RESOURCE EFFICIENCY AND SUSTAINABILITY IN BUILDINGS, NEIGHBOURHOODS AND URBAN DEVELOPMENT

Funding opportunities through Interreg B programmes

The European Union’s Interreg B programmes promote cooperation in transnational cooperation areas. Various German federal states and regions are involved in a total of six Interreg B programmes (Alpine Space, Danube Region, Central Europe, North Sea Region, North-West Europe and Baltic Sea Region). The cooperation programmes focus on themes such as innovation, reducing CO₂ emissions, the environment, transport, climate change and governance. They also promote innovative ideas on sustainability and resource efficiency of buildings, in urban neighbourhoods and at general urban level. Potential project partners include municipalities and other public bodies (e.g. public utilities, urban development companies) as well as stakeholders from the fields of business, science and civil society.

In the 2014 – 2020 funding period, a total of around 1.4 billion euros will be made available from the European Regional Development Fund (ERDF) to projects involving German players and their partners in the six cooperation areas. Although Interreg projects have less funding at their disposal than other EU funding programmes, they are capable of stimulating innovations and promoting creative pilot approaches. Projects also bring together the strategic and the local implementation level and thereby promote a common transnational awareness.

Projects need to include partners from at least three countries (generally from at least two EU Member States). Much bigger consortia are common, though, as, depending on the project topic and problem definition, it often makes sense to involve partners from several countries in a transnational project. The total costs of a typical Interreg project, which usually runs for three years, varies between 1 and 5 million euros. Depending on the programme area, between 15 and 50 per cent of expenditure must be co-financed by the project partners.

In the previous Interreg funding period (2007 – 2013), transnational projects in the funding priorities “environment” and “sustainable urban development” came up with interesting solutions to how resource efficiency and sustainability can be implemented in practice in buildings, urban neighbourhoods and in the context of urban development.

Sustainable building – the European perspective

Environmental and resource protection are important goals of the European Union. The EU has committed itself to ambitious goals when it comes to more climate protection, better resource efficiency and the transition towards a carbon-neutral economy. The focus is increasingly being put on building and facility management on the road to more environmental protection and resource efficiency. Small wonder given that buildings account for some 40 per cent of total energy end consumption and around one third of CO₂ emissions. In Germany, 90 per cent of all mineral resources are used to produce building materials. The construction industry is responsible for more than 54 per cent of waste generation. From the point of view of risk prevention, architecture and urban development also need to address and take account of risks due to climate change.

So far the EU has primarily tackled this issue by setting energy efficiency standards for buildings. According to the EU’s
Energy Performance of Buildings Directive, for example, from 2020 all new buildings are required to need only minimal energy input. The European Commission is currently widening its previous focus in regard to sustainable building to incorporate an integrated life cycle approach. Various European countries have already developed national sustainable building standards, like the system applied by the German Sustainable Building Council (DGNB) in Germany, for instance.

When it comes to sustainable building, transnational projects have, for example, contributed to the testing of constructional innovations, to the development of European standards and to the energy-related modernisation of buildings taking greater account of building culture and heritage protection. Various projects have looked into developing new methods and content for raising awareness among real estate owners for this issue as well as creating qualifications for the building trade, planners and the real estate sector.

Transnational standards for sustainable housing construction

Research institutes, housing associations and public authorities from a total of five countries, which were involved in the Longlife project, designed a prototype for a sustainable residential property which incorporates the cooperation area’s specific cultural and climatic features. A sustainability certificate and transnational planning and licensing standards were developed to facilitate future investments in sustainable housing construction and transnational business activities. Longlife was thus able to take up European energy efficiency standards in regard to buildings and to incorporate them into a life cycle approach considering the sustainability of construction materials and facility management. Its follow-up project Longlife Invest implemented the prototype in the form of student halls of residence at the University of Klaipeda. The project partners established the Longlife Institute as a registered society to consolidate the project topic.

For more information go to www.longlife-institute.org/de/

Qualifications for the building trade and planners

In the course of the AlpHouse project, the Chamber of Trade and Crafts for Munich and Upper Bavaria and its partners from other Alpine countries developed, tested, evaluated and optimised qualification modules for local craftspeople, architects, planning offices and other SMEs in the construction industry. The aim was to link traditional Alpine building culture with the demands of modern energy efficiency and sustainability standards. Through direct contact with businesses and by focusing on the use of regional building materials, the approach adopted in this project is also helping to boost the regional economy.

For more information go to www.alphouse.eu

Sustainable urban and urban neighbourhood development – a European theme

After the adoption of the Leipzig Charter on Sustainable European Cities the spotlight shifted to integrated approaches in the fields of urban and urban neighbourhood development. The aim is to link key urban policy fields from both a spatial, thematic and temporal perspective. Integrated approaches also help to strengthen the energy-related refurbishment of buildings and the use of renewable energies across cities or neighbourhoods, for instance. They can also help promote the inner-city development, strengthen urban centres and neighbourhoods and preserve cultural and natural spaces in suburban areas.

Various Interreg projects have looked into new ideas and instruments for sustainable urban and urban neighbourhood development. At the neighbourhood level, Interreg projects have, for instance, improved the use of renewable energies in large housing estates and developed strategies for sustainable industrial estates which cover the entire life cycle, from the planning stage to concrete entrepreneurial activity. In the areas of urban planning and urban development Interreg projects have, for instance, tested instruments and procedures for better incorporating resource and energy efficiency in integrated approaches. Entire regions were in the focus of projects dealing with regional building materials and related value chains.
Resource-efficient and sustainable urban development
The city of Ludwigsburg has for several years been expanding the use of renewable energies and energy efficiency as part of its urban development policy. Together with its European partners the city achieved important milestones in several projects: An integrated overall strategy for energy-efficient urban development was developed as part of the EnSure project; the MUSIC project sensitised residents in a deprived urban neighbourhood to become aware of their energy use and the means of saving energy; the EnerCITY project used databases and GIS instruments to draw up a city-wide overall energy strategy and neighbourhood strategies; the Livinggreen.eu project established Energetikom – Energiekompetenz und Ökodesign e.V., a platform for projects and information and consultancy services on questions concerning energy-efficient urban development which is funded by a broad alliance of public authorities, businesses and associations.

For more information go to www.ludwigsburg.de (“City development concept”)

Natural building materials from the region
The Grow2Build project aimed at promoting the use of hemp and flax as building materials by establishing value chains. Besides networking producers via databases and workshops, for instance, potential customers, that is especially established businesses in the building trade, were given information about the fields of application and advantages of using hemp and flax as building materials. The networks thus cover the entire value-added chain – from cultivation and processing to the use of hemp and flax as building materials. A number of SMEs, ranging from individual farmers and building material producers to building firms, can thus benefit from the development and spread of these value chains.

For more information go to www.grow2build.eu

Funding priorities in current cooperation programmes
Interreg is geared to achieving the objectives of the Europe 2020 Strategy, the EU’s ten-year growth strategy. In the 2014–2020 funding period, all transnational programmes are required to become more thematically focused and to select a limited number of themes from a predefined set of priorities. Resource efficiency and sustainability in buildings, urban neighbourhoods and in the field of urban development are above all addressed by the priorities “low carbon” and “climate protection” as well as, in some cases, by the priorities “promoting innovation” and “climate adaptation”. Different cooperation areas have different emphases when it comes to the possible project focuses of their transnational projects:

- **Alpine Space**: This cooperation area explores ideas for how settlement development can contribute to a low-carbon Alpine region, for instance. Integrated spatial development is also to be used to test energy saving potentials, energy efficiency, as well as the use of renewable energies and decentral grids.

- **Danube Region**: There are only relatively few points of departure in regard to sustainable building and sustainable neighbourhood and urban development in the Danube Region cooperation area. In the context of achieving the objective of “sustainable use of natural and cultural heritage”
the renovation of historic buildings and places can be promoted where these form part of a broader development strategy which is based on the principle of sustainable growth.

• **Central Europe:** Under the heading “strategies for reducing CO₂” the aim in this cooperation area is to enable the public sector and related areas to improve energy efficiency and the use of renewable energies in public infrastructures, for example public buildings. Projects are to focus on both new technologies and innovative management approaches.

• **North Sea Region:** In this cooperation area the spread of green buildings is to be promoted under the heading “promoting eco-innovations”. Transnational projects are also felt to hold great potential when it comes to cooperation on energy-related building refurbishment. Investments in public buildings can serve as pilot projects. Sustainable approaches in urban planning are addressed in the priority “climate change adaptation”. Technical measures such as water retention are to be brought into line with ecological (biodiversity) and social (quality of stay) concerns.

• **North-West Europe:** The focus in this programme area is on improving energy efficiency when it comes to social housing construction as well as public buildings. Among other things, funding is available, for instance, for developing innovative approaches to promoting decentral energy generation and distribution. In urban regions, great importance is attached to energy generation in the building sector.

• **Baltic Sea Region:** Under the heading “efficient management of natural resources” ideas for taking greater account at the planning stage of energy-related aspects, when it comes to residential accommodation or shaping public spaces, are to be developed. New management and funding approaches are to be created. Demonstration projects and support measures are to be promoted in the area of energy-related refurbishment.

The advantages of transnational cooperation

Here are just a few good reasons for getting involved in transnational projects:

• As a project partner you will receive a not insignificant amount of funding from the EU, and pooling capacities in a project can lead to further cost savings.

• Transnational cooperation means you can benefit from the know-how and expertise of other project partners and get a different perspective on your own challenges. Projects open up the opportunity of simply giving innovative ideas a go.

• Taking part in an EU project focuses greater attention on your project topic and your institution at regional, national and European level – both in the media and in the eyes of political decision-makers. This can help speed up developments and, in the best case, give your image a boost.

• The added social value should not be underestimated either: Taking part in a project shows that you are “living Europe”. You will gain an insight – and thus also an understanding – of other countries, structures and procedures. Networks established with colleagues, institutions and businesses often endure long after the project ends and can lead to better work results even beyond the project term.

Further information

A wide range of information is available on the Federal Institute for Research on Building, Urban Affairs and Spatial Development's Interreg webpage. Besides general information about the Interreg programmes, it provides good examples, a project database, publications and tips on implementation, and lists contacts in your Interreg cooperation area: www.interreg.de