



# EUROPEAN POLICY BRIEF

## SOCIAL INNOVATION IN ENERGY SUPPLY

This policy brief on Social Innovation in Energy Supply is based on the results of the second empirical phase of the EU funded project “Social Innovation: Driving Force of Social Change” (SI-DRIVE). It follows a policy brief from February 2016 in which the results of the first empirical phase were presented. Highlights are given from results of in-depth case studies of social innovation initiatives in energy and a policy workshop with external experts in the spring of 2017.

The main message is that the energy transition needs to speed up and that social innovation can play a unique role by both stimulating sustainable energy production and energy saving and adding additional values such as local liveability and learning. At the moment there is no official policy directed at social innovation and initiatives are experiencing many barriers to achieve their goals, such as regulatory and funding barriers. Policy makers can help them fulfil their role by working on overcoming these barriers and stimulating drivers by giving support and putting social innovation policy in place.

*Merel Ooms, Annelies Huygen (TNO), Wolfram Rhomberg (AIT)*

May 2017



## INTRODUCTION

Expectations are that the worldwide need for energy will multiply significantly, and that a continuation of the use of fossil fuels will lead to destabilizing economic effects and environmental consequences. As a response to this, a European renewable energy policy has been set up that includes goals to achieve a sustainable energy system based on renewable energy. However, many Member States are behind on their targets. Therefore the so-called energy transition needs to speed up.

Following global and European policy goals, the energy system is in a transition from a central, fossil fuel dominated system to a renewable energy based system including more local production. The need for a sustainable system and the technological possibilities for producing energy locally have inspired many social innovation initiatives to develop.

Social innovation (SI) is understood in the SI-DRIVE project roughly as ways in which actors or groups of actors try to address societal needs and problems in different ways than existing practices. In the energy sector this translates into achieving a sustainable, renewable energy system in other ways than the existing top-down, central, mostly fossil-fuel based way. Citizens, local communities, civic initiatives or collaborations between these parties and market players and/or government can have a major role by deploying renewable energy sources complementary to those developed solely by the market or governments. Furthermore, these initiatives add additional values, such as local liveability, more involvement of private stakeholders and civil society and empowerment.

In this policy brief, three things are discussed:

- 1) Types of SI and cases that were studied
- 2) The future role that SI initiatives can play in the energy transition
- 3) Drivers and barriers for SI initiatives.

This leads to a set of recommendations for policy makers who aim to stimulate social innovation. The results presented are derived from in depth case studies, on which a comparative analysis was done, and a workshop with external experts.

## EVIDENCE AND ANALYSIS

### *Types of social innovation and cases*

In the SI-DRIVE project, initiatives are clustered in 'practice fields', which is a general type of projects that have similar characteristics in common. Out of the seven practice fields that were presented in the first policy brief, cases from three practice fields were selected for the in-depth study. The chosen practice fields are representing the main societal challenges and the most innovative areas.

The first practice field is **energy collectives**. These can be for example energy cooperatives or eco-villages. This is about collective saving and/or production of energy by different parties in various compositions. It is the most dominant practice field of social innovation in energy. Although it can take many shapes and forms, it is treated as one group since it is not easy to distinguish sub practice fields. The main reason for that is that every initiative is in some way unique in terms of activities and goals.

The second selected practice field is **local production of energy**. This practice regards the local (domestic) production of renewable energy by individual households, organisations or businesses. It can be distinguished from the former practice field since these activities are undertaken by an individual party instead of a collective. Because of the lack of a collective aspect, it is less crucial from a social innovation perspective, but substantial individual activity has a lot of influence on the energy system.

The third practice field is **providing examples and inspiration**. These can be information campaigns, Energy Model Regions or award systems. It is about inspiring others to take action, raising awareness or transforming institutions to become more sustainable. Their direct goal is not to reduce energy use or increase sustainable production of energy themselves, like the other practice fields, but to foster change in others to do so.

In the table below the cases can be found that were studied in-depth.

Name of case	Practice field	Country	Description
Cloughjordan EcoVillage	Energy collectives	Ireland	Destination for learning about sustainable living with residents living in high-performance green homes.
Solar Community Bologna	Energy collectives	Italy	Local citizen's initiative created by seven small towns in Emilia Romagna, co-financed by the Regional administration.
Goienet	Energy collectives	Spain	Renewable energy generation and purchase cooperative.
Model Region Thailand	Providing examples	Austria	A region that wants to become self-sufficient in energy supply.
Energy lady and energy kid	Providing examples	Turkey	Educating women and children on energy efficiency throughout the country.
"Qvinnovindar" (Women of Wind Energy)	Energy collectives	Sweden	Organisation that helps to recruit women to the wind power industry and provide career development.
Solar powered irrigation system	Local production	Egypt	Initiative to develop a system which provides fresh water for use in households, industry or agriculture, powered by solar energy.

### *Future role of social innovation*

In the discussions particularly during the second Policy Workshop in spring 2017, it was stated that social innovation initiatives can play a **unique role** in the energy transition, adding additional values to activities of governments or companies. Several roles were mentioned, such as: (1) change the energy behaviour of consumers, (2) achieve other outcomes next to energy, such as liveability and empowerment, (3) create action on realising a sustainable system, (4) enable investment in renewables, (5) increase transparency in energy prices and (6) create independence from fossil energy producers.

### *Drivers and barriers*

In order for social innovation initiatives to be able to fulfil these roles, several drivers play a role and barriers should be overcome. Some **drivers** that can be fostered are: (1) collective knowledge, (2) motivation of individual actors involved, (3) social consensus on the need for energy efficiency, (4) support by the government, (5) an open market with equal access, (6) established structures and networks, (7) generation of results and outcomes and (8) professional and effective management and leadership. And some **barriers** that need to be overcome are: (1) Low interest in energy, (2) regulatory burdens, (3) lack of funding and capital, (4) volunteer fatigue (people are asked to do a lot for free), (5) Shifts in policy and subsidies, (6) in-crowd community (people are too locally focused), (7) dominance of traditional parties, (8) absence of quick results and (9) lack of knowledge.

## POLICY IMPLICATIONS AND RECOMMENDATIONS

Considering the uniquely contributing role that social innovation initiatives can play in the transition towards a renewable energy system, it is important that policy makers know how to take away barriers and stimulate drivers. In this section, the policy implications and recommendations based on the results from the case studies and workshop are discussed.

Given the value of social innovation it is surprising that no policy measures were found in this project that currently address social innovation specifically. Therefore there is an overall **need for a specific Social Innovation policy approach** and strategy to foster drivers and overcome barriers. This policy approach should be multilevel; however the regional level is of main importance because that is where the initiatives are active. In this approach (local) governments and policy makers can take up a facilitating role including different types of support to initiatives. Such an SI energy policy should be characterised by flexibility, inclusiveness and the will to foster collaboration and learning between and within the involved stakeholder groups. The following recommendations can be part of a dedicated policy approach for Social Innovation in the Energy domain.

Barriers	Recommendations
Low interest in energy by consumers	Stimulate SI initiatives that aim at increasing awareness concerning sustainable energy.
Regulatory burdens to start an initiative and enter the energy market	Change the rules of the game to make room for SI, create a level playing field for new and traditional parties in the energy market.
Lack of funding and capital	Provide funding programs and enable alternatives for funding. Provide subsidies, tax reductions, insurances and loans tailored for SI. Support and develop alternative ways of funding SI, e.g. through private investors and citizens.
Volunteer fatigue within initiatives because of high amount of interest	Support with funding and providing access to networks and platforms. Stimulate development of SI initiatives so that their number will increase and pressure on a few becomes less.
Shifts in policy and subsidies	Provide stable policies and manage expectations. Create a policy that particularly focuses on SI.
In-crowd community within initiatives	Support networks and platforms to broaden horizon and potential solutions, be a facilitator.
Dominance of traditional parties	Work on creating a level playing field, prepare SI to enter the market.
Absence of results and outcomes	Aim at specific outcomes/impacts but also open up for process innovations. Focus less on the output and more on success in the process.
Lack of knowledge within initiatives	Provide support to SI initiatives with expert knowledge and management knowledge/capacities and further develop their knowledge by e.g. linking SI to existing networks or set up new networks.

Drivers	Recommendations
Collective knowledge within initiatives	Provide support to further develop their knowledge by e.g. linking SI to existing networks or set up new networks. Educate policy makers in skills to deal with SI.
Motivation of individual actors involved in initiatives	Define a dedicated strategy and goals for SI to make use of its potential. Go beyond economic values. Be proactive and advocate for SI.
Social consensus on the need for energy efficiency	Integrate sustainability and SI in educational programs in order to further boost social consensus.
Support by the government for initiatives (financial and non-monetary)	Provide tailor-made support for different types of initiatives to stimulate their development. Develop dedicated SI policy and focus on local policies since that is where the initiatives are active. Provide subsidies, tax reductions, insurances and loans tailored for SI.
Open market with equal access for established and new parties	Create a level playing field in the energy market. Work on taking away boundaries for SI to enter the market. Involve all stakeholder groups in energy, stimulate cooperation between them. Be flexible, allow for experimentation and failure. Consider SI criteria in public tenders and create certificates. Be aware of tensions between newcomers in the energy market and the traditional parties.
Established structures and networks for initiatives to link to and profit from	Build on existing structures and networks to speed up the development of SI. Be a broker between civil society and the market. Create bridge organisations and provide infrastructure for advice and services for SI.
Generation of quick results by initiatives	Be patient on the long run when funding an initiative or supporting them, but also ask for some quick results and communication about those results. Support campaigns and marketing for SI.
Professional and effective management and leadership within initiatives	Foster professionalization of management, planning and competences within SI. Set up incubators and accelerator programmes, e.g. for start-ups.

Additional results on the case studies and recommendations can be found in deliverable 7.3 of the SI-DRIVE project, the case study report (see further readings)

## RESEARCH PARAMETERS

**Social Innovation – Driving Force of Social Change**, in short **SI-DRIVE**, is a research project aimed at extending knowledge about Social Innovation (SI) in three major directions:

- Integrating theories and research methodologies to advance understanding of Social Innovation leading to a comprehensive new paradigm of innovation.
- Undertaking European and global mapping of social innovation initiatives, thereby addressing different social, economic, cultural, and historical contexts in twelve major world regions.
- Ensuring relevance for policy makers and practitioners through in-depth analyses and case studies in seven policy fields, with cross European and world region comparisons, foresight and policy round tables.

SI-DRIVE involves 14 partners from 11 EU Member States and 11 partners from other states of all continents, accompanied by 13 advisory board members, all in all covering 30 countries all over the world.

Research is dedicated to seven major policy fields: (1) Education and Lifelong Learning (2) Employment (3) Environment and Climate Change (4) Energy Supply (5) Transport and Mobility (6) Health and Social Care (7) Poverty Reduction and Sustainable Development.

The approach adopted ensures cyclical iteration between theory development, methodological improvements, and policy recommendations. Two mapping exercises at the European and the global level were carried out in the frame of SI-DRIVE: Initial mapping captures basic information of more than 1,000 actual social innovations from a wide variety of sources worldwide, leading to a typology of social innovation. Subsequent mapping focused on well documented social innovation, leading to the selection of 82 cases for in-depth analysis in the seven SI-DRIVE policy areas. The results of the global mapping and the in-depth case studies were analysed on the ground of the developed theoretical framework, further discussed in policy and foresight workshops and stakeholder dialogues - carefully taking into account cross-cutting dimensions (e.g. gender, diversity, technology), cross-sector relevance (private, public, civil sectors), and future impact.

Beneath the comprehensive definition of Social Innovation and defined practice fields, five key dimensions (see figure) are mainly structuring the theoretical and empirical work.

The outcomes of SI-DRIVE will cover a broad range of research dimensions, impacting particularly in terms of changing society and empowerment, and contributing to the objectives of the Europe 2020 Strategy.



## PROJECT IDENTITY

**PROJECT NAME** Social Innovation: Driving Force of Social Change (SI-DRIVE)

**COORDINATOR** Antonius Schröder, Jürgen Howaldt, Technische Universität Dortmund, Germany  
schroeder@sfs-dortmund.de

**CONSORTIUM** Technische Universität Dortmund – Sozialforschungsstelle (Social Research Centre) - TUDO -, Dortmund, Germany (Coordinator)  
Applied Research and Communications Fund – ARCF -, Sofia, Bulgaria  
Australian Centre for Innovation - ACIIC -, Sydney, Australia  
Austrian Institute of Technology – AIT -, Vienna, Austria  
Bertha Centre for Social Innovation and Entrepreneurship, University of Cape Town – UCT-, Rondebosch Cape Town, South Africa  
Bradford University – UoB, Bradford, United Kingdom



Centre de recherche sur l'innovation sociale, Center for research on social innovation  
 University of Quebec - CRISES -, Montreal, Canada  
 Corporation Somos Más - SOMOSMAS -, Bogota, Colombia  
 Heliopolis University - HU -, Cairo, Egypt  
 Istanbul Teknik Universitesi - ITU -, Istanbul, Turkey  
 Institut Arbeit und Technik / Institute for Work and Technology, Westfälische  
 Fachhochschule Gelsenkirchen – IAT -, Gelsenkirchen, Germany  
 Institute of Socio-Economic Development of Territories of the Russian Academy of  
 Sciences - ISEDT RAS -, Vologda, Russian Federation  
 International Organisation for Knowledge Economy and Enterprise Development,  
 FORENINGEN - IKED -, Malmö, Sweden  
 Kazimiero Simonavičiaus Universitetas - KSU -, Vilnius, Lithuania  
 LABORATORIJ ZA DRUSTVENE INOVACIJE UDRUGE, social innovation lab - SIL -,  
 Zagreb, Croatia  
 Lama Development and Cooperation Agency - LAMA -, Florence, Italy  
 Netherlands Organisation for Applied Scientific Research – TNO -, Leiden, The  
 Netherlands  
 Ryerson University - RU -, Toronto, Canada  
 Tata Institute of Social Sciences - TISS -, Mumbai, India  
 The Young Foundation – YF -, London, United Kingdom  
 United Nations Economic Commission for Latin America and the Caribbean - ECLAC -,  
 Santiago de Chile, Chile  
 Universidad de la Iglesia de Deusto / University of Deusto - UDEUSTO –, Bilbao, Spain  
 University Danubius Galati - UDG -, Galati, Romania  
 Zentrum für Soziale Innovation / Centre for Social Innovation Vienna – ZSI -, Vienna,  
 Austria  
 Zhejiang University Hangzhou - ZJU -, Hangzhou, China (People's Republic of)

**FUNDING  
SCHEME**

FP7 Programme for Research of the European Union – Collaborative project Socio-economic Sciences and Humanities SSH.2013.3.2-1 Social Innovation – empowering people, changing societies?

**DURATION**

January 2014 – December 2017 (48 months).

**BUDGET**

EU contribution: 4 888 551.20 €.

**WEBSITE**

[www.si-drive.eu](http://www.si-drive.eu).

**FOR MORE  
INFORMATION**

Contact: Merel Ooms [merel.ooms@tno.nl](mailto:merel.ooms@tno.nl)  
 Antonius Schröder [schroeder@sfs-dortmund.de](mailto:schroeder@sfs-dortmund.de)

**FURTHER  
READING**

SI-DRIVE Policy Briefs 2016 on Social Innovation in Employment, Environment, Energy Supply, Transport and Mobility, Health and Social Care, and Poverty Reduction and Sustainable Development <http://www.si-drive.eu/?p=1934>  
 SI-DRIVE Policy Briefs 2017: Social Innovation in Education, Employment, Environment, Energy Supply, Transport and Mobility, Health and Social Care, and Poverty Reduction and Sustainable Development. <https://www.si-drive.eu/?p=2834>  
 SI-DRIVE Newsletters ([http://www.si-drive.eu/?page\\_id=333](http://www.si-drive.eu/?page_id=333))  
 SI-DRIVE Case study reports 2017. Social Innovation in Energy Supply: Case study results. Deliverable D7.3 (<https://www.si-drive.eu/?p=2567>)