its activities at a meeting of the Municipality of Ioannina within the framework of POCITYF (May 2022);
- ❖ On 14 May 2022, Kifissia, along with HERON ENERGY (member of the DECIDE4energy Project), co-organised '**Energy Communities, Everything you Need to Know**'. The event took place at the Kifissia Town Hall and was open to all interested parties. Representatives from DECIDE4energy, SPARCS, Greenpeace, GENEVERST and Elin Verd attended. The event addressed collective energy actions the challenges, and the long-term needs and benefits for the economy and the environment. Discussions were followed by an open dialogue/workshop. The event concluded with 'The Power of Community', an interactive game designed by DECIDE4energy to engage citizens in public participation for clean and collective energy.
- ❖ Kifissia is part of the following regional networks: Sustainable City (Greece), Association for Sustainable City Development (SBAA) (Greece)



2.2.7 Lviv

Regardless of the difficult and unusual circumstances in Ukraine in recent months, Lviv's SPARCS team still participated in many events in 2021 and 2022:

- ❖ Regional **Connective Cities18 Project** which aims to establish a formal network of urban practitioners in south-east Europe. The group meets regularly in different formats to discuss topics linked to urban resilience (May and June 2021);
- ❖ Virtual dialogue event on **Sustainable Urban Energy Planning** at which the team presented SPARCS and the Lviv City Vision to urban practitioners from south-east Europe (including the Western Balkans) and MENA regions (17-22.05.2021);
- ❖ **Mobility Working Group** meetings at which Lviv, Krusevac (Serbia) and Kutaisi (Georgia) discussed their plans for SUMP implementation, sustainable urban mobility and sustainable urban energy including SPARCS support (27.05.2021, 08.06.2021 and 14.06.2021);
- ❖ **Urban Lab Network in V4+** (Visegrad Treaty plus selected countries) (June 2021);
- ❖ Cooperation with the NGO **co2online** (Berlin, Germany). The City Institute and co2online had a meeting on knowledge and experience exchange in energy consumption monitoring (30.07.2021);
- ❖ [Presentation of SPARCS and Lviv](#) at the 'Positive Energy Districts as Innovation Ecosystems: Connections - Competence – Capital' session during **EU Regions Week Participatory Lab** (12.10.2021);
- ❖ Panel discussion and [presentation](#) of SPARCS at the **All-Ukrainian Home Owner Association Forum** about innovative solutions for energy-efficient buildings that SPARCS demonstrates in the EU (October 2021);
- ❖ Meeting with GIZ about implementing Lviv's Spatial Energy, defining the model for roles and responsibilities (October 2021);
- ❖ Meeting with the **Association of Energy Efficient Cities of Ukraine** regarding data collection for SECAP (October 2021);
- ❖ Presentation of SPARCS to representatives of Ivan Franko Lviv National University of Lviv (26.11.2021);
- ❖ Communication and preparation of the documentation for **Memorandum of Understanding with H2020 CIVITAS Fast Track Project** on joint development of e-mobility solutions such as e-bikes and e-scooters (December 2021);
- ❖ Participation on the session with Matthew Baldwin about **EU 100 Climate-Neutral Cities by 2030** (17.12.2021);
- ❖ Participation in the '**How to Write about Climate Topics and Climate-neutral Development**' training by NGO EcoAction, where local examples of SPARCS implementation were presented (December 2021);
- ❖ Participation in the **knowledge exchange event on mobility** with Lviv's sister city Freiburg, Germany (December 2021);
- ❖ Discussion with the NGO EcoAction about cooperation on SPARCS knowledge dissemination in Ukraine (24.12.2021);
- ❖ Meeting with local GIZ Office and AndAction company about Mobility Hub development. Discussion about branding Mobility Hubs in Lviv (December 2021);



- ❖ Meeting with local GIZ office and Lviv District heating companies to define their potential contribution to SPARCS, and the Spatial Energy Project in particular (December 2021);
- ❖ Conducted a workshop on energy efficiency and climate neutrality for Ukrainian university students (22.07.2022);
- ❖ **3 local collaboration meetings** (15.07.2022, 21.07.2022, 26.07.2022) with GIZ regarding the Spatial Energy Plan for Lviv and to discuss the potential financial options for the implementation of short-term energy efficiency and RES integration actions in Lviv;
- ❖ Organised the onsite workshop to develop a **‘Spatial Energy Plan for Lviv’** project idea about with the LCE Lviv and the Department of Housing and Infrastructure (August 2022);
- ❖ Organised an onsite workshop together with a Department of Mobility to develop a **‘Sustainable Urban Mobility’ project idea** (August 2022); and
- ❖ Organised an onsite workshop to develop a **‘Public Private People Partnership for PED Development’ project idea** in Lviv (August 2022).
- ❖ Lviv is part of the following regional networks: Energy Efficient Cities of Ukraine (Ukraine), Visegrad+ Network of Urban Labs (Hungary, Poland, Czech Republic, Slovakia, Ukraine, Armenia, Georgia), Mayors for Economic Growth (Ukraine, Georgia, Azerbaijan, Armenia, Belarus, and Moldova), Association of Ukrainian Cities (Ukraine), UkrElectroTrans Corporation

2.3 SPARCS Partners – collaboration with regional and local smart city initiatives

2.3.1 VTT

- ❖ VTT introduced Smart Otaniemi and SPARCS with Espoo being a common partner in both projects. Smart Otaniemi is a platform for future-bound smart city solutions that are both sustainable and commercially successful (2020 onwards).
- ❖ VTT is a partner in [NetZeroCities](#) project targets the work towards the targets of the EU’s Cities Mission and supports cities in developing their climate city contracts. VTT co-leads the knowledge platform development for the Cities Mission one-stop-shop platform, and contributes to the monitoring and impact assessment framework and other work packages. VTT has been actively supporting to build bridges and seeking collaboration with the Cities Mission at different levels (from EU level to national and local levels), and the many learnings from the lighthouse projects have supported this work.



2.3.2 BABLE

- ❖ The BABLE platform is aimed at smart city stakeholders, including cities, companies and projects such as SPARCS to connect by sharing information and opportunities². BABLE offers detailed case studies, solutions and products that are already implemented and functioning. Members can create new posts, for example about upcoming calls for tender or inform users about a new podcast release. The Tender Matcher is a new BABLE Tool that provides members with direct access to what cities are procuring all across Europe. The [SPARCS page](#) on the platform already includes some case studies, and more cases will be added in the following weeks.
- ❖ BABLE cooperates with the **E-world community21** in some of their events as content creators and content managers. The core topic of the E-world community's events is energy and they cater for a wide audience including energy suppliers, utilities, engineers and municipalities (especially in Germany). Due to the COVID-19 pandemic, the E-world community has completely changed from a single annual event in Essen to a full year of events and activities. BABLE organised one of these events, entitled 'Positive Energy Districts and the Quest of Smart Cities towards a Carbon-Neutral Future'. BABLE presented some of the insights prepared for the training (Task 5.2) and held a panel discussion with one of the SPARCS partners (CITYCON).

² <https://www.bable-smartcities.eu/home.html>



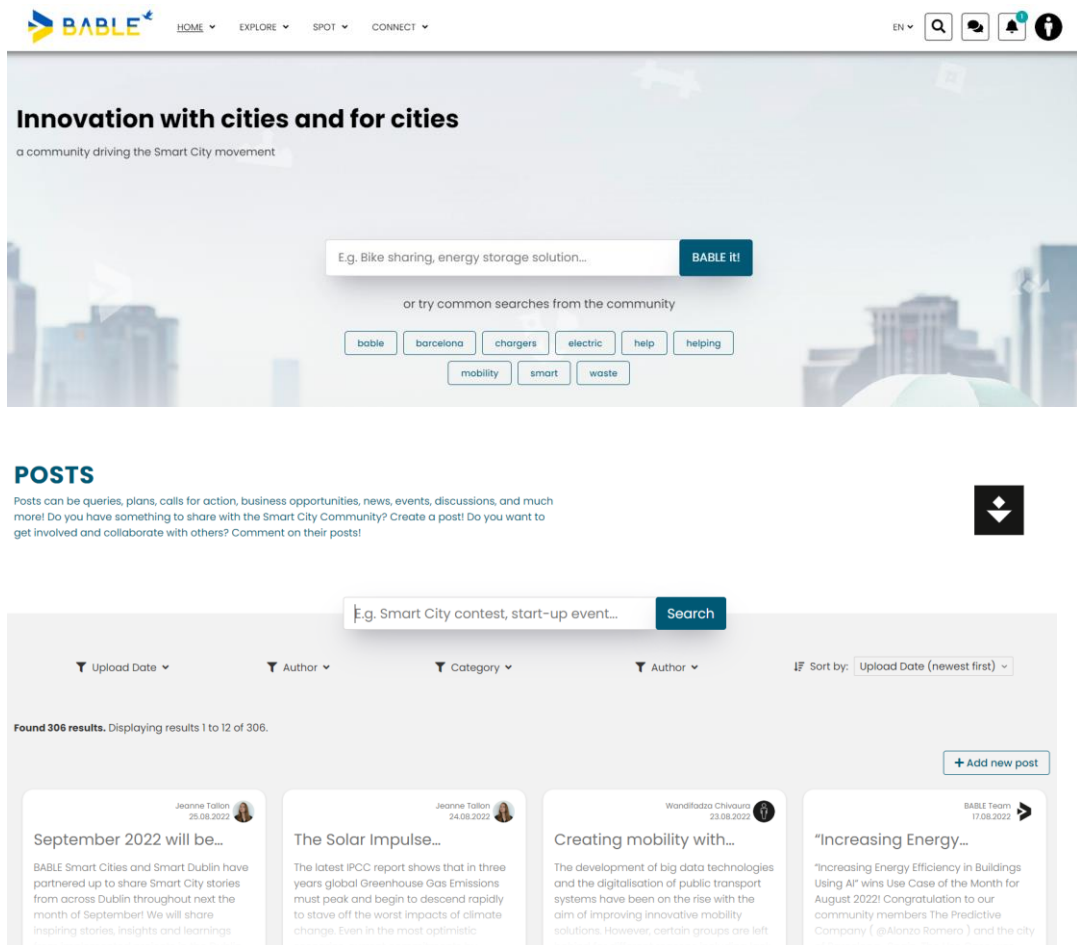


Figure 2: BABLE platform

2.3.3 FHG

The Fraunhofer **Morgenstadt Initiative** comes together several times a year and looks at the integration and sustainability of urban development. The roles of SPARCS and of FHG within SPARCS have been presented several times. SPARCS partners attended the **Morgenstadt – City of the Future** event (18.06.2020-24.06.2020) that explored what contribution the Smart City can make to overcoming the current crisis. While Leipzig actively engaged with the Morgenstadt Initiative via the ‘CO₂ Neutral Smart City Conference’ in 2019, since then the focus of collaborations has mainly been on communication and dissemination. SPARCS results are disseminated through Morgenstadt communication channels.



2.3.4 CVUT

- ❖ Between November 2019 and November 2020, CVUT hosted a series of three **Mutual Learning Exercise Workshops** as part of its EERA JPSC activities. The events consolidated and activated a group of national PED ecosystem stakeholders including funding agencies, the Ministry of Industry and Trade, and leading Czech municipalities (Prague, Písek, Litomerice, Brno, Kladno). The event in May 2020 featured a presentation from Espoo, which inspired Czech partners from around 30 organisations. The events helped to identify key barriers to PED implementation and the MLE format was thus successfully piloted. In parallel, a similar exercise was carried out in Italy by ENEA. One of the extra benefits of this initiative in the Czech Republic was participation in the Driving Urban Transition and PED partnerships, including the pilot call that was organised for soft PED projects.

- ❖ A SPARCS presentation was made at the **Rethink Architecture: Sustainable Concepts Conference** (Prague, 4.3.2020) for architects and experts from the construction sector. Another presentation was made at the **Innovation in Municipalities webinar** (2/2021) for municipal representatives under the auspices of the Czech Ministry of Interior.

- ❖ CVUT organised a workshop in September 2022 during **Urbis** at which it hosted four Czech follower/fellow/ sandbox cities ([Brno](#) – Ruggedised; [Kladno](#) - SPARCS, [Prague](#) ([Operátor ICT](#) - OICT) – CRAFT Cities and [Písek](#) - +CityxChange). Brno highlighted its experience with stakeholder engagement and the systematic preparation of the re-development of the Špitálka District. Kladno highlighted SPARCS as a kick-starter of wider systemic changes in the city (four key strategies were developed through SPARCS) and work on the Positive Energy District concept. Prague (Triangulum and CRAFT) focused on how the lessons learnt from various EU-funded projects can be accumulated and multiplied within the city administration. Písek is very successful in implementing its Positive Energy Blocks plan and establishing a city data management platform working with numerous IoT applications. All participants were in consensus when they said that most of these activities could not have happened without international collaboration. Several other Czech cities attended the workshop and were obviously inspired by the stories. The workshop attracted around twenty in-person participants.





Figure 3: URBIS workshop 2022

2.3.5 NECU

NECU participated in the ENI cross-border **NET4SENERGY23 Project** and workshops organised on energy management. The NECU team presented the SPARCS project during one of the workshops (May 2021).



3. KNOWLEDGE EXCHANGE AND PLANNED EVENTS

SPARCS is proactively collaborating with **Smart Cities Marketplace** on communication and dissemination. Regular activities include sharing input for relevant news and events for the Smart Cities and Communities newsletter and disseminating content from SCMP to the SPARCS Consortium.

Together with several partners, including FHG, BABLE and GOPA Com., SPARCS took part in the **Smart Cities Marketplace Forum** held in April 2022. The event was an occasion for all the SCC1 projects to showcase the processes, technologies and business models built in the Lighthouse Cities in order to facilitate replication in the Fellow Cities. Furthermore, this created additional opportunities for collaboration on events and dissemination activities (e.g. mutual promotion of events, the progress of demo sites, etc.). SPARCS knowledge exchange events are highlighted below:

Table 3: Knowledge exchange events (M1 – M36)

Webinar Title	Date	Participants
VTT, City of Espoo, RIL and GOPA Com. organised an online event about ' Citizen Engagement Best Practices '. The seminar was organised in cooperation with the Mission Board on Climate-neutral and Smart City .	March 2020	Organizer: VTT Participants: City of Espoo, RIL and GOPA Com Other projects: Smarter Together, STARDUST, MAtchUP, MySMARTLife, Trianglum and POCITYF
Kuntamarkkinat ("Municipality market", Finland's largest event for networking and sharing the best practices in versatile themes for municipalities) <i>Espoo presentation topic: IOT and open data in sustainable cities</i>	September 2020	Organizer: Finnish local and regional Authorities Participants: Espoo Other projects: Helsinki (MySmartlife), Tampere (Stardust).
Replication Webinar	January 2021	Organizer: GOPA Com. Participants: Maia, Reykjavik, Kladno, Lviv and Kifissia, Fraunhofer and BABLE
Human Factor in Designing Sustainable Environments Mini Webinar	February 2021	Organizer: RIL Participants: Espoo, University of Tampere, Granlund
Business Models and Financing Mechanisms Webinar	April 2021	Organizer: GOPA Com.



		Participants CiviESCo and KONE
Does Sustainability Create Value in the Real Estate Sector?	May 2021	Organizer: RIL Participants: Citycon, Newsec
Towards Energy communities <i>Espoo presentation topic: What is energy community? Why are they needed and how we can make them happen?</i>	May 2021	Organizer: RIL Participants: Espoo, Helsinki, Kerava, Oulu, Tampere, and Vaasa Other projects: IRIS, STARDUST, mySMARTLife, MakingCity, MATchUP
City Vision Webinar	June 2021	Organizer: GOPA Com. Participants: SPI, Fraunhofer, Espoo, Kladno and Kifissia
Joint CIB and SPARCS webinar	June 2021	Organizer: RIL Participants: VTT, CIB TG88, University of Reading, Hong Kong Polytechnic University
Evaluation Framework and Replication Considerations Webinar	October 2021	Organizer: GOPA Com. Participants: Suite5 and Verd
Fair and Inclusive Citizens Engagement for a New City Vision in the Energy Transition Webinar	October 2021	Organizer: GOPA Com. Participants: Maia, Kladno, KONE Others projects: RESPONSE and POCITYF
Smart Cities: Global Perspectives on Digital Transformation	October 2021	Organizer: StandICT Participants: Maia
Citizen Engagement in Public-Private Partnerships for Sustainable Transition Webinar	November 2021	Organizer: RIL Participants: Maia, KONE, Citycon, Espoo, University of Helsinki, VTT
Climate Leadership in Cities – Cooperation and Commitment'	March 2022	Organizer: Espoo Participants: Maia, Mannheim, Porto European Missions, Noki
Start-Up Competition from A to Z: Key Learnings and Success Factors Webinar	April 2022	Organizer: GOPA Com. Participants: SPARCS Fellow Cities, KONE, Fraunhofer and Leipzig
Digital Solutions in Supporting Cities to Transition to Climate Neutrality	May 2022	Organizer: GOPA Com. Participants: VTT, Other projects: POCITF



In addition, SPARCS regularly participates in joint communication and dissemination activities. These monthly exchanges allow the coordination team to optimise the information flow between projects and keep project members up to date.

Table 4: Planned events for September 2022 and onwards

Future activities	SPARCS contact person
EU Weeks of Cities and Regions October 2022 Joint event with POCITYF: <i>Making the energy transition a success through citizen engagement</i> Joint event with Covenant of Mayors and SPARCS: <i>Financial mechanisms</i>	Zarrin.fatima@vtt.fi WP6 leader Vladislava.Gospodinova@gopacom.eu WP8 leader
Two more “SPARCS City Forums” planned between October – December 2022: one internal event and one public to work on questions of replication and scale-up of SC solutions	Niklas.Effenberger@iao.fraunhofer.de WP5 Leader Zarrin.fatima@vtt.fi WP6 Leader
Onsite visits Lighthouse visits to boost mutual learning and connections in between project partners Leipzig: 20.9. – 21.9.2022 Espoo: 24.10. – 25.10.2022 (already took place)	mari.hukkalainen@vtt.fi Coordinator
City Coordinators Task Group meeting in October 2022	angelo.giordano@civiesco.it WP7 Leader
Organizing Climathon Climate-KIC event focusing on the citizen engagement tool produced in SPARCS and in alignment with the societal vision of the City Vision Reykjavík 2050 (October 2022)	sylva.lam@reykjavik.is Project Manager, City of Reykjavik
Cities4PEDs project organises the online workshop “What are the key questions to address for the development of Positive Energy Districts?” (October 2022)	Zarrin.fatima@vtt.fi WP6 leader Vladislava.Gospodinova@gopacom.eu WP8 leader
BABLE Smart Cities is hosting "The Smart Grid Paradigm for a Greener Future for Citizens", a side event in the framework of the European Week of Regions and Cities 2022.	Gretel Schaj Project Partner
SPARCS is taking part in Barcelona Expo World Congress as part of the shared Smart Cities and communities Stand (November 2022)	Vladislava.Gospodinova@gopacom.eu WP8 Leader
CVUT is co-organising an event on New European Bauhaus in Prague planned for November 2022 to which SPARCS cities will be invited.	Michal.Kuzmic@cvut.cz Project Partner



SCC1 projects actively reshare content from other SCC1 social media channels on the Twitter page (@SPARCSeu) and SPARCS publishes details of workshops, webinars and other events organised by sister projects through its website³ and monthly newsletter.

Future collaboration is foreseen, for example, with Nordic Edge, EUSEW, EUWRC and URBIS. This also a key focus in the cooperation with SCC1 TG Communications and Dissemination.



4. CONCLUSION

SPARCS has established a large number of important collaborations and connections. Thanks to the active involvement of its cities and partners, SPARCS collaborates and participates in many different networks and projects that are active at the international and EU level but also focus on regional, national and local cooperation to foster innovation and facilitate key learnings.

Thanks to widely established links with a large number of important networks, projects and platforms, SPARCS actively collaborates with various city and sectorial networks. The vigorous involvement means that SPARCS benefits from participating in a number of coordinated activities related to event participation, communication, solution development, implementation and replication.

The restrictions resulting from the Covid-19 pandemic had an initial impact on activities relating to knowledge sharing and dissemination. Events, workshops and face-to-face meetings stopped abruptly in February-March 2020. However, the SPARCS partners swiftly switched to online operations and adapted to the new reality. Now, toward the end of 2022, as in-person activities are picking up again, new collaborations and event participations are being in planning.

Some future collaboration and learning opportunities have already been identified as shown in Table 4 including joint project workshops and participation on larger scale events such as EU Regions Week 2022 and Barcelona Expo 2022. Further opportunities will arise in the upcoming months and through GOPA Com., SPARCS partners will be duly notified and encouraged to participate.

The contribution of SPARCS to the development of innovative solutions for the city of tomorrow is becoming more and more evident after two years of continuous work. In return, this visibility will help to further strengthen SPARCS's activities in knowledge sharing and dissemination, making SPARCS a pivot among stakeholders interested in sustainable, green and citizen-centred cities.

