EUROPEAN
POLICY BRIEF

SOCIAL INNOVATION IN ENVIRONMENT AND CLIMATE CHANGE

This policy brief on Social Innovation in Environment and Climate Change is based on the empirical mapping of social innovations within the EU funded project "Social Innovation: Driving Force of Social Change" (SI-DRIVE). It takes stock of the results of 94 mapped cases and 10 in-depth case studies on social innovations gathered in the SI-DRIVE policy field of Environment and Climate Change. Based on the empirical results policy recommendations were elaborated in the second Policy and Foresight Workshop on Environment and Climate Change in spring 2017 looking for policy approaches. Very often existing routines in environmentally relevant behaviour cumulate and impact negatively on nature; Social innovators in the area of Environment and Climate Change on the one hand, introduce new services that combine environmental and social aspects and henceshow feasible alternatives to existing routines and increase the capacity of individuals or groups to change behaviour and make choices that may lead to less undesirable effects on nature. On the other hand, often social innovators feel a strong incentive to act where policies are dysfunctional or missing.

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June 2017

INTRODUCTION

The main interest of social innovations in the area of environment is reducing society's environmental impact. Detrimental environmental impact can take a multitude of forms, many of these like the deterioration of oceans and marine habitats, the stratosphere or rainforests, cannot be felt everyday by individuals on a local level. However, these areas of the environment are influenced by the everyday behavior of individuals on a local level which is often motivated by short-term profit thinking and an emphasis on individual benefits over social benefits (tragedy of the commons). It is the ambition of many social innovation initiatives to bring new solutions to environmental problems in providing a local context to often global environmental problems. A

more sustainable economy is a major issue in social innovation in the area of environment. This is hinged to more sustainable production chains, to all aspects of the circular economy and to consumer patterns and consumer choice. This strong dependence on consumer patterns and consumer choice entail, of course, increased awareness of (un)sustainable behaviour and puts emphasis on citizen engagement and inclusion more generally. Especially throwaway products and throwaway behaviour cause fast-growing amounts of waste (also food waste, which has an additional ethical dimension) and high CO_2-emissions.

As already described in the first policy brief 2016 social innovations with environmental impact help building up awareness and reaching the hearts and minds, but to a great extent their role also seems to be providing feasible alternatives to existing routines. Concerning technology and social innovation, in the field of climate and environmental policy, current technological configurations are causing large environmental impacts and are part of the problem whereas new 'green' technologies are at the heart of the proposed solution at the same time.

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. Out of the eight practice fields of the policy field Environment, 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 repairing, re-using and recycling. There are a number of activities taking place in a number of European countries and aiming at repairing, re-using and recycling of different products, 16 of these are included in the SI-DRIVE Global Mapping. These are for instance repair-cafés where people meet and exchange knowledge and help each other to repair broken products. Generally there is a focus on electronic products, but there are examples of other things such as clothes or toys as well. In some cases social innovation projects in this practice field combine the aim to repair and re-use articles with other societal impacts, for instance in the field of employment by hiring people who have difficulties to get a job on the 'regular' job market.

The second selected practice field is sustainable agriculture and food. The most frequent practice field in environment and climate change (24 SI initiatives) embraces activities in alternative food production and distribution. It is a very heterogeneous practice field, where projects reach from associations of interested people who buy organic food in a self-organized way directly from local farmers and to give everybody the opportunity to consume high quality organic food to the production of sustainable (organic) food itself. Related to alternative food production and distribution are activities promoting these sustainable practices in agriculture and fishery. Another sub-practice field which seems to be established already in some countries, but still growing in many countries is avoiding the waste of food.

The third practice field is social innovation in a smart city context. The term social innovation is increasingly appearing in policy documents in relation with the development of "smart cities". The main characteristic of these social innovations is that they are developed and implemented in a smart city policy context. Examples of such activities can be found in Austria, Germany, the Nordic countries and Gulf Cooperation Council member countries (Qatar, Bahrain, etc), Masdar City being the most prominent example.

Drivers and barriers in Environment and Climate Change are the following:

Incentives and latent demand
Latent demand is a critical factor for social innovation initiatives in the area of environment. Often social innovations in the area of Environment and Climate Change creatively combine environmental aspects (e.g. repair services) with social aspects (e.g. re-integration of long-term unemployed into the regular job market) and economic aspects (e.g. enter markets as businesses). Although there often is a strong demand for the social aspects of the new service (unemployment), upon starting the new business, the demand for the environmental aspects of the service (e.g. repair, or alternative food production and distribution) is often unclear. Hence the introduction of the new service is based on more assumed or latent demand. It is often perceived by the initiators

of the social innovation initiatives as a tension or societal challenge (kick-started by statistics or personal experiences). Initiators of such projects start on the basis of assumed or latent demand and it reveals gradually, if customers are willing to pay the price and explicitly demand the new service. Thus social innovation initiatives have an important role as they provide real feasible alternatives to the existing ways of doing things.

Empowerment
One strength of the social innovation initiatives in the area of Environment and Climate Change lies in its empowerment function. Citizens are empowered to manage their waste in a sustainable way or to mitigate their negative impact on the environment. The notion of empowerment has gained interest in several disciplines. As a general concept, it is characterized by following a strength-oriented perception in contrast to a deficit-oriented perception. Although empowerment has several dimensions, they all refer to informing about otherwise hidden features (which is crucial for informed decision-making), viable options and consequences, provide feasible alternatives.

Imitation, Competition
There are aspects of weak competition in nearly all cases in the policy field, which means that at least at the beginning of the initiatives there was rarely a competitor offering a similar solution. Sometimes this changed over the longer course of the initiatives and competition arose and at least elements of the strategy or solution got imitated.
In the practice field of repairing, re-use and extending the life-time of products, competition is weak among repair service providers. Actually, firm entries are often welcome in case they provide independent and reliable repair services. Protection of intellectual property hardly occurs. Although names of organizations are trademarked, knowledge and practices are rather spread among the like-minded. However, competition is fierce with producers of new goods and retailers. They are seen as the real competitors because due to differential taxation of labour and energy, new appliances may be supplied at low prices that hinder (labour-intensive) repair services systematically.

Media as a success factor
Generally, networks and media are used to gain attention and attract people as suppliers, as well as customers. Hence, media may become an extremely important partner in social innovation initiatives. Media contributions about repair services often may raise awareness and demand that was latent before becomes then apparent and materializes.

Role of technology
The role of technology varies greatly in the different social innovation cases, from no visible role, via the well-established enabler role to being one context factor of the problem. From SI DRIVE Mapping 2, it became obvious that the opportunity of taking advantage of new technologies in social innovation initiatives in Environment and Climate Change ranged from completely technology-dependent solutions to no technology involved at all.

POLICY IMPLICATIONS AND RECOMMENDATIONS

A **structural view** becomes obvious when social innovations in Environment and Climate Change aim at having an influence on policy frameworks and agendas, backed by information from large international organisations and NGOs because many (global) environmental problems cannot be "felt" by individuals in a direct way. Here, social innovations may put pressures on governments to meet the Paris goals or the SDGs. Social innovation initiatives may introduce niches in the existing structure and thus may increase plurality and diversity of options, a space for alternatives.

▪ **The absent role of policy: Social innovation addressing a policy vacuum** where benefits accrue to society as a whole rather than to individuals, social innovation may interfere with traditional operations that governments and public policy might be expected to address. This is a worry that has been expressed on the individual level in many interviews with social innovators. The pessimistic view of the relation between promoting social innovation with public policy is that public actors, under constant financial pressures

(*austerity*) as they are, use the label and concepts of social innovation to not take responsibility for tasks that – in essence – are public tasks. Thus, some social innovation initiatives in Environment and Climate Change addressed and caused policy change; they did not arise thanks to any policy. Instead, they compensate for missing policies or government failure. Here, social innovation initiatives may be seen as seismographs indicating necessary changes and possible solutions where governments may not be aware of any. In the "seismograph view" open data and research on the social innovation initiatives are key.

▪ **Social innovation as outcome of general policy frameworks** In general, governments establish formal rules and (dis)incentives through their legislative, executive, judicial powers and bureaucratic functions, as well as through the distribution of powers and functions across all levels of government. In this role, social innovation initiatives may be the result of deliberate policy shifts that do not explicitly address social innovation, but rather implement directives, laws, e.g. set tighter emissions limits or enforce acts to measure the occurrence of harmful environmental and health effects. Nationally, different directives and laws had an influence on the practice fields in the various countries. The above examples show that in New Member States, EU policy has an important function in adapting legislation, which in turn incentivizes new services to meet environmental standards. It seems that the national policy context in the area of environment (and sometimes employment) is driven particularly by the EU strategies in the area, thus the development of the social innovation project follows and uses the new regulations that appear through EU membership. This attributes a crucial function to EU policy and legislation in the area of environment for these more recent Member States. More generally, different types of policies, such as policies related to environment, conservation of endangered species, and economics, influence the room for social innovation. Policies are needed to increase awareness, underpin orderly measurement of environmental and social impacts in all countries, and to push a combination of regulations/standards that set the limits for the market as well as economic incentives to help pull further improvement. Policy has also an important informing function and hence an important role to play in highlighting the costs of consumerism and support higher acceptance for re-use.

▪ **Unintended policy: social innovation compensating for "side effects" of policy frameworks** As a general framework, the high taxation of labour income (compared to e.g. capital income) leads to limiting labour as an input factor in the production of goods and services. This has detrimental effects on waste statistics because this systematically disadvantages labour intensive activities like repair services and, with the limited option of repair, leads to growing amounts of discarded items, with waste of electrical and electronic equipment (WEEE) growing particularly fast. In order to respond to this, many repair service firms have to make extra efforts in order to be viable, e.g. take the form of a WISE, a work integration social enterprise. In a WISE, labour is subsidized because the WISE reintegrates people with difficult employment histories into the regular job market. However, these conditions for financing can also be a source of tensions and conflicts. Here, labour cost are subsidized because the target is to place long-term unemployed, difficult-to-place people into unsubsidized employment after a transit phase at the WISE. Conflicts seem likely as WISEs have primarily goals of social stabilization and inclusion, whereas operative businesses have goals of providing high-quality services which often require skilled personnel. Hence, they are "picky" in terms of personnel acquisition. A straightforward solution to these untended effects of policy would be a tax reform that reduces the tax burden on labour and thus has positive effects on labour intensive services.

The agency view becomes most obvious where governments want to support social innovators in increasing the capacity of individuals and groups to act independently and to behave environmentally responsible.

▪ **The mediating role of policy: social innovation and soft governance**
Some social innovation initiatives in Environment and Climate Change are the explicit result of the mediating role of public actors and public programmes. Ultimately, the effects of

climate change and increasing amounts of waste will be felt by individuals and organizations of the respective regions. Still, although individuals, firms and other organizations should feel affected, they are often not likely to become active themselves. Many future projections like the global average annual temperature raise by 2°C until 2050 are too abstract. General statistics on amounts of waste and its effects have no immediate impact on firms' abilities to carry out their routines today. So change in a larger scale on the basis of self-organization is of reduced likelihood. Public programmes try to compensate exactly for this inertia in mediating and organising processes of exchange. With different mechanisms of soft governance, individual processes of change shall be activated that would have been less likely to unfold without the public programmes/projects.

Although the mediating role is definitely an important role of policy in social innovation, one has to be aware that straightforward and measurable impacts from this kind of policy intervention are not likely. Due to the high number of network partners involved, the project coordinators are often not able to keep an overview who has actually implemented strategic decisions based upon the insights during the formal projects and in what way. After the funding periods, projects and networks newly established dry down. Later network activities and especially the implementation of the strategy have to be realized without these financial resources. Furthermore, firms tend to react to act according to short-term horizons and daily necessities.

- **Concrete policy support for social innovation** Roughly recommendations for concrete policy support can be formulated on three levels:

  1. Common visions and ambitions
  Governments should contribute to common visions about desirable environmental outcomes and long-term opportunities. Governments provide guidance in incorporating clear visions and ambitions for goals (like the Paris goals, the SDGs; nation/city level goals). Here it is important that the state should view big environmental challenges as investments of the state: invest in technology, life styles, ethics, and values. This together with an overall permissive and encouraging environment is the nutrient solution where socially innovative ideas can develop and prosper, and become social movements.

  2. The project level of social innovation (agency)
  A second level of policy recommendations refers to the **stages of social innovation projects** /initiatives themselves, like **ideas – networking – start-up – growth** or exit. It refers to the capacity of individuals and groups to act independently and to behave environmentally responsible, create ideas through learning and raised awareness for environmental and social issues, find allies, plan and carry these ideas out and survive. Here governments can provide support in a multitude of ways:
  Supporting the development of **ideas** in providing space/room for local initiatives to meet and offer their services, provide room for experimentation, fund the "crazy" ideas, collect and communicate environmental issues of concern in a local area, organise brokerage-like events for finding solutions.
  Networking for ideas can be supported in providing public means for coordination of networks with environmental focus, promote social-environmental research and education from school/high school level, and for all sorts of community groups, integrating an early module on social innovation in teachers' education, more generally integrating social innovation in educational systems.
  The early **start-up** phase of social innovators needs special attention considering the high exit rate of young firms in general. Social start-up support in terms of seed funding mechanisms (grants) for social innovations, dedicated incubators and assistance small-step growth seem promising instruments. Support which refunds a proportion of expenditures upon application after the expenditures have been issued by the newly founded firm is not helpful in many cases because the social innovators risk being illiquid as an application of funding takes time and the success of an application is uncertain. So instead, they decide for small-step growth, which means slowly growing via turnover, increasing employment, investment which induces further growth. This kind of strategy is often not eligible for funding.

Further on, **growth** can be supported and **exits** avoided with favourable tax treatment for social enterprises, and special regulations for social enterprises may smoothen hindrances particular to these types of entrepreneurs; furthermore creating financial incentives to complement SI initiatives, and (easy) permits/ certification. Also social innovation should be made visible – especially local social innovation initiatives, otherwise unknown and forgotten initiatives (e.g. with prizes). Prizes for social innovations help to increase the visibility of desirable initiatives and may serve as models for other regions/areas.

3.   The reflectiveness of policy (structure)

In promoting alternatives to current environmentally damaging practices, governments have to be reflexive as well, meaning they have to reflect the structures they provide and that shape the opportunities of social innovators., like the overall framework, regulations and formal institutions. Policy should recognize the existence of social innovation, and policy should also see social innovation as indicators of where policies are dysfunctional because social innovation may provide feasible alternatives here. An eco-tax reform that renders labour less expensive and material more expensive allows structural change in the provision of goods and services which induces self-organisation processes for the environmentally better. This calls for systemic and tentative policy mixes that cut across sections, departmental structures in governments and across funding silos.

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RESEARCH PARAMETERS

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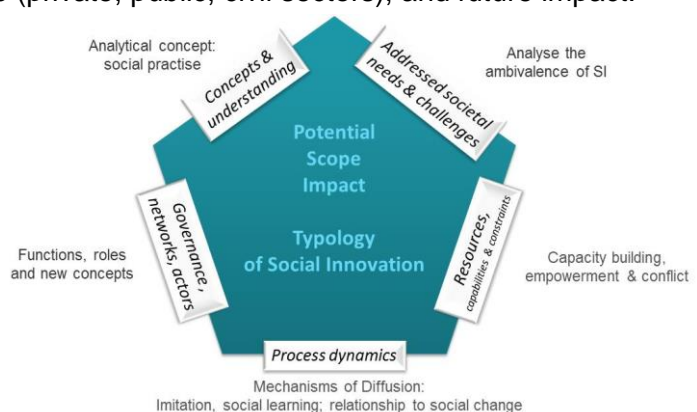
SI-DRIVE involves 14 partners from 11 EU Member States and 11 partners from other states of all continents, accompanied by 13 advisory board members, all in all covering 30 countries all over the world.

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 1000 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

SI-DRIVE - Social Innovation: Driving Force of Social Change.

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CONSORTIUM

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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.

FOR MORE INFORMATION

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FURTHER READING	Howaldt, Jürgen; Schröder, Antonius; Kaletka, Christoph; Rehfeld, Dieter; Terstriep, Judith (2016). Mapping the World of Social Innovation. Key Results of a Comparative Analysis of 1,005 Social Innovation Initiatives at a Glance. Dortmund Hier den Case Study Report von dir noch einfügen! SI-DRIVE Policy Briefs 2016: Social Innovation in Education, 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)