

LEARNING FROM CASES



MADE IN SAERBECK

Involving complex and systemic requirements to encourage local climate change innovations

“Made in Saerbeck” and not “Made in Germany” was a brand used by two companies involved in supplying renewable energy products in Germany to demonstrate their local heritage. Saerbeck is a German village of 7,500 inhabitants located in Germany’s largest region, North Rhine-Westphalia (NRW).



Location of the village Saerbeck in Germany-NRW

One of the companies is Envitec, a world leader in the production of biogas plants. The other is Saertex (the name resembles the village name), another world leader in the production of fibreglass and textile material for windmill blades. The village of Saerbeck won the German prize for being the “Climate Commune” of NRW, not because of the large number of mainly smaller companies that have settled in industrial parks around the village, but because the village and its stakeholders have encouraged numerous projects and a clear “living” strategy during the last decade to become, according to their plan, energy self-sufficient by 2030. This was not only achieved by attracting businesses. It was much more the result of social and strategic political activities

with local and national stakeholders. Saerbeck is at present known as a charming and dynamic location with several competitive advantages, which is able to keep and attract renewable energy businesses, young professionals and proud inhabitants who are involved in many activities to make the location even more attractive for insiders and outsiders.

How was this small village able to encourage climate change innovations in different ways? Is the success of Saerbeck the result of the efforts of the local authorities and stakeholders? Would Saerbeck have become the attractive “Climate Commune” without positive external factors? These were questions Mesopartner wanted to find answers to while looking at the case in more detail.

The short answer: the success was a result of many political, societal and



A rural village as an innovative Climate Commune

economic efforts at the local-, district, national and even EU level that led to somewhat unintended consequences. It can only be understood by taking a systemic perspective on climate change innovations. Certain push- and pull forces had an influence on the broader system.

Entrepreneurship and employment orientation within a structural change process

Saerbeck is located in the rural district of Steinfurt, an area which went through an economic change process from an agriculturally dominated structure to a manufacturing and service-oriented one.



Industrial Park in Saerbeck with “Hidden Champions”

The village administration opened an industrial park in the early 1980s to attract new and existing businesses. Saertex and Envitec as well as many other companies started up as small businesses in the location. As one of the driving forces in this respect, the mayor saw a need for this change and was able to combine the moment of crisis (economic change process and outward migration of inhabitants) with economic and employment interests (promotion of new business and employment opportunities) and municipal income interests (earning tax revenues for further infrastructure projects). It was not planned or foreseen at that time that Saertex and Envitec would become hidden champions within 20 years.

Nonetheless, these businesses had a strong regional identity. They were born in the area. Over the years and with the growth of the companies the positive relations with the business-oriented mayor increased. Some of the companies also later supported the innovative “Climate Commune strategy” with its orientation towards promoting a bioenergy and windmill park.

First national photovoltaic roof programs in Germany in the 1990s

At the beginning of the 1990s, the first national “1000 roof photovoltaic program” was promoted by the national government with the objective of promoting investment in 1000 photovoltaic energy systems in small family houses. At the end of the 1990s, this approach was further extended by a 100,000 roof-program. Both programs were strongly promoted by the empowerment of the Green party in the national parliament from the 1980s, and the emergence of a wider environmental movement, as well as through the interest shown by the National Research and Technology Ministry in testing the capacity of the photovoltaic technology.



Saerbeck, a photovoltaic roof-village

In Saerbeck, the primary school director, together with the municipality, started to make use of the roof programs from the

very beginning. They received support from the Transfer Centre of Alternative Technologies, located in the largest city in the district, Rheine.



Alternative Technology Centre in Rheine

A city with 70,000 inhabitants, it is situated 12 km away from Saerbeck. The Centre, at that point, was an innovation in itself. At a time when renewable energies were still more a matter of interest to environmentalists and visionaries, a group of architects and engineers guided by a regional parliament politician from the district set up this Centre with the financial support of the regional government. Its objective was to provide services and good practices for windmill production, solar energy and resource-

local level. In Saerbeck, two local banks¹, together with the local school and the village administration, started a cooperative program in which village members were enabled to support each other to finance further photovoltaic roof investments. At the same time, local farmers in Saerbeck started their first investments in a wind mill park, which became attractive due to the renewable energy law and its favourable feed-in tariff.

EU program LEADER and the District Agenda Office

The UN international action plan “Agenda 21”, initiated in 1992, had the objective of promoting sustainable development at the local level globally. In Germany, it led to many initiatives, and local Agenda 21 offices were established in the country. The Steinfurt district consolidated their Agenda 21 efforts in a District Agenda Office that applied for EU funds (especially LEADER funds) and regional government contests for the promotion of hedge management for bio energy use (see chain graphic below), village tourism and resource efficiency and energy saving programs for households.

A district hedge value chain for energy production



efficient house construction.

In 2000, the national renewable energy law was passed and promoted further opportunities for renewable energy projects and business opportunities at the

¹ In Germany, local banks like the “Sparkasse” or the “Volksbank” are public-law institutes that provide saving opportunities for the localities but also have to reinvest in the real estate sector and the local and regional communities. They participate in the construction and operation of other institutions or agencies such as technology centers or regional and local economic support agencies and offices.

Saerbeck is actively involved in these activities, with the village administration as one of their main drivers.

Emergence of hidden champions in Saerbeck with strong regional R&D linkages

The company owners of Saertex and Envitec have profited from the national renewable energy law. This law became a catalytic project that increased demand for renewable energy investments first locally and later even globally. For the two companies, it led to a boom in product sales and employment. They had started out as small-scale companies in the 1980s in Saerbeck. Envitec went through restructuring processes in the late 1990s, and from 2002 on both companies opened several international offices abroad. At present, they employ more than 200 employees each. Both currently have strong relations with R&D institutions in the district and their headquarters are still in Saerbeck. For them, “Made in Saerbeck” is not so much a competitive brand as one that symbolises their local and regional identity and network relations.

Future energy strategy 2030

The village administration had already begun to implement a local future energy strategy before the regional government announced their “Climate Commune Contest”. The mayor wanted to become independent from the large national energy providers and stuck to his objective of decreasing public energy costs and increasing the towns bargaining power. At the same time, he was able to get businesses and a key group of already very environmentally-active inhabitants involved. Over the last few years, regular energy meetings and an energy saving consultancy have been

organized. The town has invested in a bio energy and wind park and attracts further renewable businesses to the location.

The rural district of Steinfurt and Saerbeck have become home to the emergence of climate change innovations



in different ways. This includes the success of the above-mentioned businesses, and the creation of very action-oriented and innovation-driven social-, political-, economic- and research-oriented networks. The “Climate Commune prize” further contributed to the village’s public image as an interesting place to live and work.

Conclusion

Although Saerbeck deserves a lot of credit for its initiative as a small village, its success was also made possible by systemic elements both locally and internationally (see graphic below) that re-enforced each other, including

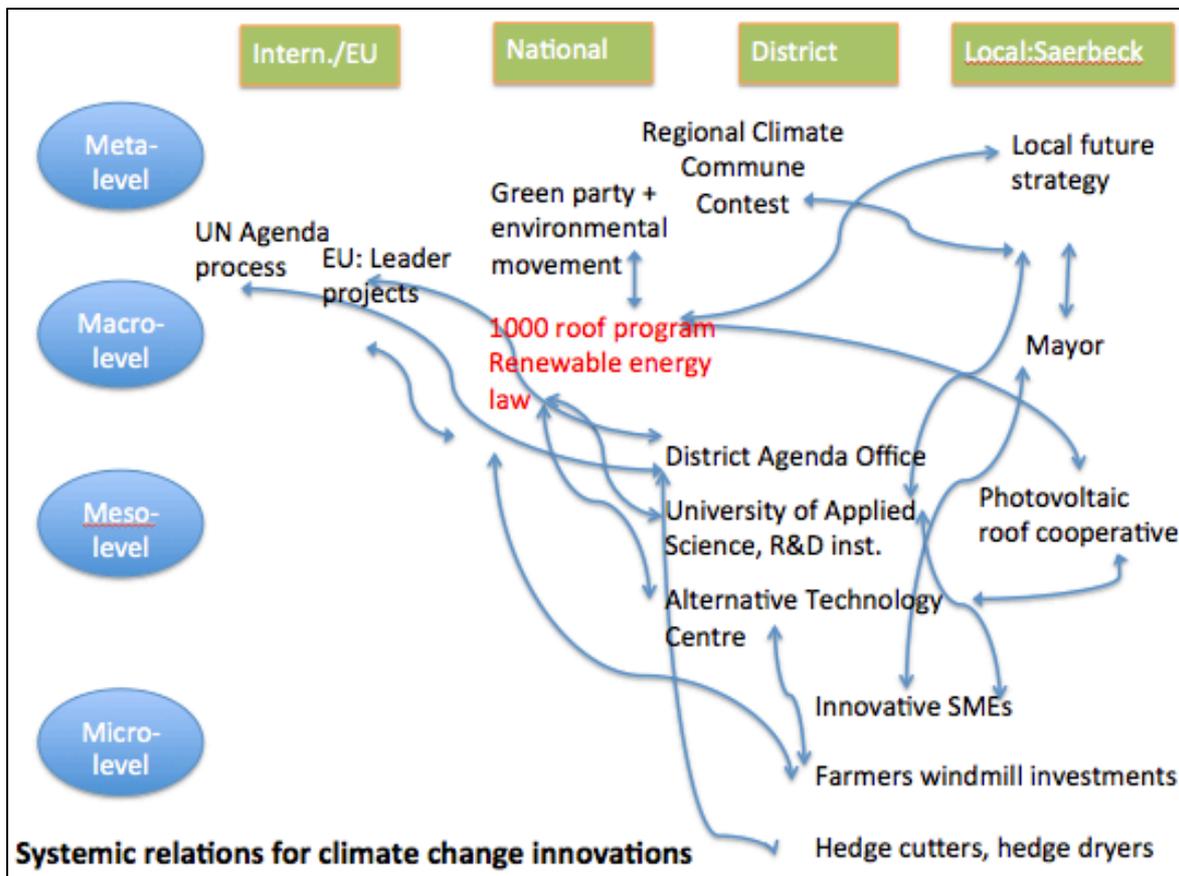
- Environmental values, entrepreneurship orientation as well as network and strategy abilities (meta),

- Policies (macro) at the international, national-, regional and local level, which supported each other
- Targeted support programs and support institutions (meso) from the district, regional and national government level as well as the EU level
- Businesses that looked for new markets and established knowledge-intensive relations with R&D institutions in the district

What conclusions can be drawn from the case study for promoting climate change innovations in different ways? The following aspects provide some reflections:

certain actor and driver mechanisms that go beyond the local level

- Both in retrospect as well before the start of such processes it is difficult to analyse the complex relationships that ultimately contribute to their success
- Catalytic projects at the local as well as regional and national level (e.g. industrial park, photovoltaic roof programs, renewable energy law, Climate Commune contest, etc.) are necessary to create synergies
- Individual drivers and leadership for change are very important but need to exist at different levels (e.g. businessmen in Saerbeck, mayor,



- Climate change innovations, irrespective of whether these are mainly technological, like new local products or processes, or whether they are mainly organisational innovations, like socially and network-constructed energy strategies or services, require further policy and

regional government politician, environmental movement, etc.) and need to be strengthened in their position through political support and certain enabling programs

- Often it is the process that matters, not the objective itself. Many existing opportunities in Saerbeck evolved

over time and were not just in the hands of the locality. But it was able to make the most of the chances to improve its competitive advantages all the time

- Using economic profitability approaches (e.g. 1000-roof program, renewable energy law, industrial park, alternative but profitable technology development in the Alternative Technology Centre) enlarged the change coalition and included not only environmentally-concerned persons but also farmers, businesses, the creative class (like architects, engineers, local inhabitants) and policy representatives at the local and district level
- High electricity cost pressure, difficult price bargaining, and favourable feed-in tariffs made it possible for local actors to make small investments and yield high returns.

The promotion of climate change innovations at the local level rarely

depends on the local drivers and their institutional surroundings alone. Nor does it depend only on technological innovations, or the availability of hardware. It is far more influenced by systemic and complex interrelations and network reinforcements, which can merge into new change opportunities at the local, district and national level. The local and national systems matter and it is exciting to analyse their complex interrelations.

Mesopartner is currently supporting and wishes to further support such systemic processes in the future in both developing as well as industrialised countries.

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For further information on Climate Change Innovations please have a look at the Mesopartner website

<http://www.mesopartner.com/themes/de-cluttering-green-to-unlock-development-opportunitie/>