08

Driving forces for greening urban and rural locations in the EU

Frank Wältring

There are many efforts at present all around the world to "green" rural locations and cities. Entry points are manifold, and the driving forces often differ in more and less developed countries. During (green) study tours in rural and urban economies in Germany as part of our consultancy work, we often reflect jointly with our partners on the key driving forces for "greening" economic development activities. Although circumstances are different, the participants are often provided with pertinent insights into important determining factors. This article summarises the reflections from several tours in the European Union (EU). The argumentation here is in line with our considerations of a climate-smart and eco-friendly business environment, which deploys pulling (finance/economics), pushing (policy/regulations) and enabling (knowledge/skills) forces (see *article Shaping a climate smart and eco-friendly business environment*). Key questions we try to answer are: What more specific driving forces behind the greening efforts in some rural and city areas have been identified? What is the difference between them? Why are driving forces relevant to our work?

Green targets in the EU and Germany

Greening of locations is a key element of urban and economic development strategies of the European Commission. The 2030 framework for climate and energy sets targets such as a 40% decrease in greenhouse gas emissions (compared to 1990 levels), almost 30% of energy is to be provided by renewable sources and 27% energy savings to be achieved. National targets in Germany have even higher objectives. Such targets must be implemented in rural and urban locations where people live, work and produce. .

Although the main argument for "greening" is climate change and environmental degradation and hence the requirement to change consumption and production patterns, it is often justified by competitive advantage in new industries and technologies due to the business opportunities which greening entails.

Driving forces of greening in rural areas in the EU

Costs: For a long time, energy costs in the EU have been too low to encourage large climate-sensitive investments. But the rise of these costs over the past years and additional pushing factors such as public construction standards for housing insulation and CO_2 consumption have encouraged investments in the renovation of buildings, the building of smaller houses, the use of energy-efficient heating technologies and energy efficiency in production processes in general.

Attractiveness: Funding competitions for climate-sensitive villages and towns have been promoted by regional governments, often supported by EU funding, to encourage rural locations to develop green consumption strategies such as the installation of solar panels on roofs, local market and consumption cycles and self-organised transport systems. Pulling factors such as providing financial incentives make these locations more attractive, as they demonstrate ambition and future orientation.

Modern image: Many rural areas have an image of being backward and lacking in lateral thinking. Many industrialised and polluted locations and cities in decline face the same lack of creativity. Greening activities require people to think and act in more innovative ways. At the same time, these efforts help to develop the image of a more modern and attractive place where more creative outsiders search for jobs or for whom living conditions are important.

New income sources: Renewable energy, e.g. generated by wind turbines, solar panels or biogas plantations, has substantially changed the income structure of a critical mass of farmers and other local investors. In Germany the majority of investments into the renewable energy sector originate from local inhabitants who benefit from subsidised prices for renewable energy.

Autonomy and decentralised energy creation: Many municipalities are interested in reducing their dependence on large and powerful regional energy suppliers. Furthermore, places that suffer from a brain drain and outward migration are challenged by reduced public revenues and reduced investment flexibility into energy infrastructure. Both factors have led to an increasing interest in energy autonomy by local as well as national governments.

New business opportunities: Rural tourism as well as the ecological production of, for instance, organic food targeting the urban middle class have become an important basis of new business opportunities in rural areas. Due to the good transport infrastructure, smaller villages around cities become hubs of food production, processing, packaging and delivery to city dwellers.

This is further made possible by online ordering and strong cooperation by rural communities to ensure timely production and delivery.

Driving forces for greening in urban areas in the EU

Many of the above-mentioned driving forces are also relevant for towns and cities. They include energy costs, attractiveness and the change of locational image. But there are also a few additional forces.

Developing and applying innovation: Cities are the places where innovation networks between R&D, business clusters and public sector actors must come up with new enabling solutions to the development of green technologies, improved and integrated mobility and energy systems. In addition, qualified labour and expertise for green innovations mostly originate in cities with a diversified educational infrastructure that allows the mixing of ideas, disciplines and technologies. It is also there where most production is still located and where environmentally friendly services and know-how accumulate and are often most in demand.

Waste management and recycling pressure: Most of the waste is still produced in cities but also accumulates from rural areas. Finding the right solutions to reduce and manage waste but also to recycle it in ways that are energy- and resource-sensitive is an increasing challenge that is forcing city administrations to come up with new solutions. At the same time, it provides new opportunities for businesses to be creative.

Managing boundaries of growth: Fast-growing cities in particular are challenged by fixed boundaries which limit growth. Many cities will not be able to absorb the increasing numbers of people without concerted efforts to increase their eco-friendliness as the population density increases.

Satisfaction of middle class demand: In general, cities have different product demands to those of rural areas. The upper middle class often demands more environmentally friendly products, healthier locations and an attractive culture. They also have the necessary purchasing power to pay for their sophisticated demands. A higher population density places more demands for clean air, elimination of

pollution and the establishment of green areas and parks.

Urban-rural linkages for recreation: These are relevant because attractive cities require attractive surroundings. Appealing rural areas contribute to the attractiveness of cities as long as they provide recreational value and access to fresh agricultural products.

Identification of driving forces to explore more complex sensitive interventions

Why is it important to reflect on the various driving forces in different countries and different localities? This article shows that driving forces vary from location to location. We have to be aware that the context differs in each location and that enabling, pulling and pushing factors in favour of or against the greening of certain locations strongly influence each other. During our study tours we found that participants started to think about what they could replicate. In reflection rounds, we emphasise that it is more relevant to understand own context, and that just copying something will most probably not work in a different context. The value of such study tours to the participants is that they can identify driving forces in the economic systems that they visit and compare them with their own context. This helps them to develop ideas of where to start analysing their own local context. During and at the end of our tours we organise a reflection workshop to encourage this thinking process. This includes working with the participants on the design of an exploration phase in which a portfolio of interventions can be tested in order to better understand the dynamics of their respective local systems.