

# D9.10: Report on attendance at events held by other SCC-01 co-ordinators 4

+CityxChange | Work Package 9, Task 9.2

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# Table of Contents

Table of Contents	2
List of Acronyms	3
List of Abbreviations	3
1 Executive Summary	4
2 Interaction with other SCC01 Projects, SCALE and the Smart Cities Marketplace	5
2.1 Scope	5
2.2 Cross-SCC01 Cooperation: SCALE Secretariat, Board of Coordinators and Task Groups	5
2.2.1 The SCALE Secretariat	5
2.2.2 Board of Coordinators	5
2.2.2 Task Group Replication	6
2.2.3 Task Group Dissemination	7
2.2.4 Task Group Monitoring	7
2.3 SCIS Solution Booklets and corresponding articles	7
2.4 IRIS Midterm Review (12 June 2020, online)	8
2.5 EUSEW Sessions (June 2020, Brussels/online)	8
2.6 Stardust Second Capacity Building Workshop – Derry (online, 3 July 2020)	9
2.7 Innovation Atelier, Bilbao (19 July 2020)	9
2.8 URBIS Smart City Fair (2-3 September 2020, online/Brno)	10
2.9 EIP-SCC General Assembly (2-3 September 2020, online/Brno)	10
2.10 European Week of Regions and Cities (EUWRC) October 2020	11
2.11 Launch of the Initiative on Regulatory Frameworks in the Smart Cities Marketplace (21 October 2020, online)	11
2.12 Sustainable Places 2020 Workshop: Smart Cities and Communities – Positive Energy Districts (27 October 2020)	12
3 Contribution to SET-Plan Action 3.2	13
3.1 HEU Driving Urban Transitions Partnership	13
3.2 PED Booklet	13
3.3 PED European Reference Framework	14
4 Interaction with EERA AISBL and EERA JP Smart Cities	15
4.1 Scope	15
4.2 Contributions to Horizon Europe, the Green Deal and the Clean Energy Transition Partnership	15
4.3 COST Action PED-EU-NET	16
4.4 Energy-SHIFTS	16
5 Conclusions	17

## List of Abbreviations

DG ENER	Directorate-General for Energy
EC	European Commission
EERA JPSC	European Energy Research Alliance, Joint Programme on Smart Cities
EIP SCC	European Innovation Partnership on Smart Cities and Communities
ERRIN	European Regions Research and Innovation Network
FAC	Future Analytics Consulting, Ireland
INEA	Innovation and Networks Executive Agency
ISOCARP	International Society of City and Regional Planners
JPI UE	Joint Programming Initiative Urban Europe
LCCC	Limerick City and County Council
MAI	Municipality of Alba Iulia
MP	Mesto Pisek
NTNU	Norwegian University of Science and Technology
PEB/D/N	Positive Energy Blocks / Districts / Neighbourhoods
R&I	Research and Innovation
R2M	Research to Market
SB	Sestao Berri 2010 Sociedad Anonima
SCC01	Horizon 2020 Smart Cities and Communities call
SDG	Sustainable Development Goals
SCIS	Smart Cities Information System
SET	Strategic Energy Plan
SMO	Obshtina Smolyan (Smolyan Municipality)
TK	Trondheim Kommune
TRD3.0	Universitetskommune Trondheim 3.0 (University-City Agreement Trondheim)
VORU	Võru Linnavalitsus (Võru Municipality)
WP	Work Package

# 1 Executive Summary

+CityxChange actively pursues synergies with other relevant EU platforms and projects, facilitating collaboration and exchanging good practices.

This report describes the participation and lessons learned by +CityxChange partners in events organised by other SCC01 projects, SCALE,, SET-Plan Action 3.2, the Smart Cities Marketplace (SCM), EERA Joint Programme Smart Cities, and other European networks during the fourth six-month period of the project M19-24.

The report is Deliverable 9.10 of the +CityxChange Task 9.2 on Extra-Project Cooperation through other SCC01 projects and EU platforms, in Work Package 9 “Inter-Project Collaboration and Clustering”. Some general content is repeated from the previous D9.8 and complements Deliverable D9.9 “Report on Intra-Project Collaboration Including Study Visits and Peer to Peer Workshops 4”.



## 2 Interaction with other SCC01 Projects, SCALE and the Smart Cities Marketplace

### 2.1 Scope

+CityxChange cooperates with other SCC01 projects, the SCALE secretariat and the Smart Cities Marketplace to anchor its experiences in a broader setting, get feedback by peers, and to share learnings that might help others achieve their goals faster and better – or at least avoid the pitfalls +CityxChange already has encountered.

### 2.2 Cross-SCC01 Cooperation: SCALE Secretariat, Board of Coordinators and Task Groups

+CityxChange participates in the online meetings of the Board of Coordinators (NTNU), and the Task Groups on Replication (R2M, co-chair), Communication & Dissemination (ISOCARP), Business Models and Finance (OV) and Monitoring (FAC). These groups meet regularly in online meetings.

#### 2.2.1 The SCALE Secretariat

The SCALE secretariat held its first cross-SCC01 meeting on 25 September 2020. The secretariat will coordinate and support the cooperation between SCC01 projects and identify opportunities for scaling up solutions and knowledge from the projects. This will also include a 3-year roadmap and a branding strategy. As a basis for this work, the Project Coordinators of +CxC and the other SCC01 projects have been asked to fill out a survey to help identify mutual expectations.

In Spring 2020, the Board of Coordinators had gathered recommendations among the Project Coordinators based on their respective experiences within their projects, and in the cooperation between the projects. These recommendations were handed over to the SCALE secretariat and will now be followed up in individual interviews.

#### 2.2.2 Board of Coordinators

The cross-SCC01 Board of Coordinators (BoC) meets on a monthly basis. This enables us to get better connected to the other SCC01 projects, and to develop a joint collaborative approach towards SCIS and the Smart Cities Marketplace.

Since March 2020, risk registration and mitigation due to COVID-19 has become a major point of discussion; being able to compare risk management practices across SCC01 projects, and to develop potential joint approaches in communication with the European Commission, is highly useful for +CityxChange. The project has also shared its COVID-19 risk summary as part of these discussions.



Through the BoC, +CityxChange has contributed to the idea consultation for the intermediate H2020 Green Deal call for 2020, based on our project experiences of which are the most promising solutions to kick-start the EC Green Deal, with high visibility to European citizens.

In Spring 2020, the Board of Coordinators started to create a joint position paper towards the European Commission. The position paper is called “Bridging the Gap - an Integrated Financial Approach”, and it was co-authored with Joule Assets. It originated during the EIP-SCC (now Smart Cities Marketplace) “Cities meet Investors” meeting in Brussels in February 2020. During conversations with the participants, the BoC leader at that time confirmed that upscaling of smart cities solutions and financial opportunities need to be matched better, in particular in light of post-COVID recovery.

### 2.2.2 Task Group Replication

The Replication Task Group (TG) aims to accelerate scaling up and replication of SCC01 projects, solutions and processes. In order to achieve this, the TG facilitates knowledge sharing on replication activities among the SCC01 projects, including commonly used roadmaps, toolkits and assessment techniques. In addition, the TG promotes cooperation among SCC01 projects to jointly overcome challenges and barriers, and to promote drivers for replication.

In 2020, TG Replication performed a self-evaluation. Members found the community of SCC01 replication managers highly useful and tangible, and appreciate the online exchange of best practices - many of which get integrated in the SCIS Solution Booklets.

In the coming period, TG Replication will ensure a more active role for the Follower/Fellow Cities. Where possible the TG will experiment with online tools to replace on-site events for networking, knowledge exchange and co-creation. All of the experiences of SCC01 replication should ideally be stored in an online repository to make them more accessible to the members and other stakeholders.

The Action Plan for 2020-2021 includes four main action points:

- Knowledge sharing on replication strategies
- Knowledge sharing on replication barriers and drivers
- Collaboration with European networks outside of SCC01
- Contribute to research in support of replication

As +CxC already has extensive cooperation with SET-Plan Action 3.2 and the EERA Joint Programme on Smart Cities, we are cooperating with TG Replication to identify how to best organise the cooperation for mutual benefit.

+CityxChange will use the lessons learned from this cooperation in its Task 8.2 on “Replication across EU cities”.

The Replication TG is also working alongside the TG Business Models in developing a common action plan which, among other things, will focus on replication in the SCC01

fellow cities. We will feed back the action plan and following outcomes to the +CityxChange Follower Cities and partners in WP6 “+Followers”.

### 2.2.3 Task Group Dissemination

ISOCARP participates in the TG Dissemination on behalf of +CityxChange. This provides added value to +CityxChange in the form of coordination and joint approach for events, the sharing of invitations to webinars and similar events, coverage in newsletters of other SCC01 projects, resharing posts on social media, answering questions for new projects, and joining forces to improve overall impact presentation.

In 2020, a lot of attention has been spent on identifying alternatives to the regular meeting places such as the URBIS Smart City Fair (Brno), Nordic Edge Expo (Stavanger) and Smart City Expo Barcelona.

For URBIS and Nordic Edge Expo, the SCC01s co-organised and participated in digital workshops.

The SCC01s decided to not rent a digital stand or organise workshops during Smart City Expo Barcelona, as the cost was too high. As an alternative, the SCALE Secretariat is identifying a set of independent webinars, media campaigns and similar activities, in which the SCC01s can showcase their best practices and connect with others. +CxC has suggested the new SCM Initiative on Regulatory Frameworks as a topic for one of these webinars.

### 2.2.4 Task Group Monitoring

+CityxChange participates in the newly formed Task Group on Monitoring, in close cooperation with SCIS. The Task Group facilitates the cross-project collaboration of responsables for monitoring and evaluation in each SCC01 project, aiming to improve and share:

- Common understanding on the scope and meaning of monitoring and evaluation, scope, evaluation boundaries, and monitoring protocols for quantitative as well as qualitative project outcomes;
- Mapping of Key Performance Indicators used across projects, aiming to harmonise them for better cross-project comparison and learning, and to identify gaps for new KPIs to be developed (e.g., related to Positive Energy Districts, qualitative outcomes, environmental, financial and societal KPIs);
- Facilitate reporting to SCIS, including discussion of appropriate data boundaries and scoping for SCIS reporting, as well as methodological differences, to find a common reporting approach for comparable results.

## 2.3 SCIS Solution Booklets and corresponding articles

After a positive experience in contributing to the SCIS Solution Booklet on Citizen Engagement (see D9.8), +CxC decided to contribute to a second Solution Booklet. In this second booklet, +CityxChange cooperates with SCIS and SCC01 projects ATELIER, Sparcs, and MAKING-CITY, on the topic of Positive Energy Districts. It describes the background and



motivation, the importance of the city context, the boundaries and components of the PED energy system, ICT support, societal and consumer aspects, business models and finance, urban planning and design, legal and regulatory aspects, governance, upscaling and replication, monitoring and evaluation, and a summary of recommended steps. This has been finalised in October 2020 and is awaiting publication by SCIS<sup>1</sup>.

## 2.4 IRIS Midterm Review (12 June 2020, online)

The IRIS SCC01 project was preparing for its EU midterm review with a number of internal preparation presentations, which included some invited external experts to give feedback and support. The +CityxChange Coordination Team was invited as a 'friendly reviewer', and participated in the presentation sessions around the demonstrations and status in the three IRIS Lighthouse Cities Utrecht<sup>2</sup>, Nice, Gothenburg. We gave feedback on their demonstrations, asked questions, and shared some of our early experiences, with discussions and ideas for areas of future collaboration.

## 2.5 EUSEW Sessions (June 2020, Brussels/online)

+CityxChange contributed to the European Sustainable Energy Week, scheduled for end of June 2020, as presented in D9.8. Two sessions were originally approved for the main programme. EUSEW switched to a digital format and reduced the programme, and changed the scope to reflect the need for economic recovery due to COVID-19.

The remaining session was switched to a side event instead, under the title of "Actions & recommendations: creating a joint vision for PEDs (positive energy districts)"<sup>3</sup>. It was organised between SCIS, FFG, and included the SCC01 projects +CityxChange, Making-City, and ATELIER.

The session consisted of short pitches from the participants. SCIS presented work on definitions, and FFG on a joint vision. ATELIER discussed the role of local context for PEDs, while both +CityxChange and Making-City presented local cases, in our case done by participants from Trondheim Kommune and Powel, focusing on the regulatory approaches. Details of the session are also found on the project website<sup>4</sup>.

Discussion sessions were on the PED definition, possible certification, and feedback to the SET-Plan; and challenges and barriers for developing on-the-ground PEDs.

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<sup>1</sup> Positive Energy Districts Solution Booklet. Han Vandevyvere (ed.), Dirk Ahlers, Beril Alpagut, Veronika Cerna, Vincenzo Cimini, Sindi Haxhija, Mari Hukkalainen, Michal Kuzmic, Klaus Livik, Marielisa Padilla, Marije Poel, Cecilia Sanz Montalvillo, Socrates Schouten, Marit Teigen Myrstad, Mark van Wees, Karen Williams, Annemie Wyckmans, Andrea Gabaldon, Nora Fernandez Perez, Sari Hirvonen Kantola, Sophie Dourlens, Els Struiving. SCIS EU Smart Cities Information System. 2020. Preprint at <https://cityxchange.eu/scis-positive-energy-districts-solution-booklet/>

<sup>2</sup> For example: <https://irissmartcities.eu/content/one-eye-iris-halfway-overview-utrecht>

<sup>3</sup>

<https://www.eusew.eu/actions-recommendations-creating-joint-vision-peds-positive-energy-districts>

<sup>4</sup> <https://cityxchange.eu/eusew-2020-webinar-creating-a-joint-vision-for-positive-energy-districts/>

The sessions gave the participants a chance to listen to and interact with other projects, and give feedback to EU regulatory and policy frameworks, based on the ongoing work of +CityxChange on regulatory mechanisms.

## 2.6 Stardust Second Capacity Building Workshop – Derry (online, 3 July 2020)

The STARDUST project organised its second Capacity Building Workshop for their Follower City Derry, Northern Ireland<sup>5</sup>. The workshop was mainly about the Derry project and replication status, with invited guests. Limerick was invited as the Irish Lighthouse City to share experiences.

The Limerick Coordinator gave a presentation on “How to access open data for energy monitoring”<sup>6</sup> and shared wider project experiences on the project demonstrations and deployments, regulations. This was an opportunity to interact also with the Tampere Lighthouse City and local Irish stakeholders around smart cities.

The discussion included development challenges and the need of open data and the availability of energy data for public buildings, for example to have the municipalities take a leading role. Another discussion point was joint data standards, where participants still saw no fully applicable solutions, but agreed on using and refining existing standards, in line with city needs and engagement in standardisation approaches. This event is also described in D4.6: Limerick Project Documentation Repository including Project Status reports 2.

## 2.7 Innovation Atelier, Bilbao (19 July 2020)

Innovation Atelier Bilbao is the participatory instrument for Bilbao in the ATELIER project. It held its first workshop with Lighthouse and Follower cities from the Basque and Northern Spain region<sup>7</sup>. The workshop, led by the Energy Cluster, had a panel of representatives from REPLICATE (Fomento de San Sebastián, Tecnalía), SMARTENCITY (Vitoria-Gasteiz City Council, VISESA, Tecnalía), STARDUST (Pamplona City Council, CENER), +CityxChange (Sestao Berri) and ATELIER (Bilbao City Council) who, accompanied by a large number of attendees, presented the smart city vision of their respective cities.

+CxC Follower City Sestao exchanged experiences and best practices with other H2020 Lighthouse and Follower Cities around knowledge sharing, especially around governance and technical solutions under the umbrella of *smart city visions* and lessons learned.

This was the first workshop of the new ATELIER project and it is expected that this knowledge exchange will deepen further in the future.

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<sup>5</sup> <https://register.gotowebinar.com/register/6840896773329279248>

<sup>6</sup> [https://www.youtube.com/watch?v=eXHBB\\_KOXW0](https://www.youtube.com/watch?v=eXHBB_KOXW0)

<sup>7</sup>

<http://www.clusterenergia.com/internacional/innovation-atelier-bilbao-celebra-su-primer-workshop-on-ciudades-lighthouse-y-fellow>

## 2.8 URBIS Smart City Fair (2-3 September 2020, online/Brno)

+CityxChange participated in the URBIS Smart City Fair; Písek representatives participated on-site, while other partners joined online.

POW, leader of WP2, represented +CityxChange in an interactive workshop on P2P Energy Market Platforms, organised by SCC01 projects POCITYF and SPARCs as a side event of URBIS. The workshop was composed of expert presentations (cities, DSOs, ESCOs, R&D, etc.) and a hands-on discussion session:

- How can P2P market platforms underpin an inclusive and fair energy transition?
- Are P2P market platforms truly a win-win situation to all its stakeholders (municipalities, citizens, DSOs, aggregators, etc.)?
- Will P2P market platforms be part of the future smart city? How will they serve the need for adaptation and resilience in case of management of unexpected crisis and risk situations?
- How to successfully deploy P2P platforms while ensuring a good replication and upscaling potential?

## 2.9 EIP-SCC General Assembly (2-3 September 2020, online/Brno)

Together with the URBIS Smart City Fair, the European Innovation Partnership on Smart Cities and Communities (EIP-SCC, now Smart Cities Marketplace)<sup>8</sup>. +CityxChange presented in the session “Smart energy solutions: Demonstration and replication in Central and Eastern Europe”<sup>9</sup>. This session further included contributions from Tartu and Sonderborg, SmartenCity; Cluj-Napoca, STARDUST; and Gdansk, Ruggedised. The session was designed for Central and Eastern European cities wanting to learn how to become Smart Cities, set up projects, and replicate best practices from frontrunners.

+CityxChange partners Písek and Alba Iulia presented their experiences as Follower Cities, including their background and feasibility studies, preparation of replication activities for their Positive Energy Blocks, and integration with their other smart city strategies and projects.

Our takeaways from the session and the discussions were the importance of citizen engagement, the need for political support, and the integration of parallel activities. Another topic was the funding and financing of solutions. The session discussed how even with COVID-19, new opportunities would emerge, through Horizon Europe, the European Green Deal, and the continued use of Structural Funds. These learnings also reflect current thinking in +CityxChange, which aims to rebuild some of the funding/financing approaches within the updated landscape.

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8

<https://eu-smartcities.eu/news/between-brno-and-online-summary-our-general-assembly-23-sept-2020>

<sup>9</sup> <https://www.youtube.com/watch?v=AYPgeiSAUnU>

On 3 September, during a synergy meeting of the SCC01s, SCIS and EIP-SCC Action Cluster Chairs and Initiative Leaders, +CityxChange co-moderated a discussion session aiming to promote cross-fertilisation between these communities and identify concrete cooperation activities. More extensive cooperation could lead to better dissemination and more visibility of each others' activities, and more opportunities for replication. The SCC01s could not only participate in, but also contribute to shaping the EIP-SCC Masterclasses and Matchmaking activities.

## 2.10 European Week of Regions and Cities (EUWRC) October 2020

The EUWRC included a session on "How to implement and monitor the SDGs"<sup>10</sup> under the "Empowering citizens" track. This was done by DG REGIO, the EU JRC, the Basque Country, and the two Lighthouse Cities of Limerick and Trondheim.

Trondheim contributed with a presentation on "Bold City Vision – Practical approaches for empowering citizens to lead the change towards UN sustainable development goals" as part of its Geneva UN Charter Centre of Excellence on SDG City Transition, where the +CityxChange Bold City Vision (BCV) is refined and applied. Limerick contributed with a presentation on "Using the Bold City Vision Framework as a Tool to Implement and Monitor the SDGs".

The discussion focused on the strategic alignment of the SDGs with city strategies, the identification of priority areas, and the use of monitoring tools. This could also showcase the applicability of the +CityxChange BCV framework to these strategic goals and its implementation in specific cases.

## 2.11 Launch of the Initiative on Regulatory Frameworks in the Smart Cities Marketplace (21 October 2020, online)

TK, POW and NTNU presented their proposal for a new EIP-SCC initiative on regulatory frameworks. The proposed EIP-SCC Initiative has been under development since the first talks with EIP-SCC on this topic in December 2019 in Bolzano. The Initiative is planned to be integrated in the Action Cluster on Integrated Planning, Policy and Regulation.

*It aims to "support the transition towards regulatory and legal frameworks that enable the societal planning, implementation and management of smart and climate-neutral districts and cities - for and with the citizens, local businesses and other stakeholders. Specific emphasis will be placed on broadening the opportunities and incentives for city administrations to fulfil their climate and energy ambitions, and to become positive energy cities in the future" (Myrstad et al. 2020)*

Details are given in D9.9: Report on Intra-Project Collaboration, including study visits and peer-to-peer workshops 4.

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<sup>10</sup> [https://europa.eu/regions-and-cities/programme/sessions/1123\\_en](https://europa.eu/regions-and-cities/programme/sessions/1123_en)

NTNU, TK and POW have presented this initiative multiple times, in several local, national and European fora, amongst others during the SCIS Final Conference on 2-3 November 2020.

## 2.12 Sustainable Places 2020 Workshop: Smart Cities and Communities – Positive Energy Districts (27 October 2020)

Sustainable Places is an industry conference co-organised by R2M. For SP2020, R2M and MAKING-CITY organised a workshop on: Smart Cities and Communities – Positive Energy Districts. It was organised with participation from additional SCC01 projects POCITYF, MySMARTLife, ATELIER, and +CityxChange.

During the workshop<sup>11</sup> the cooperation between different types of stakeholders in novel urban energy approaches was discussed, in particular investigating how to support such cooperation in order to create Positive Energy Districts. Often, secondary benefits are vital in order to convince building owners and other stakeholders to invest and engage. The workshop furthermore discussed payback times, PED-readiness, regulatory and acceptance barriers, innovation, energy systems, and replication.

+CityxChange participated with a presentation on growth paths and replication of PEDs in urban areas, titled: “Growth and replication of PED sites in urban environments”<sup>12</sup>.

The session gave a chance to interact with the other SCC01 projects and understand their viewpoints and similarities between the projects. In this way, it continued a path towards more joint work as indicated previously in the development of the SCIS Solution Booklets. Presenters came together for a follow-up online session a month later and are planning further collaboration on the joint topics.

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11

<https://www.sustainableplaces.eu/home/sp20-workshops-events/smart-cities-and-communities-workshop/>

12

<https://cityxchange.eu/cityxchange-presentation-growth-and-replication-of-ped-sites-in-urban-environments/>

## 3 Contribution to SET-Plan Action 3.2

SET-Plan Action 3.2 Smart Cities and Communities aims to create 100 Positive Energy Districts by 2025. +CityxChange contributes to this Action by sharing knowledge regarding definitions, boundary conditions and Key Performance Indicators, as well as experiences from the participating Lighthouse and Follower Cities on planning and implementing Positive Energy Blocks and Districts. SET-Plan Action 3.2 is coordinated by the Austrian Federal Ministry of Transport, Innovation and Technology (BMVIT), and managed by Joint Programming Initiative Urban Europe (JPI UE).

+CityxChange contributes to SET-Plan Action 3.2 both directly as an SCC01 lighthouse project, and through European networks such as EERA Joint Programme Smart Cities and the European Innovation Partnership on Smart Cities and Communities. In addition, NTNU (Annemie Wyckmans) is R&I Chair of the Stakeholder Group to SET-Plan Action 3.2, which enables her to participate in the SET-Plan Action 3.2 Steering Committee as an observer. This position enables us to align R&I efforts across European platforms; the SET-Plan Action 3.2 Stakeholder Group includes, amongst others, representatives from SCC01 projects, the EERA Joint Programme Smart Cities, the Urban Europe Research Alliance, the European Construction Technology Platform, and ERRIN.

### 3.1 HEU Driving Urban Transitions Partnership

Between May and October 2020, the main focus of SET-Plan Action 3.2 has been to develop the Horizon Europe Driving Urban Transition Partnership (DUTP). +CxC has given input to the open calls for feedback, as well as specific comments and discussions during Stakeholder Group meetings and the JPI Urban Europe AGORA Virtual Dialogue "From ambition to local action: Co-Designing a programme for urban research, innovation and experimentation" on 5-6 May 2020.

As Positive Energy Districts will be an important topic in the DUTP, tailoring the programme as much as possible to concrete experiences on the ground is very important.

+CxC has also facilitated dialogue between SET-Plan Action 3.2 / Driving Urban Transitions Partnership, the Smart Cities Marketplace, the SCC01 TG Replication, and EERA Joint Programme Smart Cities, amongst others by organising online meetings in which these programmes were represented to present their work and discuss ideas for future cooperation.

### 3.2 PED Booklet

+CityxChange has contributed to the PED Booklet "Europe towards Positive Energy Districts"<sup>13</sup>, created by JPI Urban Europe for SET-Plan Action 3.2.

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<sup>13</sup> [https://jpi-urbaneurope.eu/app/uploads/2020/06/PED-Booklet-Update-Feb-2020\\_2.pdf](https://jpi-urbaneurope.eu/app/uploads/2020/06/PED-Booklet-Update-Feb-2020_2.pdf)

The booklet currently includes 60 cases, including three cases by +CityxChange (Limerick, Trondheim and Vöru). More +CityxChange cases will be added after the Follower Cities complete their feasibility studies.

The PED Booklet provides an interesting overview of projects with PED ambitions, which, combined with the Stakeholder Group, provides a useful arena for discussion and comparison with peers. The booklet produced by SET-Plan Action 3.2 currently does not include qualification of the described cases, nor any common Key Performance Indicators or comparative analysis of their performance. We hope that this functionality can be developed in the near future, in cooperation with the SCC01 projects and SCIS, that have been gathering on-the-ground, verified data regarding smart city projects, PEBs and PEDs across numerous projects.

### 3.3 PED European Reference Framework

SET-Plan Action 3.2 is also continuing to map existing projects that aim to implement Positive Energy Districts, and has developed a Reference Framework for Positive Energy Districts<sup>14</sup> to support joint efforts across Europe.

We have invited the authors to present the Reference Framework during an online PED Talk on 8 May 2020, for +CityxChange partners and additional Norwegian stakeholders, and to discuss how our on-the-ground experiences in +CityxChange and similar projects, may inform the operationalisation of the Reference Framework in the near future.

This session is described in more detail in “D9.9: Report on Intra-Project Collaboration including study visits and peer-to-peer workshops 4”, Section 3.

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14

<https://jpi-urbaneurope.eu/app/uploads/2020/04/White-Paper-PED-Framework-Definition-2020323-final.pdf>





## 4 Interaction with EERA AISBL and EERA JP Smart Cities

### 4.1 Scope

EERA JP Smart Cities is an official stakeholder in the SET-Plan Action 3.2, and EERA JPSC partners are involved in all SCC01 projects. The Project Coordinators of the 2018- and 2019-funded SCC01 projects, are all EERA JPSC partners, and NTNU leads the EERA JPSC.

EERA JPSC is developing a strategic research agenda for Positive Energy Blocks, Districts and Cities, to support SET-Plan Action 3.2 as well as the upcoming Mission on Climate-Neutral and Smart Cities and the Urban Partnership in Horizon Europe. As a concerted effort between European universities and RTOs, the strategic research agenda will provide a scientifically valid and practically viable methodology (bridging science and practice), a systemic dimension (merging technical, spatial, regulatory, innovation, economic, social and other perspectives), and a mixture of participatory, practice-based, transformative, experimental and technical research, to support the real-time and future challenges European cities experience in their ambitions to develop, scale up and replicate Positive Energy Blocks, Districts and Cities.

### 4.2 Contributions to Horizon Europe, the Green Deal and the Clean Energy Transition Partnership

In 2020, EERA has created a Strategic Research and Innovation Agenda (SRIA) in support of the Horizon Europe Clean Energy Transition Partnership. Clean Energy Transition Partnership (CETP). The CETP is a Cofund Partnership, with Member States and Associated Countries as the process owners.

NTNU has fed important learnings from +CityxChange into the SRIA, amongst others as co-author on cross-cutting challenges related to Positive Energy Districts and Cities, such as regulatory, investment, spatial, social and technical perspectives, and the importance of a holistic sector coupling approach, balancing technological and social innovation, in the clean energy transition. In particular, we have promoted the use of urban living labs as boundary-spanning spaces to test the clean energy transition, aiming to accelerate the social innovation for climate-neutral and smart cities, and the emerging role of researchers to facilitate the co-creation and prototyping needed to achieve a climate-neutral Europe by 2050.

This work also builds on SET-Plan Action 3.2. However, while the SET-Plan has a perspective of 2030, the HEU CETP will also take into consideration the 2050 perspective.





### 4.3 COST Action PED-EU-NET

In Autumn 2019, EERA JPSC created and submitted a proposal for a COST Action to create a “European Network on Positive Energy Districts”. The proposal was led by Fraunhofer ISE. NTNU contributed to the proposal as leader of EERA JPSC and with on-the-ground experiences of the +CityxChange project. We invited +CityxChange Follower Cities and EAP to join the proposal.

The COST Action had its kick-off for the Management Committee in September 2020.

In the next months, NTNU will extend this Norwegian network towards the Nordic Edge Innovation Cluster on Smart Cities (originating from SCC01 project Triangulum), Smartbyene, the Norwegian cluster of 14 smart municipalities, and the Norwegian solution providers of +CityxChange.

### 4.4 Energy-SHIFTS

NTNU forms part of the Energy-SHIFTS Working Group on Smart Consumption. The aim of this group is to guide the European Commission on the role and potential contribution of Social Science and Humanities in smart consumption as a European priority area for the SET-Plan. The recommendations of the Working Group will be submitted to DG RTD units on ‘Ecological and Social Transitions (C5)’ and ‘Clean Energy Transition (D1)’.

NTNU contributed to the horizontal scanning survey performed by Energy-SHIFTS in Spring 2020, with three recommended research questions that are very pertinent for +CityxChange when starting to implement communityxchange demonstration activities in the Lighthouse and Follower Cities:

- How may co-creation and open innovation, empowering citizens to come together to discuss, test, fail, try again and eventually find good solutions for their local environment, be used as key drivers towards smart and sustainable consumption?
- How may the inclusion of the arts, creative and cultural industries, generate possible new pathways to address the complexity of smart, sustainable, positive energy cities attuned to citizens’ and local businesses’ interests?
- How may innovation by citizens be nurtured and supported to contribute to value and job creation, in addition to more sustainable consumption?

The final Horizon Scan report will be submitted to the European Commission in December 2020, with a final Policy Conference in January 2021.

## 5 Conclusions

During months 19-24 of the +CityxChange, our interactions with other SCC01 projects, SCIS, EIP-SSC / Smart Cities Marketplace, SET-Plan Action 3.2 and EERA JP Smart Cities have consolidated into robust collaborative mechanisms. +CityxChange and its peer projects and platforms are mutually inspiring each other and cooperating to organise joint events, share learnings, and identify areas for more in-depth collaboration within smart city innovation, research and education. The shaping of Horizon Europe and the Green Deal has brought many additional arenas in which we can cooperate, and in which we can test the viability and relevance of our project's findings.

