



Governance Change for Energy Efficiency in Buildings

A Policy Brief from the Policy Learning Platform on
Low-carbon economy

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Summary

Whilst regional authorities are realising the benefits of energy efficiency investments, and are making finances and knowhow available, further actions are required to change behaviour and ensure that efficiency is consistently taken into consideration by decision-makers. This requires new management structures and processes, as well as new methods of monitoring and recording change. This paper will present the work done in Interreg Europe projects, looking at how governance and behavioural change can support the transition to low carbon energy. It will present good practices which are readily transferable, and make recommendations for regional policy-makers.

Why does governance for energy efficiency matter?

Buildings represent 40% of energy consumption in the EU, and improving their performance is a key challenge for regional policy-makers. The reasons for doing so have been heeded by most regions – in particular, improving competitiveness and energy security, combating climate change, and reducing energy poverty – but as regions have taken their first steps towards improve energy efficiency, new challenges have emerged.

In fact, improving energy efficiency requires a combination of technologies, market mechanisms, policies and behavioural change, requiring co-operation and co-ordination between governments, businesses, and publics. Getting the right support policies in place for all of these factors is essential for success.

Setting the framework for Energy Efficiency Governance at European level



Energy efficiency governance is the combination of legislative frameworks and funding mechanisms, institutional arrangements, and co-ordination mechanisms, which work together to support implementation of energy efficiency strategies, policies and programmes.

International Energy Agency

Energy Efficiency Governance is comprised of enabling frameworks (such as action plans and strategies), institutional arrangements (agencies, stakeholder engagement mechanisms), and co-ordination mechanisms.

Much of Europe's enabling framework is established at the European level. This framework gives long-term direction to Europe's energy efficiency strategy and supports confidence amongst investors and policy-makers, to encourage them to change their decision-making processes and make investments.



The [Low Carbon Economy Roadmap](#) of 2011 put the European Union on course for large cuts in energy intensity, with an aim of reducing greenhouse gases by 80% from 1990 levels, by 2050. In the building sector, the Roadmap showed that buildings emissions could be cut by 90% through a combination of passive technologies for new builds, renovation of old buildings, and use of renewable energy for heating and cooling requirements. Since then, the 2020 Strategy and the upcoming 2030 targets have set the direction of travel, supported by legislation on building performance.

The [Energy Performance of Buildings Directive](#) (EPBD) was issued in 2010 and has been renewed ('recast') in 2018. It will require member states to develop long-term strategies to support renovation of public and private buildings to be nearly zero energy buildings in 2050, with milestones for 2030 and 2040. Significant action will need to be driven at the local level, where stakeholders can be reached and where knowledge of regional boundaries are strongest.

Challenges at regional level

Whilst regions realise that energy efficiency can contribute to both reducing greenhouse gas emissions and strengthening economic growth, numerous challenges remain to be overcome, particularly in implementing actions, where human behaviour and capacity are limiting factors.

Regions involved in Interreg Europe projects have identified numerous challenges, which they are working to overcome through interregional co-operation:

- There is low awareness amongst policy-makers regarding regional energy performance, and the chances for change;
- Different departments and neighbouring municipalities pursue different strategies, resulting in suboptimal outcomes from competing goals and stretched resources;
- Responsibility for steering energy efficiency is not clearly assigned to a lead department with the ability to co-ordinate other departments;
- Lack of knowledge amongst policy-makers regarding incentives and drivers for investments, results in artificial barriers being created in the functioning of policy instruments;
- Policy-makers expect to see quick change, when energy efficiency renovations require a long-term perspective and slow transformation;
- Regions rely too much on building owners taking the initiative to renovate buildings, with regions relying on grants to stimulate renovation;
- Lack of knowledge of energy performance makes it difficult to monitor progress and correct course when needed.



Overcoming challenges with Europe's support

But the good news is that regions across Europe have already worked to overcome such challenges, and solutions exist that can inform your regional approaches. Overcoming these challenges can involve visualising and explaining energy efficiency in new ways, setting up targets and monitoring schemes, and institutionalising new forms of co-operation and capacity building, to ensure that plans and strategies are followed through.

The European Union has made large sums available for supporting the transition to more efficient use of energy, including EUR 18 billion under the European Structural and Investment Funds (ESIF) for the period to 2020. All member states have dedicated funding to energy efficiency under the European Regional Development Fund, and actions to be funded are presented under national and regional Operational Programmes. One of the aims of Interreg Europe projects is to improve governance and management of policy instruments funded under these Operational Programmes, and projects can assist regions to identify best practices and implement them into their policy frameworks. Projects can be excellent tools for engaging local stakeholders, particularly regional policy-makers, as they fund communication activities and require frequent interactions with local government.



The regions involved in the **REBUS project** have all recognised the importance of energy efficiency, but each face challenges related to governance. In Tuscany (Italy), some civil servants lack the required expertise for steering energy efficiency projects; in Durham (United Kingdom), there is insufficient access to tools for monitoring energy performance; in Malmö (Sweden) the city government aims to be climate neutral by 2030 but needs to ensure co-operation between building managers, users and other stakeholders. Working with other regions in Hungary, Romania, Greece and Poland, the project will improve capacity of public authorities in European regions to undertake renovations of building stocks, producing an Action Plan for each region, as well as an Energy Renovation Path for planning, implementing and monitoring renovation works, which can be used by any European region.

<https://www.interregeurope.eu/rebus>



European regions sharing their good practices

Interreg projects have identified practices from regions in Europe that can provide inspiration for overcoming governance barriers.



ISO 50001 Energy Management System Implementation in Donegal

ISO 50001 enables organisations to use energy more efficiently by developing an energy management system, which involves developing an energy policy, setting targets and designing action plans. The County Council of Donegal (Ireland) established an energy management system to ISO 50001 standard for establishing where energy consumption was being used in the public sector, with the main areas being street lighting, road transport and public buildings. Energy indicators and an action plan were produced, identifying projects with significant potential for energy reduction. The Action Plan led to a number of activities, including the installation of LEDs for street lighting, implementation of fleet management systems to monitor the fuel efficiency of public vehicles, insulation of public buildings, and the replacement of inefficient vehicles. Outside of these physical investments, a 5-10% reduction in energy use was achieved through improving behaviour, including energy awareness campaigns to highlight inefficient energy use and promote alternative behaviour, appointing energy teams in each department, and adjusting the parameters and timings of building management systems so that ventilation, heating and lighting systems were turned on only when necessary.

<https://www.interregeurope.eu/clean>



Hungary's Virtual Power Plant

Energy Efficiency is sometimes referred to as the 'first fuel' of Europe – a source of energy which is less expensive and complex than investing in new capacity. But energy efficiency is intangible and often political awareness is low. The Hungarian Virtual Power Plant Programme aims to, collect, visualise and make tangible the invisible benefits of energy efficiency investments and help shape policy and funding decisions. The programme, run by the Hungarian Innovation and Efficiency Non-profit Ltd, used ERDF funding to interview and audit companies, thus highlighting energy efficiency potentials, and collected good practices in a 'motivational pipeline', giving companies ideas on how to achieve savings. Companies can apply for three different energy certificates – Energy Conscious, Energy Efficient, or Energy Mentor Company – based on their activities and energy savings. The Programme is self-funded through procedural fees from companies. The Virtual Power Plant displays total energy savings as a fossil fuel primer of an actual power plant, collecting enough energy savings to offset the electricity production of a 200MW power plant, making it the seventh largest power plant in Hungary. Through the LOCARBO project, the Virtual Power Plant concept will be taken up in both the United Kingdom and Sweden.

<https://www.interregeurope.eu/locarbo>



Sustainable Municipalities in South-West Finland

In South Ostrobothnia, Finland, a group of eight municipalities decided to join forces to work together on climate and energy issues. Their collaboration began in 2011, under the guidance of Thermopolis, the region's Energy Agency. Within a year the group had written and agreed on a common Climate Strategy document, which was adopted by each of the municipalities. The drafting of the joint Climate Strategy and implementation of the actions it contained were funded by the ERDF. After this initial funding, each municipality set-up energy efficiency teams, bringing together staff from different departments, which would meet regularly to plan and implement energy efficiency actions. The municipalities shared resources for joint training exercises, arranged joint visits to inspirational companies and regions in Finland, and shared experiences of new actions and policies with the others so that they could learn from each other. By working together to make energy efficiency a priority for all staff, the municipalities were able increase the impact of their Climate Strategies, and by 2017, five municipalities with a joint population of under 50,000 people were still working together, and had achieved more than EUR 400,000 of energy savings.

<https://www.interregeurope.eu/zeroco2>

Improving governance and awareness does not need to be a complicated or expensive process, but as these practices show, it can be hugely effective. Sharing resources, setting targets, jointly developing strategies and visualising change are often the first step in broader transformation to a low-carbon economy.



Recommendations – how to improve governance for energy efficiency in buildings

- Ensure a robust enabling framework that states a clear objective (i.e. targets) and timeframe. The example of the County Council of Donegal shows the impact of long-term strategy development;
- Make sure that responsibility is assigned to an organisation or team for implementing programmes and monitoring performance – preferably an organisation with a statutory basis to indicate long-term expectations. The example from South Ostrobothnia shows the potential for transformation when responsibility is assigned, and co-operation is supported;
- Always communicate about energy efficiency in the broader policy context, relating it to competitiveness and regional development, and ensure it is considered in all policy sectors;
- Co-ordinate amongst departments so all involved stakeholders are aware of their responsibilities and can contribute to regional priorities;
- Monitor and visualise energy efficiency so that its economic benefits are clear and easy to understand, and can drive change, like the Hungarian Virtual Power Plant;
- Make use of ERDF funding to support your energy transition and learn from other regions through Interreg Europe projects and the Policy Learning Platform.

Sources, further information

- European Environment Agency (2013) – Achieving energy efficiency through behaviour change: what does it take?
- European Commission S3 Platform – <http://s3platform.jrc.ec.europa.eu/esif-viewer>
- International Energy Agency (2010) – Energy Efficiency Governance
- International Organisation for Standardisation (2016) – ISO 50001: Energy management systems
- European Parliament and Council of the EU (2013) – ERDF Regulation 1301/2013
- European Parliament and Council of the EU (2013) – Common Provisions Regulation 1303/2013
- Virtual Power Plant – <http://www.mi6.hu/english/>
- Sustainable Energy Authority of Ireland – <https://www.seai.ie/>

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#EnergyEfficiency*



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