

Stakeholder Group on PV Community Self Consumption

(MS Working Group SET-Plan Action 4)

Hemma Bieser (Support SET-Plan MS WG 4) and Gaëtan Masson (ETIP PV)

Marseille, 9 September 2019



- 1. Who we are
- 2. Our motivation
- 3. What we did so far
- 4. First results
- 5. Next steps





- 1. Who we are
- 2. Our motivation
- 3. What we did so far
- 4. First results
- 5. Next steps







1. Who we are



Hemma Bieser
Managing Partner
avantsmart
Support SET-Plan MS WG 4



Michael Hübner
Austrian Ministry of
Transport, Innovation and
Technology
Co-Chair SET-Plan MS
Working Group on SET-Plan
Action 4-Energy Systems
and Networks



Gaëtan Masson
Managing Partner Becquerel
Institute
ETIP PV





- 1. Who we are
- 2. Our motivation
- 3. What we did so far
- 4. First results
- 5. Next steps







2. Our motivation: SET-Plan Innovation Activity A4-IA2.2-5

"This stakeholder initiative was established to contribute to A4-IA2.2-5 Families of living labs to develop technology-service systems for direct use of PV energy on an aggregated level of multi-family buildings, districts or communities."





- 1. Who we are
- 2. Our motivation
- 3. What we did so far
- 4. First results
- 5. Next steps







1st Stakeholder Workshop on October 23rd 2018, Brussels, Belgium

- R&D Project Leaders and experts from Living Lab Initiatives from 7 European countries (Austria, Belgium, Germany, Italy, Netherlands and Sweden) gathered
- The overall goal of the workshop was to make a first step towards the implementation
 of the Innovation Set Plan Action 4, addressing issues of developing technology service systems for direct use of PV electricity (self-consumption) on an aggregated
 level of multi-family buildings, districts or communities
- Press release







2nd Stakeholder Workshop on May 6th 2019 Stegersbach, Austria

Goals:

- Identify relevant R&D projects and Living Lab Initiatives in member countries
- Bring European project leaders together and exchange first experiences in the projects
- Discuss barriers in implementation in different countries
- Discuss different legal aspects in the participating countries









National Stakeholders Coordination Group (NSCG) Meeting on June 18th 2019, Brussels

3 different communities met:

- 1. PV Community Self Consumption Stakeholder Group
- 2. National and Regional Initiatives on **Energy Communities**
- 3. Flexible and Energy Positive Districts
- All working on the same topic how can we join forces?









- 1. Who we are
- 2. Our motivation
- 3. What we did so far
- 4. First results
- 5. Next steps









Case Book

Case Book

PV Direct Use on Community LevelCases and Living Labs

SET-Plan Action 4 – Energy Systems
Innovation Action A4-IA2.2-5
Version 1 – August 2019





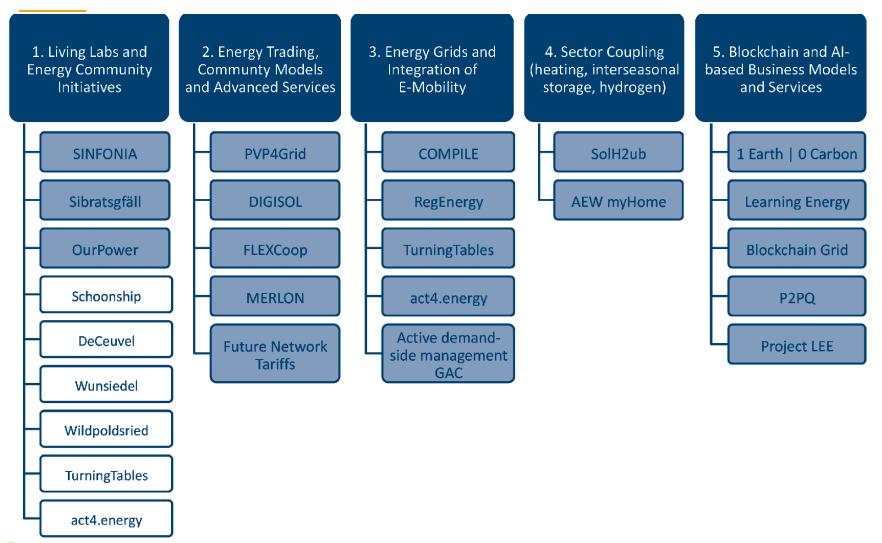
Case Book Content

- 1. Information about SET-Plan Action 4: Goals & Activities
- Latest developments on regulatory framework
- 3. Description of cases and living lab initiatives





5 thematic clusters





7.1.1 SINFONIA - Smart Initiative of cities Fully cOmmitted to iNvest in Advanced large-scaled energy solutions



Case description 1

A) Author Information

Country Austria
Contributor Sophia Neuner

Organisation IKB – Innsbrucker Kommunalbetriebe AG

E-mail sophia.neuner@ikb.at

B) Project Information

Project Title SINFONIA Smart INitiative of cities Fully cOmmitted to invest in

Advanced large-scaled energy solutions

Location Innsbruck, Austria **Time Period** 01.06.2014 – 31.05.2020

Funding Government: EU-Commission FP7

Private Sector

Participating Coordinator:

Organisations > RISE Research Institutes of Sweden

Pilot District Bolzano:

- > City of Bolzano
- > TIS Techno Innovation South Tyrol KAG
- > eurac research
- > Istituto per l'Edilizia Sociale (IPES)
- > Alperia
- > Agenzia CasaClima

Pilot District Innsbruck:

- > Landeshauptstadt Innsbruck
- > Innsbrucker Kommunablbetriebe AG (IKB)
- > ATB-Becker e.U.
- > Neue Heimat Tirol
- > University of Innsbruck
- > Standortagentur Tirol
- > alpS GmbH
- > TIGAS Erdgas Tirol GmbH
- > Innsbrucker Immobilien Gesellschaft (IIG)
- > Tiroler Wasserkraft AG
- > e3 consult

Early adaptor cities:

- > City of Borås
- > City of La Rochelle



DI Hemma Bieser, MSc | 36th EU PVSEC Ma





> Corporacion de Empresas Municipales de Sevilla





Website http://alpsthu.bplaced.net/wordpress/

http://www.sinfonia-smartcities.eu/

#smartcity #energyefficientbuilding #districtheating Keywords

#intelligentelectricitygrid

C) Project Summary

Background & challenges

With 80% of European citizens living in urban areas, cities have a crucial role to play in the transition towards a low-carbon economy. Faced with the challenge of ensuring the quality of life of their citizens while becoming more energy efficient, cities must look at the system level and develop integrated urban development strategies that will make them both sustainable and better places to live.

Objectives of the project

The SINFONIA project is a five-year initiative to deploy large-scale, integrated and scalable energy solutions in mid-sized European cities. At the heart of the initiative is a unique cooperation between the cities of Bolzano and Innsbruck, working hand in hand to achieve primary energy savings and increase the share of renewables in two pioneer districts. This was done through an integrated set of measures combining the retrofitting of around 100,000m² of living surface, optimization of the electricity grid, and solutions for district heating and cooling.

Current status & results

All projects of IKB are finalized and in the monitoring status.

Projects with focus on self-consumption:

- eco buildings:
 - Tenants based projects: "Mieterstrom" tenant-based electricity supply PV
- > IKB-Smart-City-Lab: Hybrid grid with sector coupling. Self-consumption of so far around 35% of electricity. Set up of Local Energy Community. 330 kWp of PV were installed.
- In total over 400 MWh are annually produced through PV modules within SINFONIA and most modules have surplus feed-in tariffs.





Case description 2



Case description 3



Barriers & obstacles

The tenants self-consumption business model was developed during SINFONIA. It enables the tenants with now own property to consume electricity from PV modules from their own roofs. Two further projects shall be realized this year (2019) with the project partners IIG and NHT. To invent the "Mieterstrom" tenant-based electricity supply PV, lot of obstacles occurred.

Within SINFONIA a similar project was invented a year ago, but it was still necessary that each PV module was directly connected to each tenant. So, for each flat (consumer) a inverter was mandatory. Now, after the amendment, it is possible to have on a multiparty house one PV plant with only one inverter.

Key regulations, legislations & guidelines

One of the key regulations, that enabled the "Mieterstrom" tenant-based electricity supply PV for the apartment buildings, was the amendment of the § 16a ElWoG (Kleine Ökostromnovelle).





How to use this Case Book?

- 1. Browse through
- 2. Find relevant information and contact data
- 3. Get in contact and join our initiative for starting new projects





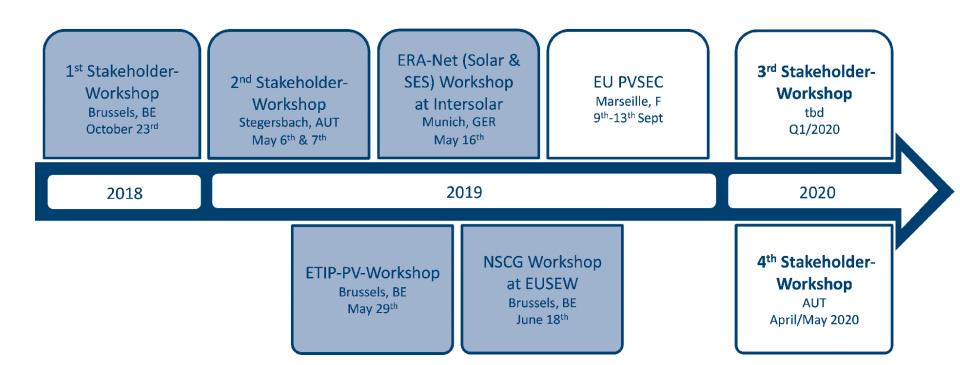
- 1. Who we are
- 2. Our motivation
- 3. What we did so far
- 4. First results
- 5. Next steps







Overview and outlook







Join us!

Register as Expert on the Expera platform: http://www.smartgridsplus.eu



Join one of our next meetings!





Federal Ministry Republic of Austria Transport, Innovation and Technology





Case Book and future activies:



 Hemma Bieser avantsmart hemma.bieser@avantsmart.at



Gaëtan Masson
Becquerel Institute
g.masson@becquerelinstitute.org

