

# **Sustainability and Economic Recovery: European perspectives on urban and rural development in Wales**

Sustainable development is the central organising principle for the Welsh Government and is therefore at the heart of the Welsh Government's agenda for Wales. The Welsh Government is also working to ensure that its planning policies provide optimum support to economic development in Wales. Research done in the European programme ESPON can provide concepts, evidence and methods to advance these aims. ESPON is the European Observation Network for Territorial Development and Cohesion. It carries out applied research across 31 countries. This short paper selects ESPON findings most relevant to those working in economic development, planning and sustainable development in Wales.

## **Wales in its European context**

Wales lies just beyond the "Pentagon", demarcated by London, Paris, Milan, Munich and Hamburg, which is the economic core of Europe. It faces Ireland and the Atlantic, rather than the most intensely used maritime corridor that connects the south-east of England to the continent. It has no global hub airport or high speed rail service. Indeed Wales has no settlement that shows up as providing a gateway function that is significant at European scale, though in different ways Liverpool, Manchester, Bristol and Birmingham do fill that role (FOCI).

One concern is that the accession of new countries to the EU over the past decade has resulted in major attempts to improve continental east-west accessibility. Multi-modal accessibility within Europe increased by 8.7% between 2001 and 2006. However, for South West Wales it actually decreased during that period (Territorial Observation 2, p.18).

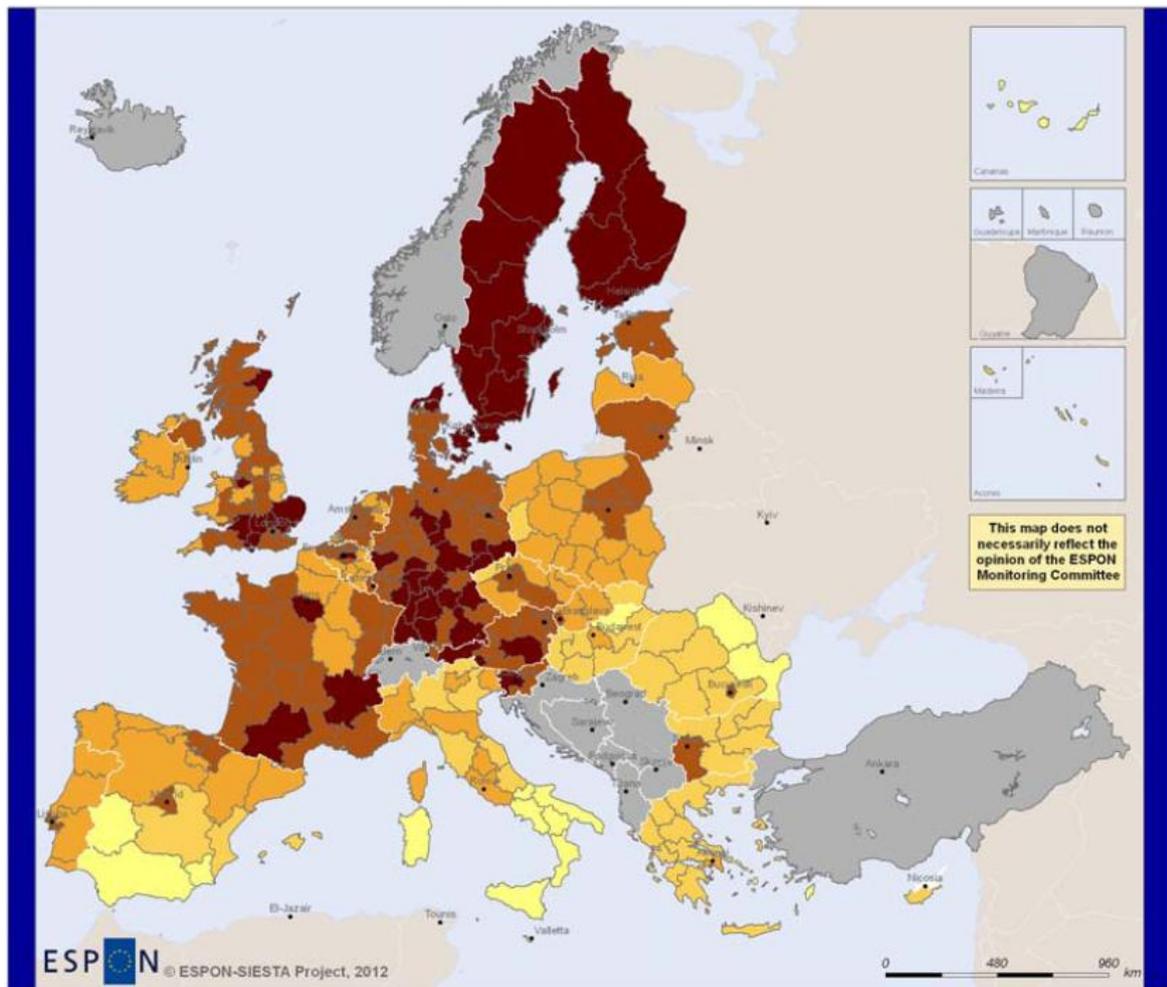
In general, economic growth, labour migration and accessibility are closely related. However, the Scandinavian countries in particular demonstrate that high GDP per capita can be achieved in peripheral parts of Europe. ESPON has mapped GDP-PPS per capita against potential multi-modal accessibility across Europe's NUTS 3 regions. Except for the areas based on Newport and Cardiff, Wales emerges with both lower than average GDP and lower than average accessibility (Territorial Observation 2, p.20).

The EU's economic recovery strategy, Europe 2020, set eight headline targets (see table 1). ESPON has produced an aggregate index that can give a quick picture of how regions are performing in relation to each other on these measures. The resulting map for the situation in 2010 is shown as Map 1, taken from the SIESTA project.

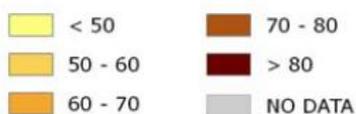
**Table 1: Head target indicators for the EU 2020 Strategy**

| HTIs  | EU2020S target  |
|---|---|
| Persons aged 30-34 with tertiary education attainment       | At least 40% of 30-34-year-olds completing third level education.                       |
| Early leavers (aged 18-24) from education and training      | Reducing school drop-out rates below 10%  |
| People at risk of poverty or social exclusion               | At least 20 million fewer people in or at risk of poverty and social exclusion.         |
| Employment rate of the population 20-64                     | 75% of the 20-64 year-olds to be employed   |
| Gross domestic expenditure on R&D                           | 3% of the EU's GDP (public and private combined) to be invested in R&D/innovation.      |
| Greenhouse gas emissions, base year 1990                    | Greenhouse gas emissions 20% (or even 30%, if the conditions are right) lower than 1990 |
| Share of renewable energy in gross final energy consumption | 20% of energy from renewable sources  |
| Energy intensity of the economy                             | 20% increase in energy efficiency.  |

**Map 1: Performance on the 8 EU 2020 headline target indicators in 2010**



**EU 2020 Strategy Index - 2010 - 8 targets**



The map shows that performance of Wales on the aggregate of these eight indicators is “middling” relative to the rest of Europe. East Wales sits in the same band as Northern Ireland, Scotland and the provincial urban regions on England, while West Wales and the Valleys in in the lower category, like Ireland and parts of England such as Cornwall and the Lake District.

In terms of climate change, Wales is expected to face relatively small temperature increases compared to areas in mainland Europe. On the potential to generate energy from wind power, Wales is similar to most of Western Europe, but with less potential than Scotland or Ireland.

In summary, accessibility is an issue for Wales as a whole, and especially for areas beyond Cardiff. There are a number of gateway cities of European significance close to it borders, but they are all in England. For the foreseeable future, connectivity to these will be very important. While it has potential in terms of the green economy, it also faces challenges as an under-performing post-industrial economy with a legacy of relatively low rates of economic activity and wages (ECR2 project).

What kind of development policies might make a difference? Market demand remains largely beyond the control of public policy, except in relation to macro-economic actions by nation states. While there are also limits on the supply side, place-based actions and more joined up approaches do offer a way forward.

### **The City Regions**

It is the cities that drive the economy of Europe and its regions. As hinted above, one challenge for Wales is that its main cities lack critical mass when viewed from a European perspective. As the Task and Finish Group (2012, p.5) noted, the Welsh cities generate a significantly lower proportion of income / wealth than is the norm across the rest of the UK.

It is widely recognised that cities provide a range of benefits to businesses located there. These include the size and diversity of the labour force, links with other firms (including, but not restricted to, specialised business services, suppliers and distributors), access to transport and communications infrastructure, universities etc. Bigger is better – up to the point where diseconomies of congestion become severe. We also know that cities are sustained by flows of people, goods and waste across their administrative boundaries.

Part of the attraction of the city region concept is that it can provide a more co-operative and focused approach to economic development than is possible when city and hinterland are fragmented. Of course there are different city-region models, and much depends on the particular history and settlement structure. The ESPON FOCI project undertook a case study of the Glasgow city region and found that, while there was little political enthusiasm for reinventing the 2-tier, region/district, local government system of the 1975-96 period, city-region co-operation was active and beneficial.

### **Box 1: Making a city region work: Toulouse (from FOCI Scientific Report)**

The French Midi-Pyrenees region, adjoining the Spanish border, has been identified as performing strongly in terms of attracting residents and visitors. It has Toulouse as its dominant urban centre, with a population of around 450,000, but also an attractive rural hinterland, with well-developed transport infrastructure, land available for development and good access to basic services. Regional authorities play an important co-ordination role especially in relation to spatial planning. Transport corridors from the city have been successful in attracting and accommodating retail and office growth.

There are business links between Toulouse and the smaller towns. Thus Laboratoires Pierre Fabre, a global business with a 1.8billion Euros turnover in 2009, is based in Castres, a town of 50,000, but it benefits from its links with major research centres and the hospital in Toulouse. There are also branches of Toulouse colleges and universities that are located in the smaller settlements across the region.

Toulouse is the growth centre for the region, and is supported as such in strategic planning policy, but the planning also seeks to diffuse growth and support the sub-regional centres. The region provides important opportunities for leisure and recreation to the city and its inhabitants, and there is two-way migration between Toulouse and its hinterland.

Box 1 sketches the story of a functioning city-region based on Toulouse. France is renowned as a highly centralised country, in which Paris, like London, dominates. However, the Toulouse case, where a regional administration was formed in the 1980s, shows how a medium-sized urban centre and a surrounding mainly rural region with small towns, can complement each other to mutual benefit. Of course it helps that Toulouse is the home of Airbus, but aviation is only one of three main clusters that underpin the economic development of the region (the others are agriculture and food, and cancer research).

Emphasis on cities and city-regions as engines of growth is focusing attention on the need to improve degrees of policy integration to avoid management/resource inefficiencies. However, the complexity of planning across different sectoral fields, and levels of governance, makes the process of integration difficult. Thus across Europe new approaches to strategic planning are appearing which are very different from the top-down, public investment driven plans of an earlier period. Research led by the University of Birmingham (RISE) has suggested that regional strategies must identify strong sectors as well as under-performing sectors. Where there is considerable diversity amongst the people who live or work in the region, a strategy needs to understand, recognise and value this diversity. Strategies need to provide a unifying vision but also connect to local projects.

Policy makers need to understand the wider territorial context and implement locally adapted measures. "A territorial development strategy that is clear in its messages to investors as well as to local stakeholders can reduce uncertainty and risk and be part of the

process of restoring business confidence and creating attractive places” (Synthesis Report p 10).

Understanding the wider territorial context requires thinking across administrative boundaries and borders. Enlargement of the EU and moves towards economic integration mean that cross-border co-operation has been recognised as an important means to achieve smart, sustainable and inclusive growth. While the EU focus is on borders between member states, the underlying principles apply to the relation of Wales to English cities, notably Liverpool, Manchester, Birmingham and Bristol. ESPON research (GEOSPECS) suggests that cross-border co-operation should focus on cross-border issues such transport flows, labour mobility or access to essential services such health care, and should seek to exploit the potential offered by the differences. Some European regions are working on joint cross-border development strategies.

This poses some questions for Wales. What current benefits do Welsh residents gain from the proximity to these English cities? How can such opportunities be strengthened? In particular how can the differences, e.g. Wales’ distinctive landscapes and identity, be capitalised upon? How is the cross-border dimension to be factored into Welsh plans?

### **Innovation**

Innovation is recognised as being important to the competitiveness of businesses, especially in the knowledge economy. However, innovation can take different forms: it is not just about investment in R&D. Across Europe there are different patterns of innovation that can be observed. Most of the UK is a “Smart Technological Application Area” where the innovation policy aim is best directed to “co-inventing application”, which means that regions need to be able to respond rapidly to new technologies (KIT). While local firms will be the beneficiaries, the policy required is one that fosters strong links with external partners in specialised sectors. There needs to be flexibility to convert capacity to new opportunities. Local knowledge networks also need to be open to external sources of knowledge, whether from business or scientific work.

Box 2 illustrates how this pattern of innovation has been followed in the TV and digital media sector in Cardiff. While each sector and place is unique, the message for Wales from the Cardiff example is “co-inventing application” is a fruitful line for economic development agencies to explore. This implies fostering links between local firms and external partners in specialised sectors.

### **Box 2: Innovation in the TV and digital media sector in Cardiff**

|   |
|---|
| <p>The TV and Digital Media sector centred in Cardiff is in a process of change and adaptation. The sector in Cardiff has a pattern of development to date that may be characterised as a ‘creative co-inventing application pattern’. Strong firm-level sector-specific knowledge is evident in Cardiff that allows firms in the region to innovate and to adapt basic knowledge</p> |
|---|

that is produced and developed in other regions. Firms in the region are networked to sector organisations in other regions that enable exchange and knowledge acquisition to occur, and are also able to attract and fully utilise mobile (freelance) expert labour. The region also displays the capacity to generate expertise locally, and provides a strong basis of skills and talent. The proposed Media Capital, offers the potential of capitalising on existing strengths and on the clustering of sector actors in the city. However, the sector is highly competitive and developments in a number of other regions, and globally will have direct bearing on the success of firms located in Cardiff.

Innovation is not confined to urban centres. Box 3 presents the example of the food industry in West Wales. The Welsh university towns can also play a leading role in innovation that can be significant at European scale and benefit the wider region. For example, Aberystwyth stands out amongst small cities in Europe in terms of its involvement in terms of its participation in research networks in what are called “converging technologies (nanotechnology, biotechnology, information technology and cognitive science) (FOCI, p.171).

### **Box 3: Innovation in the food industry in Carmarthenshire**

Most of the firms operating in the food sector in Carmarthenshire are SMEs or micro-businesses. This is one of the UK’s main milk-producing areas. Beef, sheep and seafood are other important products. A number of the firms are involved in research and development, e.g. in food flavouring.

There is informal sharing of knowledge amongst small dairy forms (e.g. in cheese making), while larger firms access new knowledge from connections external to the region in the rest of the UK and beyond. Leading edge knowledge on production techniques is then adapted for local use. Specialist research led knowledge is sourced from local universities and public sector sources within and out-with the region.

Thus the food industry also provides an example of how innovation can be achieved through networks, imitation and local adaptation. The County Council has actively supported the food sector, e.g. through a dedicated business development officer. There is a Food Park and Food Technology Centre, as well as a Dairy Development Centre, and an organic farming centre in the adjoining mid Wales region. Thus there is a concentration of expertise and support for developing food related businesses in the region.

In summary, innovation in Wales currently follows a path based on adaptation of new know how to fit local needs and conditions. There may be opportunities to build on this approach. An innovation strategy needs a sectoral focus but also a spatial component, and synergy between economic development and planning policy.

## **Rural and small town Wales**

A number of ESPON projects challenge the notion that rural regions or coasts, for example, are by their nature “handicapped”. Rather there is recognition that almost all regions of Europe have some kind of “relative specialisation” with one or more factors that can make them attractive to specific audiences. Individuality is a development opportunity. European research and practice (e.g. in the LEADER programme) has embraced the “new rural paradigm”. This means that the emphasis is on endogenous development and the mobilisation of local assets. There are two fundamental assumptions: “agriculture is no longer the backbone of rural economies” and “rural is not synonymous with decline” (OECD, 2006, p.12). The latest thinking stresses the need for such bottom-up development approaches to look outwards as well as inward, in particular connecting to wider markets and accessing cutting-edge know-how.

Rural economies and societies are increasingly connected, both locally but also to global networks. The European research has distinguished between rural areas that are within the commuting range of main cities, and those that are more remote. In the former, there is pressure for new housing development, which puts pressure on affordability for young local residents. There is in-migration of young families seeking space and an attractive “lifestyle”. In the latter there is typically rural to urban migration, particularly of young people; sustainability of key services is a problem.

There is a full case study of the Cambrian Mountains area in the ESPON study of the Potential of Rural Regions (PURR). Aspects of this are summarised in Box 4, which shows the importance of working towards integrated and place-based approaches to rural development. The Cohesion Funds 2014-20 puts particular emphasis on the need for integrated and community-led development.

### **Box 4: Realising potential: The Cambrian Mountains (PURR)**

The Cambrian Mountains can be a pioneering laboratory for environmentally sustainable rural development. The concept of Ecosystem Goods and Services (EGS) sees society as part of nature and entails understanding how our actions affect natural ecosystems, but also how society benefits from the natural world. The Cambrian Mountains Initiative is working on practical implications of such thinking. In particular it is looking at ways to capture and retain the benefits EGS for local communities. Such thinking, connecting economy, community, ecology and landscapes, offers a development path to realise the potential of the area.

A clean environment is the corner stone of the image of the Cambrian Mountains, and this poses challenges and opportunities in relation to renewable energy. How, for example, can the benefits from wind farm development be retained within the region? Powys County Council, for example, has a scheme in which it pays the start-up costs which can then be repaid when the farm is operational. Provision of high quality timber for sustainable

construction also offers economic possibilities in this region.

Realising the potential of the Cambrian Regions will also require other innovations in governance. One possibility might be a new form of designation for the Mountains to fit the sustainability agenda. There are examples from Europe that might provide inspiration, e.g. the German *Naturparken*, the French *Parcs Naturels Regionaux* or the Flemish *Regionaal Landschappen*.

### **The Green Economy**

As suggested in Box 4, moves towards a Green Economy are expected to mean greater reliance on local conditions. Local resources, labour markets (skills and costs of the workforce) or agro-ecological conditions are anticipated increasingly to influence economic productivity, but governance and spatial planning policies are also like to influence the progression. Land and place are integral to a sustainable economic development approach, with multi-functional use of land taking economic as well as ecological values into account.

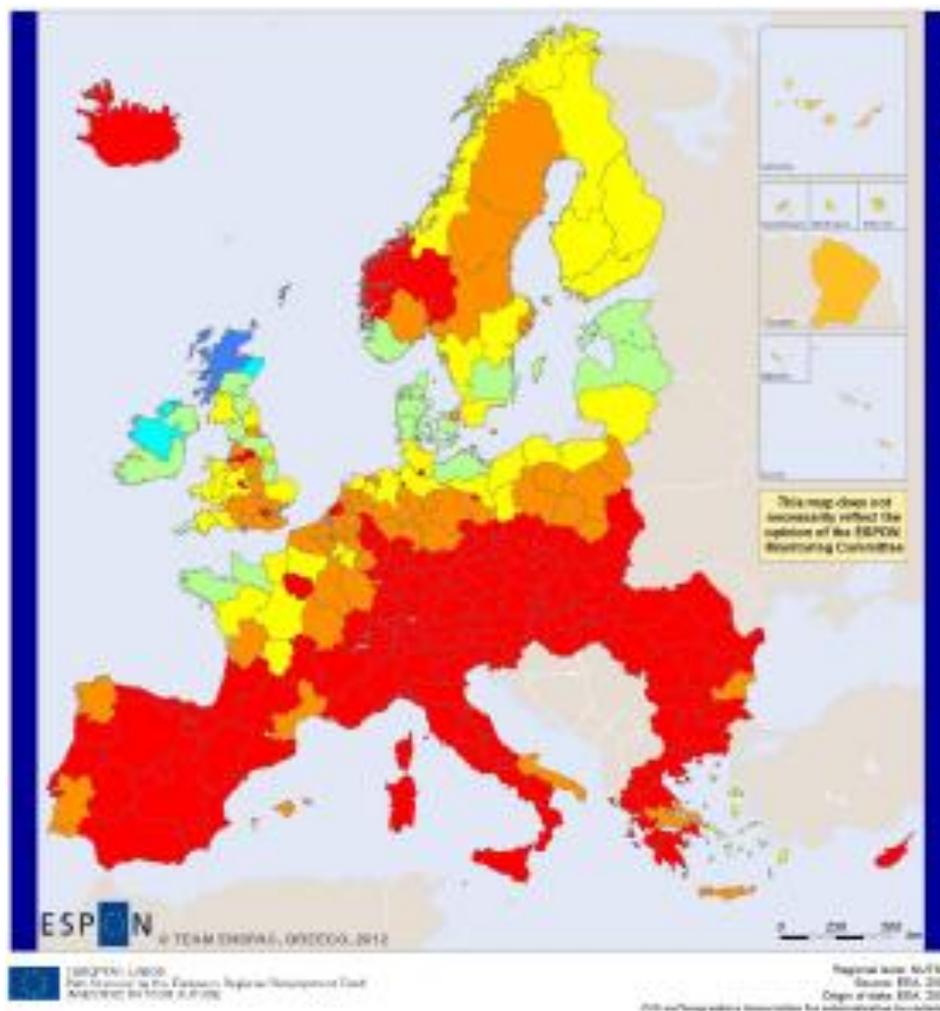
The team working on ESPON's research on the green economy have suggested that countries and regions would need an integrated development approach in order to use the capacity they have in the best way. Policies need to be coordinated. "Policies towards labour markets, enterprise and innovation, energy, transport, rural development, urban development and planning might be very important components to be integrated into green growth strategies. Individual policy strands also have to be developed in such a way that the territorial dimension (regional differences) is taken into consideration and utilised." (GREECO, p. 34).

Table 2 outlines the driving forces of a green economy approach.

**Table 2: Preliminary classification of the driving forces of a green economy (GREECO, p.37)**

| Driving forces                                      |  |
|---|--|
| Domain  | Factors  |
| Territorial capital                                 | <b>14</b> Renewable stocks<br>Freshwater resources<br>Forest resources<br>Fish resources<br>Renewable energy potentials<br>Additional factors                                  |
|   | <b>10</b> Regional innovation capabilities<br>R&D infrastructure<br>Environmentally -related innovation<br>Additional factors  |
|   | <b>13</b> Labour force<br>Degree of specialisation<br>Degree of underutilisation<br>Education and training<br>Additional factors   |
|   | <b>15</b> Territorial assets<br>Agglomeration economies<br>Existence of (ideally eco-innovation) clusters<br>Polycentric structure<br>Multifunctionality<br>Additional factors |
| Location advantages                                 |  |
| <b>16</b> In-flows from external territories        | Financial flows of importance to GE<br>Physical flows of importance to green economy (energy, raw materials, etc.)<br>Etc.   |
| <b>12</b> Investments                               | Private investments  |
| <b>9</b> Consumption patterns (behavioural aspects) | Consumer behaviour   |
| <b>?</b> Additional domains                         | Additional factors   |

**Map 2: Green energy potential: per capita wind resources**



Map 2 shows the potential of Wales, relative to other parts of Europe, in terms of wind energy. While the potential in Wales is not as high as parts of the British Isles that are more exposed to Atlantic gusts, it is greater than most of England or continental Europe.

**Summary: Place-based development in Wales**

ESPON provides an evidence base that can be used to inform policy making in Wales. In particular, ESPON can underpin a place-based approach by emphasising the need to understand the potential and different strengths of Welsh cities, towns and rural regions. As well as statistics, indicators, maps and case studies it provides techniques that can be adapted and applied by practitioners and policy makers in Wales. In particular, methods have been developed in the ESPON projects PURR and GEOSPECS for probing potential in rural regions and local districts. In addition ESPON has led work on methods to assess the territorial impact of EU Directives and Policies, with the EATIA project developing a methodology that can be used quickly and with qualitative inputs.

Perhaps above all, ESPON provides a set of concepts and triggers that can be used by policy makers in Wales, not least with a view to the new Cohesion Funds programme. Specifically,

ESPON points to the need to look across administrative boundaries to understand and work with the territorial context of any place. This applies at the national scale, say in relation to managing the marine environment of the Irish Sea or capitalising on the proximity of gateway cities close to the English border; but also at the city-region and even local scale, where, for example, the role of Wales' small towns is so vital to their rural hinterlands.

ESPON's work on climate change, energy, land use, seas and the green economy has a special resonance for Wales, given the priority attached to sustainable development in Wales. The idea that mountains, islands and coasts have distinctive needs and present unique opportunities can be used to shape thinking here about how to realise the potential of such special places. Similarly, a focus on innovation and on clusters as means of supporting a growth agenda can be drawn upon in developing national and local strategies for spatial planning and economic development. Accessibility and connectivity remain important and the challenge for Wales is to find ways to optimise these at all scales from local to European.

Thus ESPON can assist policy making in Wales and inform thinking about key current concerns such as city regions, the Welsh spatial plan (the Scottish Government is involved in an ESPON project looking at indicators for use in national spatial strategies), innovation or the scope to develop eco-system goods and services.

## References

OECD 2006, New Rural Development Paradigm, Policies and Governance, *OECD Rural Policy Reviews*; OECD Publishing.

Task and Finish Group 2012, City Regions: Final Report, <http://wales.gov.uk/docs/det/publications/12076cityregionsrpten.pdf>, viewed on 18 September 2012.

## ESPON REPORTS

Territorial Observation 2

ECR2

FOCI

GEOSPECS

GREECO

PURR

The Royal Town Planning Institute provides the ESPON Contact Point for the UK through a contract with the Department for Communities and Local Government in England. See [www.espon.org.uk](http://www.espon.org.uk) to access the Contact Point and its work.