

# STARDUST

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## D8.10 Report of collaboration with other project's activities

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WP 8, T 8.4.1 Networking and Events

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## Technical references

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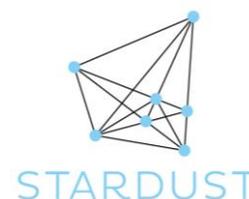
RE = Restricted to a group specified by the consortium (including the Commission Services)

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

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## Executive summary

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STARDUST has demonstrated to be a new active player in the development of smart cities in Europe by collaborating with existing networks and promoting the creation of new links in order to enhance cities' networks in different areas.

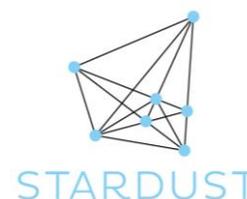
This report explains the most relevant collaborations carried out by STARDUST partners with this regard during the first 30 months of project.

Section 1 is focused on the European level smart city networks. STARDUST has an active role in the SCC01 Collaboration Network, including its Task Groups; specifically, the new Evaluation and Monitoring Task Group is led by STARDUST. This section reports the activities of STARDUST members in SCIS and the EIP-SCC, as well as the Finnish Cities collaboration group and other networks participated by STARDUST cities, both lighthouse and followers.

Section 2 reports the dissemination actions and events organized by STARDUST partners, such as the Tampere Smart City Week, the Trento Smart City Week, the Smart and Sustainable Planning for Cities and Regions Conference (Bolzano), the Balkan Clean Energy Transition Conference and Fair, and two editions of the Barcelona Smart City Expo World Congress, in collaboration with the SCC01 Network. Finally, three STARDUST members are actively collaborating for the definition of PED (Positive Energy Districts) in the frame of the ANNEX 83 of the IEA-EEB.



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# 1. Smart Cities Networking

The following section describes the main networks on which STARDUST has focused their efforts up to March 2020 in order to enhance the collaborative existing structures and boost the impact of the demonstrating activities.

## 1.1. SCC Collaboration Network

All Smart Cities and Communities lighthouse projects funded by the European Commission through the Horizon 2020 research and innovation programme since 2014 (namely: REMOURBAN, TRIANGULUM, GROWSMARTER, SMARTENCITY, REPLICATE, SMARTER TOGETHER, SHARING CITIES, RUGGEDISED, MYSMARTLIFE, IRIS, SMATCH UP, STARDUST, +CITYXCHANGE, MAKING-CITY, SPARCS, POCITYF and ATELIER, see Figure 1) work together in order to demonstrate the processes, technologies and business models to transform their ecosystems into smarter and more sustainable places and to boost their impacts through joint dissemination activities.



Figure 1: Overview of the SCC Projects

This collaboration network aims at delivering **higher impacts and benefits to the challenges that EU cities** are facing such as:

- Mainstreaming Smart City solutions, by working together to show case them to decision makers and shifting Smart City technologies out of the private and technical sectors and into the public mainstream, giving confidence to the market.



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- Share learning and capacity building to enable replication in similar urban environments.
- Find a swifter route to replication through demand cities and industry across EU maximizing value of the funds received by the projects and demonstrating that smart approaches deliver a real external return of investment and can drive the market value.
- Provide joint ideas and evidence to support future policy and regulatory change in the lighthouse cities.

To do so, SCC01 PROJECTS adopt a cross-project collaboration framework and a management structure:

- The **Board of Coordinators** is the executive organ formed by the project coordinators, with 2/3 new members every year. One TELCO is organized every month and twice a year face to face meetings are organized coinciding with a dissemination event.
- The **Task Groups** are thematic working groups to enhance the collaboration of partners belonging to different projects sharing the same objectives and challenges. At the moment, there are 5 active Task Groups (in parenthesis the involved STARDUST partner) which are periodically exchanging updates and discussing joint actions via monthly calls and via two physical meetings per year:
  - **Communications and Dissemination (Fondazione iCons)**
  - **Replication (Greenovate!Europe)**
  - **Business Models and Finance (Officinae Verdi)**
  - **Data (PAMPLONA, FBK)**
  - **Monitoring (CENER, VTT, FBK, EURAC)**

Every year STARDUST renews the signature of the **Cooperation Manifesto**, establishing a framework of collaboration with the other SCC-01 projects, with the following commitments:

- To adopt a cross-project collaboration framework and a management structure to work together to enhance the impacts and benefits achieved through the projects
- To establish task groups where needs for collaboration are identified in order to ensure cross-project cooperation in an impact based approach and collaborate with projects funded under previous Research and Innovation Framework Programmes where synergies appear
- To contribute and collaborate with the European Innovation Partnership on Smart Cities and Communities as main fora for cities, industries and citizens to improve urban life, to increase the replication potential of the project in other EU cities
- To promote and exploit the results of this cooperation approach through the proper mechanisms and tools
- To increase the replication potential of the lighthouse projects in other European cities by working together
- To involve the EC and INEA in an observing and advisory role on the continuous progress in the cooperation activities
- To determine and demonstrate the behaviours expected for effective collaboration in order to contribute willingly and actively, provide constructive challenge, mutual trust, enthusiasm and respect



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**STARDUST signed the Manifesto in 2018 and 2019, and Florencio Manteca is the official representative of the project in the BOC.**

Since September 2018, STARDUST cities and solutions are featured in the SCC **Multitouch Software Tool** with the other projects. The tool is used at conferences and events to provide detailed information on the projects, their objectives, areas of intervention and solutions in an engaging and interactive way. Fondazione iCons is responsible for the periodic update of the STARDUST-related contents displayed on the Multitouch Tool based on the information provided by the STARDUST Lighthouse cities. Also the follower cities are displayed in the tool.

STARDUST collaborates with the other SCC projects via **joint communication and dissemination activities**: via mutual and frequent interactions with the posted contents (re-shares, likes etc) on its social media channels ([Twitter profile](#) and a LinkedIn [company page](#)), by featuring the other SCC projects' news on its newsletter, by co-organizing joint events to maximise synergies and enhance impacts on wider audiences as well as targeted enablers.

## 1.2. Chair of Monitoring and Evaluation TG

During the face to face meeting of BOC in San Sebastian last year (March 2019) it was identified the need to create a specific **Task Group for the Monitoring and Evaluation of projects**. STARDUST took the lead of the new TG, in collaboration with MATCH UP project.

The **kick off** meeting of this new Task Group took place in **Lyon (October 2020)** and the **Action Plan for 2020** was presented to the SCC Collaboration Network during the Smart City Expo World Congress in Barcelona (**November 2020**).

The **preparation group** is formed by:

- Sergio Díaz de Garayo (co-chair) – STARDUST Technical director - CENER
- Aapo Huovila (co-chair) – MATCH UP and collaborations in +POCITYF, SPARKS and my SMARTLife –VTT
- Barbara Branchini – MATCH UP – KVELOCE
- Terttu Vainio – STARDUST – VTT
- Gabriele Zacco – STARDUST – FBK
- Adriano Bisello – STARDUST - EUR

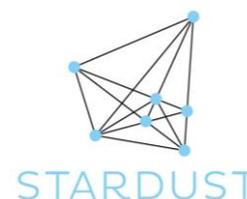
At the moment there are representatives of the **17 SCC Projects** involved.

The four main objectives of this TG for 2020 according to the Action Plan are:

- Common understanding on the scope and meaning of EVALUATION & MONITORING
- Mapping of KPIs



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- Facilitate SCIS Reporting Methodology
- Set up a COLLABORATIVE FRAMEWORK

One TELCO is organized every month and specific workshops will be held coinciding with the SCC Collaboration Network face to face meetings (twice a year).

### 1.3. EIP-SCC and SCIS

STARDUST partners have played an active role in multiple **EIP-SCC and SCIC** events or activities.

- VTT and TAMPERE organised/gave a presentation at the **SPARCS webinar “Citizen engagement practices towards climate neutrality”** in Feb/2020.
- Eurac organised the [2019 Smart and Sustainable Planning for Cities and Regions Conference \(SSPCR2019\)](#) in Nov/2019 in Bolzano, which saw the participation STARDUST and other SCC projects.
- CENER, FBK and VTT represented **STARDUST at the SCC Lighthouse network** event that took place in **Lyon** in Sep/2019. The event was hosted by Smarter Together
- Litomerice attended the [URBIS smart city fair](#) (organised by the SCC project Ruggedised) in May/2019 in Brno
- Eurac represented STARDUST at the EIP-SCC workshop to Launch of the [Smart City Guidance Package](#) in Brussels in Apr/2019 (read the event concept note and agenda [here](#))
- CENER, Pamplona, Fondazione iCons, Zabala and VTT participated in the **European Smart Projects Summit (San Sebastian, March/2019)**. In particular, representatives of the three LH projects launched in 2017 (STARDUST, MATchUP and IRIS) met to study possible synergies to boost their impacts and visibility. For STARDUST, this meeting was attended by CENER and Fondazione iCons.
- CENER, Tampere and Eurac presented STARDUST at the **2018 Nordic Edge Expo in Ago/2019 in Stavanger** during a special session dedicated to new LH projects. Fondazione iCons and Tampere participated in the communication workshop representing STARDUST and Tampere communication and engagement strategy, the outcomes of which were presented in a pitch in the conference plenary session. Moreover, CENER, Fondazione iCons, Tampere, CLuBE and Pamplona manned the local SCC joint booth to present the project.
- CENER, Pamplona, Officinae Verdi, VTT and Litomerice attended the **EIP General Assembly in Sofia** in May/2019 and had the opportunity to actively participate in workshops and open panel discussions as speakers
- CENER, ICONS, G!E, Zabala and OV attended the **SCC meeting in Lisbon** in March/2019
- STARDUST participated in the **replication workshop organized by INEA** at the premises of the EC in Dec/2018

The following **SCIS contests** were won by STARDUST partners:



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- Tampere won a [dedicated video](#) produced as part of the **SCIS Video Storytelling Contest** (released in Oct/2019). The video is embedded in the Tampere mini-website part of the STARDUST website and was promoted via the project social media channels.
- **Kozani** won one of the three [SCIS Smart City Roadshows](#) (Feb/2019). This consisted of the poster in being produced by the SCIS and distributed throughout Kozani to support the first edition of the [Balkan Clean Energy Transition Conference and Fair](#) organised by the City of Kozani and the Clube Cluster of Bioeconomy and Environment of Western Macedonia (See section 2.4)

## 1.4. Smart Finnish Cities collaboration group

Tampere started **cooperation with other Finnish Lighthouse** cities quite soon after the project started. In 2018, STARDUST Tampere team met twice with MySmartLife project staff from Helsinki. MySmartLife was the first Finnish Smart Cities and Communities lighthouse project. There the idea arose to organise a meeting with all Finnish cities that have similar projects.

In **January 2019**, a first Smart Finnish Cities collaboration group meeting was held in Tampere. The **attendees** were apart from **STARDUST Tampere** the cities **Helsinki (MySmartLife, Lighthouse City)**, **Kerava (MatchUp, Follower City)**, **Oulu (MakingCity, Lighthouse City)** and **Vaasa (IRIS Smart Cities, Follower City)**. The meeting was a success and all the attendees agreed to continue the co-operation. An online meeting was held in May and a face to face meeting was held in Oulu in August.

As a result of this co-operation, the projects co-organized a replication event in Tampere in January 2020. The new **Lighthouse city Espoo (Sparcs)** was invited to join the event and to become a member of the collaboration group.

The members of the group are:

- Maria Viitanen, Petteri Huuska and Jari Viinanen, MySmartLife, City of Helsinki
- Johanna Kuusisto and Emmi Malin, MatchUp, City of Kerava
- Samuli Rinne, Kaija Puhakka and Sari Matinheikki, MakingCity, City of Oulu
- Maarit Vehviläinen, Anna Vilhula and Janne Laurila, STARDUST, City of Tampere
- Terttu Vainio and Paula Ala-Kotila, STARDUST, VTT
- Maria Backman and Pertti Onkalo, IRIS Smart Cities, City of Vaasa
- Mauritz Knuts, IRIS Smart Cities, Vasek
- Elina Wanne, Sparcs, City of Espoo

The meetings have been a good way to share **information and exchange experiences**. The co-operation will continue this year. An online meeting was held in March and the next meeting will be in April or May in Espoo, as a guest of Sparcs. STARDUST Tampere has been active in coordinating the meetings.



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## 1.5. Other networks of STARDUST CITIES

In this section we summarize some of the networks related with energy, e-mobility, building retrofitting &/or TICs on which STARDUST is collaborating through the respective city representatives.

### 1.5.1. PAMPLONA

Below some of the networks on which the STARDUST team of Pamplona is active:

- **RECI (the Spanish smart cities association)** is a network of local entities leading innovation ecosystems by promoting their own local network of agents related to research and innovation. <http://www.redciudadesinteligentes.es/> Pamplona makes part of this association and STARDUST innovation actions are part of the local initiatives in with this regard.
- The objective of **CIDEU (iberoamerican network of cities for strategic urban planning)** is to promote the strategic way of thinking about the design and management processes of urban projects, in order to achieve sustainable development in Ibero-American cities. [www.cideu.org](http://www.cideu.org).
- **ENERGY CITIES** is a European city network that defends a locally driven energy transition <https://energy-cities.eu>
- **CITIES FOR MOBILITY** is a network of municipalities, companies, research institutions and organizations from civil society that cooperate for developing, implementing and disseminating innovative policies and measures for sustainable urban mobility. <https://www.cities-for-mobility.net/>

### 1.5.2. TAMPERE

The City of Tampere has many internal networks like **Smart Building group** that has been active for couple of years. They are meant for sharing information. STARDUST Tampere has been coordinating the work of Smart Building group. Project manager Maarit Vehviläinen is a member in the **network for autonomous traffic**. The network is cooperating in writing a level 4 autonomous traffic plan for Hervanta area. Vehviläinen is also a member of **ITS factory**, a traffic related network that has members from companies and public sector. STARDUST Tampere is also an active member in the internal Smart Tampere network.

### 1.5.3. TRENTO

Trento is active in these networks:

- **ANCI (Associazione Nazionale dei Comuni Italiani)** that is the National Association of Italian Municipalities. ANCI represents around 7300 Municipalities. The fundamental aim of ANCI's activities is to represent and safeguard the municipalities' interests, lobbying parliament, the government, regions, and Italian public administration and EU bodies. They also organise meeting and conferences



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between cities for different topics also including cities that are involved in EU Projects.

- **Consorzio dei Comuni Trentino** that is the Consortium of Trentino Municipalities. Members are all the 166 Municipality of the Province of Trento and the Valley Communities. The Consortium manage different activities such as initiatives of consulting and training in different fields including also mobility and. Moreover, it coordinates activities related to the digitalisation process and innovation.
- **AGID (Agenzia per l'Italia Digitale)** that is the Agency for Digital Italy. The main purpose of the Agency is to guarantee the achievement of the Italian digital agenda objectives and contribute to the diffusion of information and communication technologies, with the aim of fostering innovation and economic growth. Municipality of Trento is collaborating with AgID in some projects as pilot city.
- **ForumPA** that works for fostering meeting and collaboration between Public Administrations, companies, research e civil society in all the process of innovation that impact the public system and developing of the country. They also publish every year the ICityRate

#### 1.5.4. LITOMERICE

Litomerice is active in these networks:

- Association of Energy Managers of Towns and Municipalities (**SEMMO**) – [www.semmo.cz](http://www.semmo.cz) – Association of municipalities interested in sustainable energy
- **CZECH SMART CITY cluster** - <https://czechsmartcitycluster.com/> - Association of companies bringing SC solutions
- **Healthy Cities of the Czech Republic** – [www.nszm.cz](http://www.nszm.cz) - Association of municipalities interested in sustainable development

#### 1.5.5. CLUJ NAPOCA

Network partners of STARDUST are: • the City hall • Utilities (DelGaz Grid, Electrica, water Somes) • Technical University of Cluj-Napoca • CREESC energy efficiency cluster • Architects Order Romania. Cluj-Napoca is also active in/at:

- The **proGireg H2020** project (<https://progireg.eu/>), which is more focused on NBS
- The **UrbforDan** project (<http://www.interreg-danube.eu/approved-projects/urbfordan>).
- The **National Institute for Research and Development of Isotopic and Molecular Technologies** Cluj-Napoca (<http://en.itim-cj.ro/>)
- The **Transylvania IT Cluster** (<https://transilvaniait.ro/en/sample-page-2/>), which helps Cluj-Napoca to disseminate information and to develop new projects.



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### 1.5.6. KOZANI

Network partners of STARDUST with regards to various initiatives are:

- The Municipality of Kozani
- Utilities (PPC, Municipal Water Management Company)
- University of Western Macedonia
- Cluster of Bioeconomy and Environment of Western Macedonia
- Municipal technical department

### 1.5.7. DERRY

Network partners of STARDUST with regards to various initiatives are:

- **Regional Energy Strategy**, a joint initiative between Derry City and Strabane District Council and Donegal County Council with a range of local and national stakeholders
- Department for the Economy's Energy Strategy Working Group
- **NIREV (Northern Ireland Renewing the Energy Vision)** in conjunction with Ulster University & Utility Regulator • Climate Emergency Members Working Group (local Councillors)
- **Climate Emergency all Party Working Group** (with members from all local councils and the NI Assembly)
- **P-CAN (Place-based Climate Action Network**
- **Local Government Climate Action Network (LGCAN**
- **SMARTrenew Project Partnership**
- **MARCTIC Project Partnership**



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## 2. Events and additional networks

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### 2.1. Tampere Smart City Week

Tampere Smart City Week was held **25-31 January 2020** for the second time. The week was designed and realised in cooperation with local actors. The week of events presented how Tampere has solved the challenges of Smart City development and what opportunities it creates as seen from different industries.

STARDUST Tampere organised three events during the week and invited colleagues from abroad to participate in the events.

- 1) Tue 29 Jan, Session “**Sustainable building in energy transition**” at Smart City Mindtrek conference
- 2) Wed 29 Jan, Replication event “**Success Stories and Development Challenges of Carbon Neutral and Energy-efficient Mobility, Building and Energy from Finnish Lighthouse Projects**” – open event
- 3) Wed 30 Jan, **STARDUST replication workshop** - learnings from Tampere – only for people working in STARDUST

On 29 Jan there was a session that reflected how carbon-neutral building could be achieved. The focus was on carbon calculating and energy transition. The speakers were experts from Finland, Norway and Sweden. About 50 people attended the session that was co organised by several Finnish projects (STARDUST, Energywise Cities and Puurakentaminen kasvuun Pirkanmaalla).

(<https://www.mindtrek.org/2020/carbon-neutral-building-energy/>)



Figure 2. Attendees in Smart City Mindtrek on 28 January. Photo: Mirella Mellonmaa



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On 29 Jan 50 participants from across Europe studied at the **workshop how low-emission housing, district heating and public transport** have been developed in Helsinki, Kerava, Oulu, Tampere and Vaasa. The business cases, legal issues and market barriers were also linked to the case examples. The event was organized by IRIS Smart Cities, Making-City, MAtchUP, mySMARTLife and STARDUST projects.



Figure 3. Attendees on a field trip on 29 January. Photo: Anna Vilhula

On 30 Jan about 20 people attended the **STARDUST replication day** where the City of Tampere showcased its experiences in developing the city and open data, boosting sustainable mobility and e-mobility, developing public transport and developing demand response capabilities through smart energy management in real estates. The city experts were there to answer to questions. The event was organised in co-operation with STARDUST Tampere WP3, WP5 and WP8.



Figure 4. STARDUST partners in 30 January. Photo: Anna Vilhula



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## 2.2. Trento Smart City Week

**Trento Smart City Week (also called TSCW)** is a big event hosted in Trento and organised by the Municipality of Trento. Some of promoters together with the Municipality are Province of Trento, Fondazione Bruno Kessler, University of Trento, EIT Digital, IEEE and in 2019 it had also the sponsorship of the AgID (Agenzia per l'Italia Digitale - Agency for Digital Italy (AgID) is the technical agency of the Presidency of the Council of Ministers).

Until now, it has been organised 3 editions of this event: first one in **2016**, then in **2018** and the last in **2019**.

Around **5000 people daily** visited the first two editions. In 2019 more than **16.000 visitors** came and visit the “Digital Village” organised in Piazza Duomo, with more than 140 events, **180 speakers**; moreover 7 “Digital Speakers” presented his/her personal and professional experiences starting from cyberbullying, Public Administration digitalisation process, digitalisation of the press and news, rights and obligations of digital citizens.

Related to Stardust, during the second edition in 2018 that has the subtitle “**The hope of belonging**”, Stardust team of Trento’s District held a couple of presentation related to Stardust project, one entitled “**Becoming Smart City thanks to Stardust**” held by the most important partners of the Trento District and one related to open innovation “Building together the General Regulation Plan” in which Municipality of Trento and FBK presented the platform “FuturaTrento – Obiettivi PRG” for the contribution of the citizens related to this thematic. Furthermore, during the entire TSCW in the Municipality of Trento stand, citizens had the chance to meet the Trento Partners in order to understand better the project. In this case it has been made a flyer for presenting the interventions will be done in the project and a poster.



Figure 5. Stardust booth and poster on EDP @ Trento Smart City Week 2019



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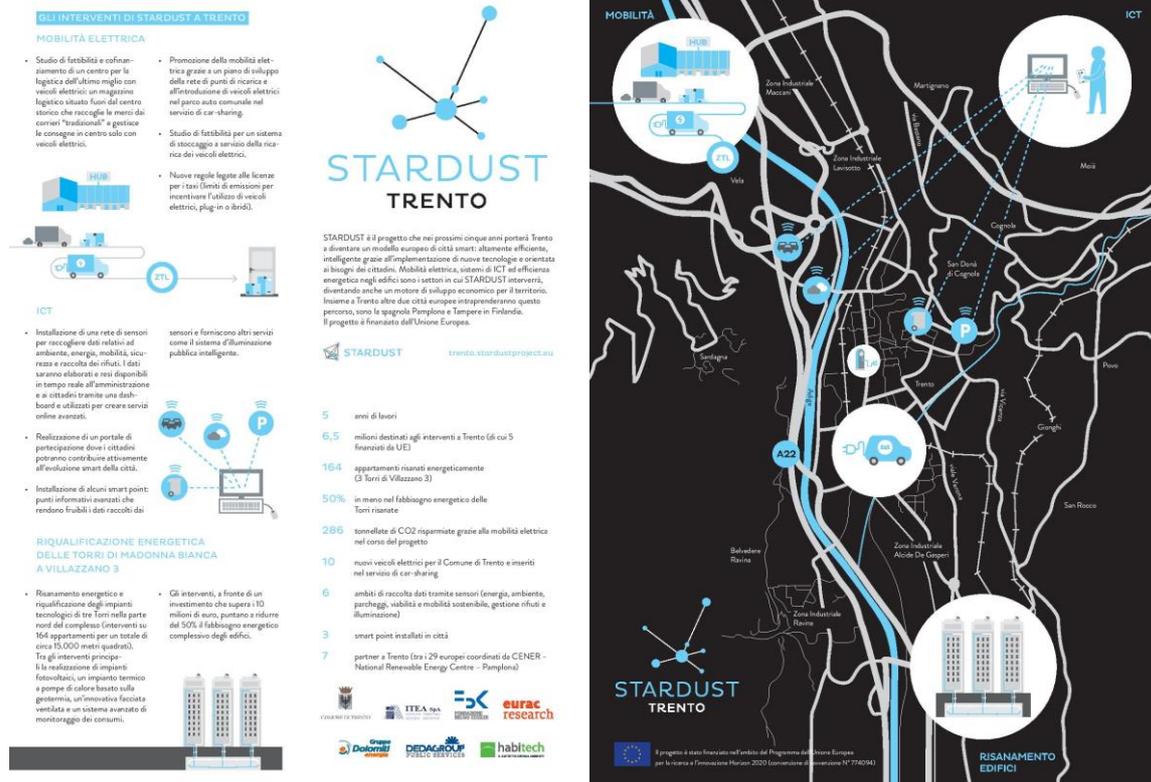


Figure 6. STARDUST brochure for Trento Smart City Week.

Instead in the last edition of 2019, during the 3 opening days of the “Digital Village”, Municipality of Trento in collaboration with Eurac and Habitech organised an event called “**Stardust Spritz**” the partners presented the goals and achievements of the project and interacted with the locals. Topics of discussion included interventions related to electric mobility and its logistical feasibility in limited traffic zones, smart sensors, and energy refurbishment works taking place at the Madonna Bianca district.

In this occasion, printed materials, posters, slide inside the presentation of the Municipality of Trento stand, and the official video were distributed and shown to the citizens, contributing to the dissemination of the project. Moreover, Eurac Research directly engaged citizens in the **planning of the future smart city**, by asking for their knowledge about local entrepreneurial initiatives (**Entrepreneurial Discovery Process - EDP**) and perceived needs of the city of Trento, through a participatory activity (Silvia Tomasi, Sonia Gantioler, Adriano Bisello, Daniele Vettorato).



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## 2.3. Smart and Sustainable Planning for Cities and Regions Conference – Bolzano

<https://stardustproject.eu/news/one-step-closer-to-making-sustainable-and-smart-cities/>

The **third edition** of the **Smart and Sustainable Planning for Cities and Regions Conference (SSPCR 2019)** took place from the **9th to the 13th of December 2019** at the NOI Techpark in **Bolzano** (Italy). The event was organised by Eurac Research. The conference aimed to support the **‘transposition’ of research into practice and visionary strategies into planning policies** and tools in relation to the challenges posed by the smart city/region approach. A total amount of **210 participants from 38 countries** attended the event, for a total amount of **143 presentations and 19 posters**.

STARDUST played a major role during the event, as it was one of the SSPCR2019 partner projects and was presented in two conference sessions.

The first session was the side **event “How to support local governments in Italy and across Europe?”** on December 10. Adriano Bisello and Daniele Vettorato gave a general presentation of the project, of the cities involved and of some of the STARDUST smart urban interventions to be implemented in Trento in the Building, Mobility and ICT sectors. The presenters highlighted the environmental, economic and social benefits of initiatives such as STARDUST as well, ranging from better air quality to higher employment and building values.

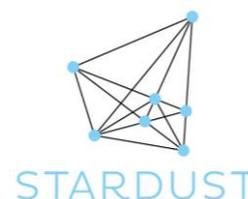
The second presentation was given by Adriano Bisello on December 12 during the session Energy master planning in Smart and sustainable cities – **Towards Positive Energy Districts**. The intervention focused on the current status of the STARDUST activities happening in Trento. New retrofitting techniques and energy-efficient systems that relies heavily on ICT are being applied to different buildings in Trento: two years after the project launch, the preliminary studies on logistics and soil are being finalized and the design of the interventions on buildings is complete.

## 2.4. Balkan Clean Energy Transition Conference and Fair.

KOZANI and Clube organised the first edition of the [Balkan Clean Energy Transition Conference and Fair](#) (19 – 22 September 2019, see [event concept and agenda](#) and STARDUST [pre-event press release](#)). The **Balkan Clean Energy Transition Conference** was a three-day event (19 - 21 September) covering Clean Energy topics such as renewables, energy efficiency, smart cities, circular economy, mobility, governance and citizen engagement, all of them leading the Balkan area throughout the coal transition. In particular, the Conference session on the 20<sup>th</sup> of September focused on Smart Cities and E-Mobility for the Clean Energy Transition. STARDUST played a leading role in the session, with keynotes from CENER, KOZANI, Clube and G!E. In parallel with the Conference, the **Balkan Clean Energy Transition Fair** was a four-day exhibition (19-22



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September) showcasing new technological solutions that will make Balkans cleaner and greener. A poster was produced by the local partners to advertise the event, see Figure 7. The poster highlights STARDUST among the major supporters:



Figure 7: The poster advertising the Balkan Clean Energy Transition Conference and Fair



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Figure 8: The SCIS poster for the Smart City Roadshow won by KOZANI and used to support the Balkan Clean Energy Transition Conference and Fair

The international conference and fair were enhanced by interactive sessions of knowledge exchange to inspire attendees in current and future Clean Energy initiatives. A mix of panels, presentations, discussions, roadshow, B2B exchanges, student matching and mentoring and other animated activities fostered the transition to the whole Balkan area and beyond. The ambition of Balkan Clean Energy Transition is to be the **Clean Energy accelerator that places the Balkan area on the global map as a vibrant & vital area** where innovative solutions for a cleaner, greener, smarter, safer, and better world are fostered. It will serve as the institutional initiative to start preparing for a **transition to the post coal era**. The Balkan Clean Energy Transition is expected to be a bi-annual event,



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during which new international Clean Energy initiatives, challenges and solutions will be presented. The 2019 edition was under the auspices of the Technical Chamber of Greece (TEE), the European Economic and Social Committee (EESC) and with the support of STARDUST, the EU Smart Cities Information System (SCIS) and the European Chemical Industry Council (CEFIC). The main partners were the Kozani Chamber of Commerce and Clube. The event had been co-organised by the Region of Western Macedonia, the Municipality of Kozani, the University of Western Macedonia, the Chemical Process and Energy Resource Institute (CPERI) of the Centre for Research and Technology Hellas (CERTH) and the Regional Development Agency of Western Macedonia (ANKO). The event was also the occasion for the organisation of the [SCIS Smart City Roadshows](#) won by Kozani in M17 (see section 1.3). This consisted of the poster (see Figure 8: The SCIS poster for the Smart City Roadshow won by KOZANI and used to support the Balkan Clean Energy Transition Conference and FairFigure 8) being produced by SCIS and distributed throughout Kozani to support among citizens the Smart City Session.

## 2.5. Smart City Expo World Congress – Barcelona

The mission of SCEWC (Smart City Expo World Congress) is to **empower cities and collectivize urban innovation across the globe**. Through promoting social innovation, establishing partnerships and identifying business opportunities, the event is dedicated to creating a better future for cities and their citizens worldwide.

As the intended world's leading event for cities, Smart City Expo World Congress provides a unique meeting point for the whole smart city ecosystem. This event is formed by three areas:

- **Congress:** a three-day program with +400 international experts coming together to share insights and learn best practices for a more sustainable urban world.
- **Expo:** a 54,000 m<sup>2</sup> marketplace where 1,010 global companies and organizations can engage with 24,000+ professional attendees and show the world their projects and smart implemented solutions. Open stands and multiple Agora spaces provide opportunities to listen to selected speakers, discuss congress level issues, and encounter business opportunities.
- **Side Events & Activities:** a curated list of sessions and workshops that broadens the event program and gives answer to concrete challenges. The perfect way to explore the most pressing issues and move from words to actions.

The **SCC Collaboration Network** identified this event as a strategic opportunity to explore the synergies among the different projects in order to communicate the achievements of the demonstration actions in a coordinated and coherent way, reaching a higher impact on the marketplace and the society.

As a result, **one booth is booked and managed co-ordinately by all SCC01 projects** every year, including organized **booth and Agora sessions**. Since the signing of the



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Manifesto (as mentioned in section 1.1.) in September 2018, STARDUST has participated with this communication activities, including the SCC Multitouch Software Tool.



Figure 9. Session at the booth of SCC Collaboration Network. SCW

STARDUST has made part of SCWEC in two editions:

- 2018 (13-15 Nov)
- 2019 (19-21 Nov)

In both occasions **CENER**, as coordination, and **Fondazione iCons**, as communication professionals, represented STARDUST, participating in the **booth and Agora sessions** and providing live coverage of the two editions on the project communication channels by collecting and sharing materials such as short video interviews and pictures, hence promoting and giving visibility to the role played by STARDUST at the world's leading event for smart cities.

In addition, in 2019 **TAM** participated in coordination with the NORDIC countries with their own booth, as well as **SICE** as TIC company.

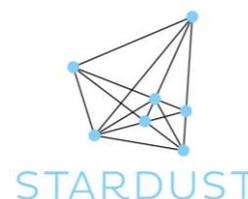
## 2.6. IEA-EBC: ANNEX 83 on Positive Energy Districts (PEDs)

The basic principle of **Positive Energy Districts (PEDs)** is to create an area within the city boundaries, capable of **generating more energy than consumed** and agile/flexible enough to respond to the variation of the energy market because a PED should not only aim to achieving an annual surplus of net energy.

The European Commission (EC) has proposed **generic regulatory conditions to support the implementation of PEDs** in real urban concept by 2050. Actually, the new SCC01 calls include the requirement of demonstrating PEDs within the lighthouse projects since last year, but, unfortunately, it is still unclear the scope and definition of this new concept. The international research community has a central role in this definition and in



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stating the next research streams for developing PEDs and supporting the decision making process with accurate information (Figure 10. The roles of the policy and research and innovation processes in producing effective outcomes for solving energy-related issues facing cities and communities.) especially when there can be **conflicting policy goals**.

This is actually the vision of a **new initiative of IEA-EBC called ANNEX 83** on Positive Energy Districts (PEDs). The Scope of this Annex is developing an in-depth definition of PED and the technologies, planning tools and planning and the decision-making process related to positive energy districts. Practical experience and data to be used in the Annex will be gained from demonstration cases.

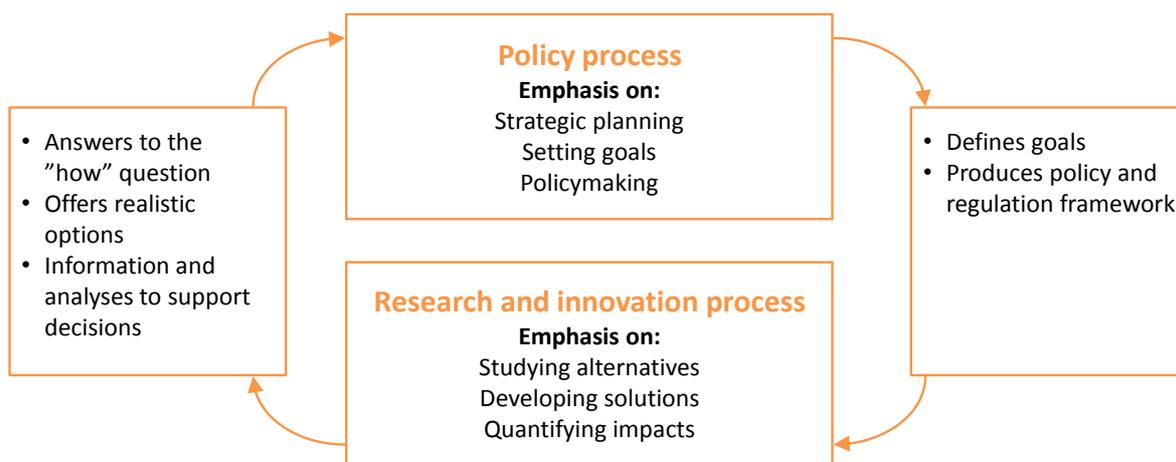


Figure 10. The roles of the policy and research and innovation processes in producing effective outcomes for solving energy-related issues facing cities and communities.

This Annex will build on the existing results of the following Annexes and will be coordinated with the ongoing ones within the **framework of the Buildings and Communities Programme (EBC)**:

- **Annex 51 Energy Efficient Communities** regarding planning tools and methods, case studies of energy efficient communities, decision making strategies and processes and policy development.
- **Annex 60 New Generation Computational Tools for Building & Community Energy Systems** regarding the application and development of computational tools for the design of district energy systems.
- **Annex 63 Implementation of Energy Strategies in Communities** regarding the operationalization of strategic district level planning and related organizational, legal, social and policy issues.
- **Annex 64 LowEx Communities** regarding developing, designing, modelling and implementing low exergy heating and cooling solutions on a district level.
- **Annex 67 Energy Flexible Buildings** regarding modelling and designing buildings to work as parts of a district-level energy solution in a smart way and methods for



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analysing and planning load matching, self-consumption, peak shaving etc.

- **Annex 73: Towards Net Zero Energy Public Communities** regarding lessons and best practices that can be learned from communities of public buildings such as campuses and military bases.
- **Annex 75 Cost-effective Building Renovation at District Level Combining Energy Efficiency & Renewables** regarding the possibilities of moving existing districts closer to the PED level.

Additionally, the Annex will seek to benefit from research results and collaboration with other IEA Technology Collaboration Programmes (TCP). Other relevant international cooperation activities already ongoing include the following:

- **EU Strategic Energy Technology Plan process**
- **European Energy Research Alliance EERA**
- **EIP-SCC Marketplace (Marketplace of the European Innovation Partnership on Smart Cities and Communities)**
- **EU Smart Cities Information System (SCIS)**
- **JPI Urban Europe (Joint Programming Initiative)**
- **BRIDGE/Horizon 2020**

Contributing to the preparation of this full proposal two international workshops were held: the first international workshop was held in Rome on the 2 September 2019 and a second follow-up meeting in Graz (Austria) on the 2 October 2019. Among the outcomes of the workshop were the project team, its leadership and finalization of the project content.

The Operating Agents for the Annex are: Dr. Pekka Tuominen and Dr. Francesco Reda (VTT Technical Research Centre of Finland Ltd.).

The Subtasks leaders are:

- Subtask A: Steinar Grynning (SINTEF, Norway), Xingxing Zhang (Högskolan Dalarna, Sweden); Vicky Albert-Seifried (Fraunhofer, Germany)
- Subtask B: Ursula Eicker (Concordia University, Canada), Genku Kayo (Tokyo City University, Japan), Andrea Gabaldón Moreno (CARTIF, Spain)
- Subtask C: Francesco Guarino (Palermo University, Italy), Dorian Frieden (Joanneum, Austria), Adriano Bisello (EURAC, Italy)
- Subtask D: Niki Gaitani (NTNU, Norway), Florencio Manteca González (CENER, Spain), Neumann Hans-Martin (AIT, Austria)

**STARDUST “innovation islands”** are exemplary models of smart, highly efficient, intelligent and citizen-oriented cities, that clearly fit with the definition and spirit of these new PEDs. The STARDUST community is very active in the process of ANNEX 83, with three research institutions involved:

- **VTT: Francesco Reda as operating agent and coordinator.**
- **CENER: Florencio Manteca as Subtask D leader.**
- **EURAC: Adriano Bisello as Subtask C leader.**



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