ENEA Working Group
on Climate Change and Cohesion Policy

# Improving the Climate Resilience of Cohesion Policy Funding Programmes

## An overview of member states' measures and tools for climate proofing Cohesion Policy funds

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# Abbreviations

| | |
|---|---|
| 3CAP | Cornwall Climate Change Action Plan |
| ADEME | French Environment and Energy Agency |
| BREEAM | Environmental Assessment Method for Buildings around the World |
| CC | Climate change |
| CCD | Commission on Climate Change and Development |
| CEE | Central and Eastern Europe |
| CP | Cohesion Policy |
| CPER | Projects Contracts State Region in France |
| CPV | Concentration of solar photovoltaic energy |
| DG Env | European Commission, Directorate General Environment |
| DG Regio | European Commission, Directorate General Regional Policy |
| DIACT | Inter-ministerial delegation for regional planning and competitiveness, France |
| EA | Energy Agency |
| EAFRD | European Agricultural Fund for Rural Development |
| EC | European Commission |
| EE | Energy efficiency |
| EEA | European Environmental Agency |
| EEE | European Centre for Renewable Energy |
| EEOP | Environment and Energy Operational Programme |
| EIA | Environmental impact assessment |
| ENEA | European Network of Environmental Authorities for the Cohesion Policy |
| EMAS | Eco-Management and Audit Scheme |
| EMS | Environmental management system |
| ERDF | European Regional Development Fund |
| ES | Environmental sustainability |
| ESF | European Social Fund |
| ESPON | European Observation Network for Territorial Development and Cohesion |
| ETAP | European Action Plan for Environmental Technology |
| ETS | Emissions Trading Scheme |
| EU | European Union |
| GDP | Gross domestic product |
| GHG | Greenhouse gases |
| GRDP | Greening Regional Development Programmes |
| IT | Information technologies |
| ISFOC | Institute for Concentration of Photovoltaic Systems |
| ISO | International Organization for Standardization |
| LCA | Life-cycle analysis |
| LOLF | Law on public finances, France |
| MA | Managing authority |
| MAE | Environmental Support Mission (France) |
| NGO | Non-governmental organisation |
| NMC | Northern Maritime Corridor |
| NRP | National Reform Programme |
| NRW | North Rhine Westphalia (Germany) |
| NSDS | National Sustainable Development Strategy |

| | |
|---|---|
| NSRF | National Strategic Reference Framework |
| OECD | Organization for Economic Cooperation and Development |
| OP | Operational programme |
| OPE | Operational Programme Environment |
| OROK | Austrian Conference on Spatial Planning |
| PR | Public relations |
| RDA | Regional Development Agency |
| RDP | Regional Development Programme |
| RE | Renewable energy |
| R&D | Research and development |
| RES | Renewable energy sources |
| REC | Regional Environmental Center for Central and Eastern Europe |
| ROP | Regional Operational Programme |
| SD | Sustainable development |
| SEA | Strategic environmental assessment |
| SEPA | Swedish Environmental Protection Agency |
| SF | Structural Fund |
| SME | Small and medium-sized enterprise |
| STP | Science and technology park |
| TEN-T | Trans-European Transport Network |
| VROM | Ministry of Housing, Physical Planning and the Environment, the Netherlands |
| UK | United Kingdom |
| WG | Working group |

# Key Definitions

**Climate change adaptation** — adjustment of ecological, social and economic systems in response to current or expected climate change and its effects in order to moderate or offset possible damage and exploit beneficial opportunities.

**Carbon intensity** — the amount of carbon by weight emitted per unit of consumed energy, expressed in terms of grams of carbon dioxide released per megajoule of energy.

**Climate change mitigation** — interventions to reduce greenhouse gas emissions and to enhance their sinks, aimed at reducing the effects and impacts of climate change.

**Carbon positivity** — refers to actions to reduce carbon emissions through increasing energy efficiency and carbon sequestration.

**Climate proofing** — identification of risks to a development project as a consequence of climate variability and change, and ensuring that those risks are reduced to acceptable levels through long-lasting and environmentally sound, economically viable, and socially acceptable changes implemented at one or more of the following stages in the project cycle: planning, design, construction, operation, and decommissioning.

**Climate change resilience** — the ability of a social, ecological and economic system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change. With respect to climate change, this refers to the reduction of the energy and climate vulnerability of the regions and their economies.

**Low-carbon economy** — a concept of economy defined as one that is 80 percent less carbon intensive than the present economy and based on low energy consumption, low pollution and low emissions. The fundamental aim is to achieve high energy efficiency, to use clean/renewable energy and to pursue green GDP via technological innovation.

# Executive Summary

European Cohesion Policy funds represent a hugely significant investment[i] in Europe's knowledge and physical infrastructure, helping to deliver a converging and competitive economy aimed at improving the prosperity of European citizens.

This report investigates the role of the current Cohesion Policy in supporting climate-proof investments and programmes. The aim is to encourage the integration of aspects of climate change into Structural and Cohesion Funds in order to reduce the carbon intensity of the programmes. In addition, the paper aims to:

- facilitate information sharing and know-how transfer across member states;
- summarise the available knowledge as regards tools and measures used in member states to incorporate climate change mitigation and adaptation into Cohesion Policy funding programmes at all levels;
- study innovative approaches to addressing climate change in regional policy documents and in the sections dedicated to the environment in operational programmes (OPs); and
- make a non-exhaustive inventory of techniques for strengthening environmental and climate change considerations into all investments, not only environmental ones.

Significant knowledge and experience of how to include climate change aspects into Cohesion Policy spending programmes are available in EU member states. Although good examples exist, they usually focus only on certain aspects of the project cycle.

The present report may be used as a support tool by decision makers and environmental and other managing authorities in EU member states, to help improve their performance with respect to environmental issues in general, and climate change issues in particular, at all levels of the programmes. This can be achieved through:

- taking climate-resilient decisions throughout the project cycle in order to climate proof the spending of Structural and Cohesion Funds;
- finding opportunities to amend current programming documents in order to increase possibilities for financing climate change mitigation or adaptation measures through EU funds; and
- influencing the 2014–2020 programming period in the direction of climate proofing member states' operational programmes in general, as well as individually funded actions.

The report follows the phases of programme realisation, from strategic planning and programming to project cycle management and ex-post evaluation.

As a first step, the report analyses how climate change issues are dealt with at the programming level in the National Strategic Reference Frameworks (NSRFs) and provides examples of selected operational programmes that envisage direct measures for stimulating climate change–positive investments.

Climate change–related objectives and indicators within the programme content form the basis for the implementation of such measures throughout programme development and implementation. Linking NSRF objectives with other national strategies — such as, for example, the national climate change strategy — can increase the consistency and coherence of efforts, as explored in Chapter 2.

It is important that the programming documents — that is, the NSRFs — explicitly include climate change measures and map the potential of those measures for economic growth and job creation. As the economy is always higher on the political agenda, the description and definition of synergies between climate change and economy might boost climate change integration into the Cohesion Policy.

Chapter 3 focuses on the integration of climate change aspects into the development stages of projects financed by the Cohesion Policy and follows the project cycle, from methods of project identification, design and preparation, to assessment and scoring. Project monitoring is discussed in Chapter 4.

At the stage of the call for proposals (call announcement), there is insufficient knowledge among project applicants about the opportunities offered by projects related to climate change. There is also limited experience of the possible types of activities and outputs of such projects. This gap can be addressed by organising thematic calls for proposals and by providing technical assistance to project applicants.

The authors believe that the two main ways in which operational programmes can improve the integration of climate change considerations into project development and preparation are (i) through the project application documents; and (ii) through assistance and guidance to project applicants. In some countries, positive steps are taken to strengthen the environmental and climate focus of application forms through the inclusion of questions related to emissions reduction and energy consumption. Existing guidance documents on how to reflect environmental sustainability issues in the project proposal also serve to improve the quality of proposals from a climate perspective and to enhance applicants' knowledge.

Technical assistance to project proponents plays an important role in strengthening their knowledge of how to integrate climate change considerations into project proposals. Designating personnel to provide support to applicants (e.g. an environmental sustainability manager or climate coach) is a positive example of targeted institutional support. Consultation with environmental authorities during the application phase is a good practice that should be strongly encouraged. In some countries, there is accumulated experience with environmental networks that maintain active dialogue with project applicants and assist with the integration of environmental aspects into project proposals.

Regarding the project appraisal process, innovative institutional mechanisms (e.g. environmental panels) can be highlighted as examples of bringing expertise and knowledge into the assessment of the environmental aspects of projects and of contributing to the integration of environmental issues and the capacity building of project applicants. Existing checklists and guides for the assessment of environmental sustainability issues are a helpful tool for evaluating the impacts of a project on the environment. Climate change considerations are integrated in these checklists.

Chapter 4 focuses on the monitoring of individual projects and programmes in terms of their contribution to or reduction of GHG emissions. In a period in which EC climate change policies are becoming stronger, it is essential to align all other policies — including big expenditure policies such as

the Cohesion Policy — with climate change policies. This was stated in the White Paper on Adapting to Climate Change. There will thus be increasing pressure on the EC and its countries to fund projects that do not contribute to GHG emissions on an individual level, or at least on an aggregated programme and/or regional level, but also possibly to contribute to significant GHG reductions in line with EU commitments and global agreements (for example the EU objective of 20-20-20 by 2020, and the objective of the Intergovernmental Panel on Climate Change of 80 percent by 2050).

The EU does not exert sufficient pressure on member states to use EU funds only or primarily for projects that are $CO_2$ neutral. In some member states (e.g. France), the concept of carbon neutrality has been adopted, where neutrality has to be reached on a programme and/or regional level. The most elaborated and most commonly used software tool in the EU for estimating the carbon impact of individual projects and programmes on a regional level is the French NECATER, which is an instrument for carbon impact analysis mainly on an aggregated regional or national level.

Chapter 5 looks at climate change as potential for growth and highlights the fact that strengthening EU resilience to the impacts of climate change will offer opportunities to invest in a low-carbon economy and to deliver sustainable growth, jobs and competitiveness. The vision of environmentally driven growth is central to only a few countries (e.g. Sweden, where it has been recognised as a motor for regional economic development), where it is reflected throughout the operational programmes. This chapter also presents innovative projects funded by Structural Funds. Projects are divided into:

- mitigation projects;
- adaptation projects;
- projects that make the economic case for investment in a low-carbon economy;
- clusters for environmental technologies;
- examples of how conventional economic projects and/or projects that have no vertical environmental outcomes have been adapted or changed to reduce their carbon/environmental intensity; and
- examples of skills/education-based projects that include carbon literacy development.

Based on a review of the literature, research findings and discussions within the ENEA working group, the authors have come up with a set of conclusions and recommendations for the future that are presented in Chapter 6. The recommendations follow the logic of the report. Possible timelines for implementing the given recommendation, as well as the main responsible actor, are included.

# 1. Introduction

## 1.1 Objectives

This paper reflects on the challenges posed by climate change in the context of the EU Cohesion Policy, as well as on the opportunities offered. It aims to encourage the integration of climate change aspects into Structural and Cohesion Funds in order to reduce the carbon intensity of the programmes, eventually leading to actual carbon dioxide emission reductions.

Significant knowledge and experience of including climate change aspects into Cohesion Policy spending programmes is available in EU member states. Although there are good examples in many member states, these are usually linked only to certain aspects of the project cycle.

The paper aims to:

- facilitate information sharing and know-how transfer across member states;
- summarise the available knowledge as regards the tools and measures used in member states to incorporate climate change mitigation and adaptation into Cohesion Policy funding programmes at all levels;
- study innovative approaches to addressing climate change in regional policy documents, and in the sections dedicated to the environment in the operational programmes (OPs); and
- make an inventory of techniques to strengthen environmental and climate change considerations in all investments, not only environmental ones.

The report is targeted mainly at the managing authorities of the member states, but also at other interested parties such as regional decision makers, environmental authorities, NGOs and the European Commission. This report has been being drafted with the intention of supporting decision makers and environmental and other managing authorities in EU member states to improve their performance as regards environmental issues in general, and climate change issues in particular, on all levels of the programmes. This can be achieved by:

- taking climate-resilient decisions throughout the project cycle in order to climate proof Structural and Cohesion Funds expenditure;
- finding opportunities to amend current programming documents in order to increase actions for financing climate change mitigation or adaptation measures by EU funds; and
- influencing the 2014–2020 programming period in the direction of climate proofing member states' OPs in general, as well as individually funded actions.

Based on the practices presented and on the policy documents reviewed, the report attempts to draw conclusions and make recommendations as to how to improve the climate resilience of Cohesion Policy spending programmes in the current (2007–2013) period and provides an outlook and recommendations for the next programming period.

Great efforts are needed for member states to achieve actual emissions reductions. The report will serve as a basis for future work in supporting member states and regions to lead in the delivery of a truly low-carbon economy. Milestones for future efforts are the following.

- Summer 2010: official proposal by DG Budget on the future perspective, which will outline the priority spending areas.
- Autumn 2010: Cohesion Forum at which member states can give their input to the future Cohesion Policy.
- Spring 2011: first draft of the legislative proposal.

## 1.2 Setting the scene/rationale

Climate change will lead not only to severe environmental impacts but will also have significant economic and social impacts, with some regions and sectors likely to suffer greater adverse effects. In order to adapt to the already inevitable effects of climate change and to mitigate further pressures, safeguard mechanisms need to be incorporated in EU policies, including the Cohesion Policy. In 2007, the EU put forward a climate action and renewable energy package, setting the target to reduce emissions by 20 percent below 1990 levels, including a 20 percent share of renewable energy in EU energy consumption by 2020 and increasing energy efficiency by 20 percent (EC, 2008a).

The Cohesion Policy, including the European Regional Development Fund (ERDF), the Cohesion Fund and European Social Fund[ii](ESF), represents 35.7 percent of the total EU budget for the period 2007 to 2013 and represents the bulk of infrastructure projects supported by EU funds. These investments represent a serious risk of increased climate change emissions. A coherent and streamlined approach on behalf of the EC, linking the constraining climate change policy objectives on the one hand and the developmental Cohesion Policy objectives on the other, would require maximum efforts in the countries to carbon proof projects. This would be particularly challenging in the new member states, parts of Portugal, Spain and south Italy, as they are all convergence regions.[iii] Infrastructure investments in these regions are more carbon intensive and therefore more difficult to neutralise.

European Commission regulations for Structural Funds set sustainable development as a binding theme for all funding objectives in the 2007–2013 period. The White Paper on Adapting to Climate Change, adopted in April 2009, sets a framework for reducing the EU's vulnerability to the impacts of climate change. The white paper calls for integrating and mainstreaming adaptation into EU key policy areas such as the Cohesion Policy. It is emphasized that infrastructure projects that receive EU funds should take climate proofing into account based on methodologies to be developed and integrated into the EU Cohesion Policy. In addition, it suggests that indicators should be developed to better monitor the impact of climate change, including vulnerability, impacts and progress on adaptation (EC, 2009a). The white paper builds on the consultation launched in 2007 by the Green Paper on Adapting to Climate Change, which called for an examination on how climate proofing can be implemented in plans and programmes under the Cohesion Policy. The communication stressed that the EU must adapt its governance structures to deal with adaptation in addition to including climate change adaptation in the spending programmes. Member states were urged to take advantage of current OPs to include such measures (EC, 2007b).

The integration of climate change aspects into the EU Cohesion Policy was discussed in the Fourth Cohesion Report (EC, 2007a). In the Green Paper on Territorial Cohesion (2008), the Commission suggested examining how climate proofing can be reflected and made operational in the programmes and projects adopted under the Cohesion Fund, the Regional Development Fund, pre-accession instruments, Trans-European Networks Programmes, and infrastructure measures under the Rural Development Fund (EC, 2008b).

In the report "An Agenda for a Reformed Cohesion Policy" (2009), Fabrizio Barca puts forward climate change as one of the six future core priorities of the Cohesion Policy. In defining these priorities, the starting point used is the concept of the "European public good" (a good that benefits all European citizens, one that is neither possible nor desirable to deprive anyone of). Barca suggests a place-based approach to intervention, due to the region-specific effects of climate change that requires place-specific responses, taking into account local conditions and knowledge. Place-related considerations could be placed before economic and sectoral considerations (Barca, 2009).

In addition to the potential for emissions reductions, the Cohesion Policy can support the creation of new market openings for local economies by enabling them to seize the opportunities created by the need to tackle climate change as new potential sources of growth. The development of measures for mitigation and adaptation to climate change could be a powerful driving force in the transition to a low-carbon and low-input economy and toward finding new practical solutions and technological developments to address climate change issues. The issues of mitigation and adaptation should be an essential cornerstone of the European Action Plan for Environmental Technology (ETAP) (ETAP website, DG Env). Making buildings and infrastructure climate proof as an adaptation measure could promote innovation in the same way that efficient power generation, energy use and transportation are driving forces for innovation linked to climate change mitigation measures.

The urgency of climate change considerations has become clearer and more persistent only since the completion of the programming for the 2007–2013 period, because the climate action and renewable energy package was put forward only after the start of the programming period and because understanding of the importance of adaptation has recently increased. Nevertheless, several member states did address climate change mitigation and adaptation in their OPs for the 2007–2013 period, though to varying extents. Nearly half of member states have integrated indicators for the reduction of GHG emissions into their Cohesion Policy programmes. France, for example, has developed a carbon evaluation tool to monitor $CO_2$ emissions produced by all projects funded through the central budget and with EU support (EC, 2009b). Although such approaches exist, they are often applied only to one part of the cycle and holistic integration is still lacking. The acceleration of the climate change discourse implies opportunities for modifying the current programming documents towards further climate resilience. It will also influence future programming documents to significantly increase climate change integration post-2013.

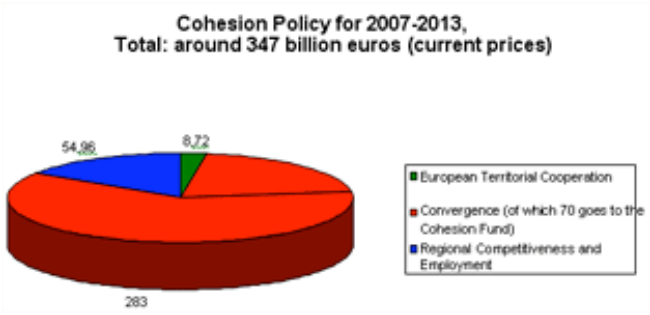
Integrating the principles of sustainable development, or more specifically climate change aspects, is not straightforward and there is a great deal of flexibility in the interpretation of how it can be achieved. This paper reviews measures taken by member states and analyses experiences.

## 1.3 Scope

This report explores the relationship between the Cohesion Policy and climate change, and studies the integration of climate change mitigation and adaptation into Cohesion Policy financial instruments. Among the three objectives of the Cohesion Policy, priority is given to the Convergence and Regional Competitiveness and Employment objectives, although the European Territorial Cooperation objective will also be taken into account.

**Objectives, Structural Funds and instruments**
2007-2013

| Objectives | Structural Funds and instruments | | |
|---|---|---|---|
| Convergence | ERDF | ESF | Cohesion Fund |
| Regional Competitiveness and Employment | ERDF | ESF | |
| European Territorial Cooperation | ERDF | | |




Source: DG Regio

The role of the European Social Fund (ESF) and its support to skills development, education and increasing carbon literacy will not be widely elaborated in this report. However, the recommendations provided can also be applied to the ESF. The authors would like to stress the importance of drawing together ESF and ERDF investments to ensure good economic and environmental linkages — that is, through investing in the Environmental Skills Network whilst increasing support for the development of the environmental goods and services sector.

In some member states, regional development programmes (RDPs) are closely linked with Cohesion or Structural Funds programmes and complementary to Structural Funds investments, for instance through providing co-financing. In some regions in France (e.g. Nord-Pas de Calais), the CPERs[iv] (regional development programmes) go hand in hand with Structural Funds programmes and there is even a common subsidy application form. The connection between climate change and RPDs will be taken into account accordingly in the present report.

The guidelines provided in this report may apply equally to the agro-economic elements of RDPs, such as the European Agricultural Fund for Rural Development (EAFRD).

As the climate change discourse, and especially aspects such as adaptation, is still not fully integrated into policy instruments and measures per se, this paper also deals with the integration of "environment" and "sustainability." These aspects of a project often overlap with climate change aspects, especially mitigation measures, and the vast majority of investments are related to climate change mitigation measures. The authors do not disregard "environment" and "sustainability" language (i.e. measures and considerations) and believe that interesting practices and approaches now associated with the terms can

be easily adapted to climate change. The authors would like to emphasise that carbon accounting and climate change are just one element of wider issues surrounding sustainability. The social dimension of environmental issues is also of major importance — that is, the implications of fuel poverty, social exclusion and inclusive design.

As acknowledged by the Commission on Climate Change and Development, the fight against poverty and the fight against climate change are inseparable and must be addressed together (CCD, 2009). Social groups with fewer resources are the most vulnerable to the effects of climate change. The same segments of society are also exposed to rising levels of energy poverty in Europe. Energy poverty relates to the affordability of energy supply and the proportion of household expenditure allocated to energy consumption. As a consequence of the recent increase in energy prices, some households spend almost 30 percent of their income on energy. A key element in reducing fuel poverty is to improve levels of household energy efficiency, particularly with respect to minimising heating demand (EEA, 2008).

## 1.4 Vision of the desired situation

The delivery of Cohesion Policy funds is currently helping to achieve mitigation and adaptation to the global challenges faced, but it can and should do more to help regions to lead in the delivery of a truly low-carbon economy and to provide global leadership. Along with this leadership come huge economic opportunities for regions across Europe to exploit new market opportunities and develop new goods and services. Only through adapting the current economy to a low-carbon economy, and through using Cohesion Policy funds to help achieve this, will regions, member states and Europe as a whole achieve long-term economic sustainability and global competitiveness.

The speed of this economic transformation can be facilitated through a more carbon-centric Cohesion Policy (including mechanisms and delivery governance) that identifies the fact that Cohesion Policy funds can only be delivered within the context of the delivery of **actual** regional and member state carbon reductions over **relative** reductions of carbon intensity in the business-as-usual delivery scenarios.

A step towards achieving this is the development of a common package of environmental outcome indicators to be used by all programmes to report environmental sustainability delivery, thus enabling benchmarking and comparison between regions.

Based on extant good examples and practices, carbon management and accounting tools can be developed and consolidated to help regions and member states to evaluate the carbon impact of an investment before it takes place or is contracted.

In the next programming period, the delivery of Cohesion Policy funds within the context of a low-carbon economy can be further promoted through strengthened regulations requiring regions and member states to report on how Structural Funds will contribute to ***real*** carbon reductions and to set legally binding carbon reduction targets for OP delivery.

## 1.5 Methodological considerations

This report is based on research carried out by the Regional Environmental Center for Central and Eastern Europe (REC) and funded by the Ministry of Housing, Physical Planning and the Environment of the Netherlands (VROM). Support was also provided by the European Commission. It was initiated by members of the Working Group on Cohesion Policy and Climate Change within the European Network of Environmental Authorities for the Cohesion Policy (ENEA). The work has been guided by, and carried out within the framework of, the working group jointly chaired by the European Commission and the REC. The ENEA was established in 2004 to contribute to the integration of environmental and sustainable development policies within the regional policy programmes of EU member countries. The ENEA brings together experts from environmental administrations, international organisations and non-governmental organisations (NGOs) and is chaired by DG Environment. The ENEA has recently been renamed ENEA-MA and has now been extended to include managing authorities.

An initial survey was carried out in summer 2008 among members of the working group in order to collect good practices in incorporating climate change and the environment, as discussed above. Following the identification of some good models, the authors of the report conducted personal interviews with stakeholders in several EU member states (Austria, Finland, France, Italy, Hungary, Slovakia and Sweden). It was not possible to conduct further interviews in other countries due to limitations in terms of both time and funds.

Drafts of the report were prepared by the REC and periodically sent for consultation to the working group. Feedback was received from its members in their capacity as experts. The final draft of the report has been consulted with members of the ENEA.

One of the added values of the research and the resulting report is the presentation of selected good practices from member states. Good practices are positively selected case studies of an activity or system currently in use, which gives more positive environmental benefits and has other more positive effects, than the average solution or customary practice within the field. This means that good examples are dependent on time, context and region (as opposed to having an absolute quality of "goodness" or to being the "best" example in every possible context). These good practices are found at different system levels, including:

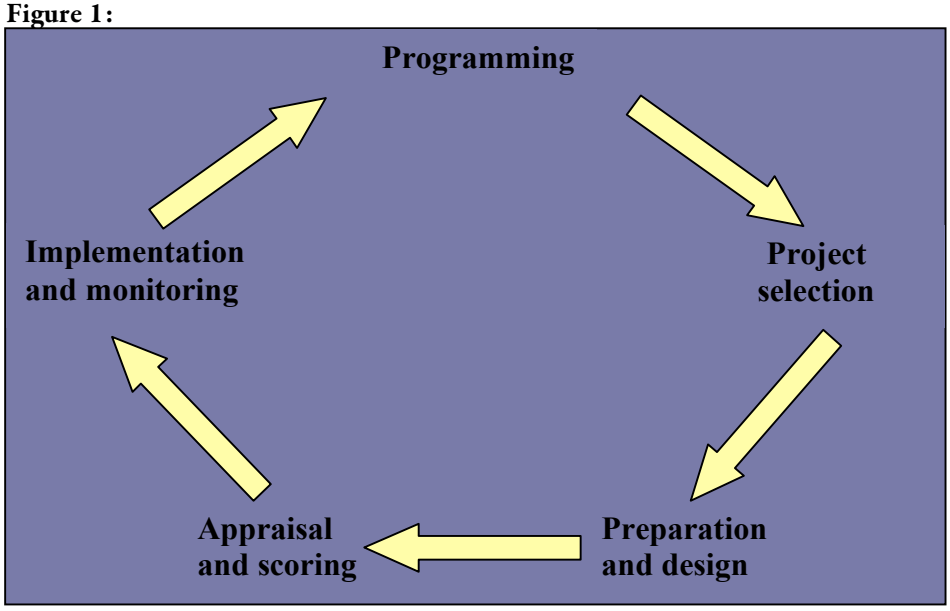
- general policy instruments (e.g. taxes, regulations, subsidies);
- local policy instruments (e.g. physical planning);
- tools and methods (e.g. LCA, EIA, EPD or EMS); and
- technical, practical solutions that can be more or less localised, ranging from a "green city" to a green building, or to a particular technology such as high-insulation windows or roof-top solar cells.

The fact that these particular good practices are presented does not mean that similar or better practices do not exist in other member states. It is simply that other good practices have not been identified due to limited time and resources. One of the aims of this report is to stimulate the further identification, systematisation and exchange of good practices in other member states. While some of the national examples have been presented as annexes in order to improve the readability of the report, this in no way implies that they are of lesser or greater value than other examples.

## 1.6 Overview of the report

The report follows the phases of the classic project cycle, from strategic planning and programming through project selection and project monitoring to ex-post project and programme evaluation. The key findings are presented in each chapter, while the recommendations are presented in the final chapter. Key findings are summarised and elaborated at the end of the report together with recommendations.

**Figure 1:**




**Chapter 1 Introduction** — includes the report objectives and a presentation of the context and rationale of its development. The introduction also presents the scope of the report and some methodological considerations.

**Chapter 2 Climate Change Integration in Strategic Planning** — covers the strategic planning phase including the programming of the NSRF and the preparatory programmes. It gives examples of how climate change has been taken into account when formulating priority themes in the NSRF and how it is reflected in the priority axis in selected OPs. This chapter highlights the situation in new member states and convergence regions, and discusses the role of indicative lists of projects, which contain foreseen major investments in certain OPs.

**Chapter 3 Climate Proofing the Project Cycle** — analyses how climate change considerations are reflected in the phases of the project cycle from project identification, project preparation and design, to project appraisal and scoring. Positive examples, approaches and practices are elaborated.

**Chapter 4 Project and Programme Monitoring and Evaluation** — discusses available practices for monitoring individual projects and programmes in terms of their carbon dioxide impact.

**Chapter 5 Climate Change as an Economic Driver** — attempts to briefly map the relation between climate change and economic growth. It includes selected examples of innovative projects supported by Structural and Cohesion Funds.

**Chapter 6 Conclusions and Recommendations** — presents the key findings of the report and recommendations. The conclusions and recommendations are split in terms of position in the project cycle and in terms of time horizon.

# 2. Climate Change Integration in Strategic Planning

According to Article 17 of the General Regulation, sustainable development is a binding principle for all funding objectives in the period 2007–2013 (EPRC, 2008). The integration of sustainable development in programming documents is key to compliance with environmental sustainability needs as established by European treaties and Structural Fund regulations. Appropriate consideration of relevant environmental issues, including climate change–related objectives and indicators, within the programme content helps to set the basis for the successful integration of those issues throughout programme development and implementation. For example, recipients of funding can be required to meet targets for energy and resource efficiency, land use or green procurement (GRDP, 2006).

The requirement for strategic environmental assessment (SEA) in the current period is intended to increase emphasis on sustainability aspects in programmes and plans, in accordance with the SEA Directive, as transposed into national legislation. When used in an appropriate and efficient way, the SEA is a particularly useful tool for ensuring that environmental issues are integrated into programmes.

The IQ-net thematic paper (22)2 concludes that the level of integration of sustainable development in Structural Fund programmes has increased compared to previous programming periods, both in programme design and actual implementation (EPRC, 2008). This chapter reflects the integration of climate change aspects into the design of NSRFs and OPs.

## 2.1 Requirements for incorporating climate change as set out in the national strategic reference frameworks and other planning documents

This section discusses how climate change issues are taken into consideration at programming level in national strategic reference frameworks (NSRFs) and OPs. It includes selected examples of OPs that envisage direct measures for stimulating climate change–positive investment, mostly through energy-related projects. It suggests ways to enhance the importance of climate change issues in the current programming period through the revision of OPs.

Analysis of the integration of the Lisbon and Gothenburg priorities in regional policy instruments shows that the NSRFs of EU countries reflect, to a high degree, the Lisbon Agenda as structured in the national reform programmes (NRPs), but that the linkage between the NSRFs and the national sustainable development strategies (NSDS) is less straightforward. However, climate change adaptation and mitigation and/or renewable energy are important exceptions: these issues are included in the NRPs, NSDSs and NSRFs of nearly all countries. It can be concluded that the 2007–2013 Regional Competitiveness and Employment objective and Convergence objective have significant potential to contribute to Lisbon and Gothenburg goals, particularly in strengthening the synergies between environmental protection and growth and, to a lesser extent, in reducing Europe's dependence on traditional energy (Nordregio, 2009). Examples of how climate change issues are reflected in NSRFs are provided below.

### 2.1.1 Acknowledging the risks and meeting the challenge of climate change in NSRFs

In the 2007–2013 period, the higher priority given to climate change objectives can be observed through increased spending of Structural and Cohesion Fund resources on renewable energy and energy efficiency projects (EEA, 2009), which is partly due to the enhancement of sustainable energy in the Community Strategic Guidelines. In the current period, most member states identify increased allocation to energy efficiency and renewable energy as an important priority.

**Italy** makes a strong commitment in its NSRF, in which 12 percent of ERDF funds are allocated to energy efficiency and renewable energy investments in the Convergence regions and 8 percent in the Regional Competitiveness and Employment regions. Specific priority axes are devoted to energy and environment. In general, member states reflect the importance of energy through thematic priorities (EPRC, 2008).

The NSRF of **Austria** recognises the climate and energy challenges and includes them among its goals. It states that the main challenges in the environment and energy sectors should be used as a potential push for innovation and growth. The NSRF general objectives do not contain explicit reference to climate change; however, the specific objectives and goals include energy and climate issues. An example of the envisaged support is innovative and environment-friendly transportation. The objectives are synergised with relevant national strategies and programmes. The NSRF of Austria makes reference to strategies at EU and national levels, including the Austrian Sustainability Strategy. Sustainable development is thus a framework condition and is also reflected in the approved development strategies.

The NSRF of the **UK** acknowledges that climate change poses a serious risk to long-term growth and prosperity. Environmental and social sustainability is an overarching theme that includes special emphasis on the promotion of low-carbon energy efficiency. The UK has committed to a target of reducing GHGs by 12.5 percent below base year levels by 2008–2012 and has set a domestic goal to reduce emissions of carbon dioxide by 20 percent by 2010 and by 60 percent by 2050, below 1990 levels. The business sector contributes the most to UK emissions. According to the NRSF, it is therefore essential that businesses adapt to the new conditions.

**Box 1: Examples of thematic priorities in NSRFs reflecting climate change**

**France**
- Protect the environment, prevent risks, and adapt energy practices in a sustainable development perspective.
- Develop transport modes other than road for individuals and companies.

**Sweden**
- The priority "Entrepreneurship" acknowledges the potential of developing production, using renewable energy and changing to sustainable consumption and production patterns.

**UK**
- Environmental and community sustainability is an overarching theme in the NSRF, including a special emphasis on the promotion of low-carbon energy efficiency.

**Austria**
- NSRF general objectives do not contain explicit reference to climate change; sub-priorities of the thematic priority Regional Competitiveness and Innovation focus on innovation in eco-technologies and energy technologies. Within the priority Attractive Regions and Competitive Business Locations, an important role is given to the protection and sustainable use of natural resources and the prevention of risks and natural hazards (including those caused by climate change).

**Poland** (Convergence objective)
- The strategic priority Infrastructure (establishment and modernisation of technical and social infrastructure) contains objectives relating to the energy sector, including the diversification of energy sources, an increased share of renewables, limiting the negative pressure of the energy industry, and pollution reduction.

The NSRF of **France** sets out the need to promote a competitive and sustainable economy. It outlines the need to promote environmental innovations and renewable energy sources and to improve management of natural resources. The national goal is to reduce GHG emissions by a factor of four by 2050.

The NSRF of France states that "following the need to optimise funds and to contribute to reaching the objectives of the Lisbon and Gothenburg Strategies, the partners have to fix in their operational programme criteria and common objectives for the selection of projects." This is in addition to the fact that projects funded from Structural Funds must fit in a sustainable development perspective considering the national sustainable development strategy (NSDS). This is elaborated in Annex 1.

In some member states, RDPs are closely linked with Structural Fund programmes, for example through providing co-financing to Structural Fund investments. There is added value in adopting common governance of state funds and EC funds, mostly through ensuring complementary actions. Links to other national strategies, such as the national climate change strategy, can ensure the consistency and coherence of a member state's efforts. The EEA report supports this argument and states that "the most effective spending occurs when environmental policies are developed outside Structural Fund programming, and are incorporated into the programming to guide spending" (EEA, 2009).

Examples are given in **Box 2** below.

**Box 2: Maintaining links to other national documents**

**France**: Projects funded from Structural Funds must comply with the sustainable development perspective in the NSDS. Regions with suitable strategic instruments and that comply with the reference framework (i.e. Agenda 21, national parks charters, climate plans, etc.) will have priority access to funds.

**UK**: Programmes should support the objectives of the UK Climate Change Programme, which underlines the need for carbon reduction to go hand in hand with increased competitiveness and economic growth.

**Austria**: The specific objectives and goals include energy and climate issues, which are synergised with the more precise provisions from national strategies and programmes.

### 2.1.2 Applying horizontal priorities

According to the **Hungarian Development Strategy**, two general aspects should be focused on when implementing developmental objectives. Sector and regional programmes must be transcended by the principle of environmental, macro-economic and social sustainability; and of regional and social cohesion. These horizontal policies have to be taken into consideration while concentrating on these two aspects in the planning, implementation, monitoring and evaluation of the OPs and interventions. The concrete targets defined in the National Climate Change Strategy are as follows:

- reduction of GHG emissions by 6 percent by 2012;
- in the case of an EU unilateral GHG emissions reduction undertaking of 20 percent, reduction by between 16 and 25 percent compared to 1990 emission levels in Hungary;
- in the case of a presumed emission reduction goal of 30 percent by the EU, reduction by between 27 and 34 percent compared to 1990 emission levels in Hungary; and
- reduction of GHG emissions by between 60 and 80 percent by 2050.

In the **Slovakian NSRF**, sustainable development is considered a horizontal priority that should be applied to all OPs. Although the need for climate change mitigation and adaptation is not generally given specific emphasis within this priority, and EU-funded projects are not required to take climate resilience into consideration during the project cycle, there are several measures aimed at supporting this objective — that is, energy efficiency measures are identified in several OPs.

If the NSRF, through the OPs, truly has the opportunity to deliver sustainable development, it is important that it does more than describe sustainable development as an objective or advocate adherence to certain principles. Actions, or intentions to act, are necessary to implement a sustainable development strategy (Nordregio, 2009). In this respect, it is important to have good indicators on the horizontal level and to follow up the intended actions (see more on indicators in Chapter 4).

**Key points**

- Consideration of climate change–related objectives and indicators within the programme content sets the basis for the implementation of such measures throughout programme development and implementation.
- Linking NRSF objectives with other national strategies, such as the national climate change strategy, can increase the consistency and coherence of efforts.
- It is important that programming documents, i.e. NSRFs, explicitly include climate change measures and map the potential of climate change measures to promote economic growth and job creation. As the economy is always higher on the political agenda, a description and definition of overlaps between climate change and the economy might boost the integration of climate change into the Cohesion Policy at national level.
- Minimum requirements can be identified by the EC and taken up in the next programming period, post-2013.

## 2.2 Encouraging climate change positive investments in operational programmes

In addition to the NSRF setting the overall framework conditions for the climate change actions foreseen under the Cohesion Policy, individual OPs set specific priorities and outline the measures to be implemented. An analysis of OPs shows that all of them are closely aligned with the Community Strategic Guidelines (EC, 2006). In Competitiveness OPs, "Energy use and intensity" and "Increasing renewable energy in the energy mix" have a relatively high priority in EU member states. These priority themes in the Regional Competitiveness and Employment OPs indicate the potential of energy and renewable energy and efficient energy management systems to contribute to fulfilling the goals of growth, jobs and sustainable development. In Convergence OPs, "Management of natural resources," "Clean water, air and soil" and "Sustainable transport" are the most important sustainable development priority themes. The "Management of natural resources and climate change" themes have, overall, a medium level of priority, which is higher than in Competitiveness regions (Nordregio, 2009). These tasks are explicitly mentioned in the programmes for rural development.

The examples below are of direct measures aimed at addressing climate change mitigation issues through energy-related investments. These measures can be complemented by indirect interventions required by national standards and regulations.

**UK: Environment as economic driver and growth within environmental limits**

The South West of England Regional Development Agency (RDA) is the intermediate body for the delivery of two ERDF programmes within the region. Environmental sustainability and the development of a low-carbon economy form a key strategic theme embedded throughout the region's two OPs. The OPs recognise the importance of "Environment as an economic driver," "Growth within environmental limits," the principles of one-planet-living and the role of increased carbon literacy in bringing about higher levels of economic resilience. The approach to delivering these objectives is threefold:

- De-resourcing — Reducing the environmental intensity of existing business practices.
- Promoting new business opportunities and economic resilience — Looking at new ways of doing business, commissioning environment-positive projects and investments, and developing new business models and opportunities for the growth of the environmental goods and services sectors.
- Developing integrated skills among individuals and businesses to increase carbon and environmental literacy and awareness in regions — building capacity and resilience into future economic development.

A joint ERDF/ESF programme monitoring committee operates across both Convergence and Competitiveness OPs, seeking to draw synergies between ERDF and ESF programme delivery. The South West RDA is the first RDA to set a corporate target for delivering a net-zero carbon investment portfolio by 2013 for non-EU investments.

**Italy: Multi-regional Renewable Energy and Energy Efficiency Operational Programme**

In the 2007–2013 programming period, an OP entirely dedicated to energy measures has been introduced in Italy. The multi-regional Renewable Energy and Energy Efficiency OP was developed for the Italian convergence regions of Apulia, Campania, Calabria and Sicily. The national strategy will focus on three goals: linking with other Structural Fund interventions, in particular in protected areas; improving infrastructure; and raising awareness among citizens and in local administration (EEA, 2009). The OP has a total budget of around EUR 1.6 billion. The following are some of the expected impacts of the OP's investments expressed through targets:

- increased share of renewables in energy consumption (from 4.7 percent in 2006 to 6.1 percent in 2013);
- energy conservation (1250 thermoelectric power or TEP);
- reduced GHG emissions (1 megaton carbon dioxide/year);
- creation of 7,400 jobs;
- reduced dependency on fossil fuels; and
- reduced dependency on energy imports.

Italy foresees allocating EUR 4.4 billion (in EU funds and national co-financing) to energy efficiency and renewable energy measures in the 2007–2013 period, a significant increase compared to the 2000–2006 programming period allocation of EUR 800 million. On the other hand, this allocation of EU funds is the only funding scheme for energy efficiency and renewable energy in Italy. In other countries, EU funds increase national expenditure on energy efficiency and renewable energy by less than 1 percent.

Box 3 presents examples of how some member states have formulated climate change–related priority axes and measures in their OPs. Energy efficiency and renewable energy measures related to climate change can be included under several types of priorities. For example, sustainable transport measures can be supported by enhancing investment in public transport and by the construction of cycling pathways. Energy efficiency measures are easily incorporated into the construction and renewal of housing infrastructure.

| Box 3: Examples of climate change–related priorities in selected OPs | | |
|---|---|---|
| **OP** | **Priority** | **Budget** |
| **Sweden** | | |
| Mid-North | Priority axis 1: Renewal of industry, energy and environment-driven development | 73.9 percent of total funding (EUR 177 million) |
| | The focus of this priority is on innovation and knowledge in industry, energy and environment as areas for support and growth. Bio-energy and bio-fuels are considered a priority area for development within the OP Mid-North. Branch-specific initiatives are foreseen in growth areas such as energy, environmental technology and tourism. The provision of risk capital is another support area. | |
| **Germany** | | |
| Berlin | Priority 4: Environment | n/a |
| | This priority focuses mainly on climate change, to be addressed in particular by measures to increase energy efficiency and research and development in the area of environmental technologies and water protection (to be achieved in particular through measures to improve water quality); and nature and landscape protection (to be implemented in particular through measures to maintain and expand existing nature reserves and areas of protected landscape and to safeguard biodiversity). | |
| **Finland** | | |
| Western Finland | Priority axis: Promotion of business | |
| | Some 12.5 percent of total OP funding has been allocated to renewable energy and energy efficiency investments. This funding is mainly allocated through the priority axis on business promotion. | |
| **Slovakia** | | |
| Environment (OPE) | Air protection and climate change mitigation | EUR 180 million<br>(10 percent of total OP budget) |
| | This includes support for renewable energy (the budget for this measure is EUR 45 million of EUR 180 million).<br>Within each of the priority axes, measures contributing to climate change mitigation and adaptation can be included. | |
| Competi-tiveness and Economic Growth | Priority axis 2 | EUR 170 million<br>(OP total: 772 million) |
| | Measure 2.1: increase energy efficiency in energy generation and energy consumption and introduce advanced technologies in the energy sector.<br><br>Measure 2.2: establish and modernise public lighting in towns and municipalities and provide consultancy in the energy sector. | |
| **Hungary: The Environment and Energy Operational Programme (EEOP)** | | |
| The Environment and Energy Operational Programme (EEOP) | Priority point 4.1. Renewable energy | EUR 253 million (5.15 percent of the EEOP) |
| | Priority points 5.1 and 5.2: Energy efficiency | EUR 154 million (3.14 percent of the EEOP) |
| | In addition, energy projects can receive funding from the budget for the preparation of bigger projects (EEOP 7) and for promoting projects for sustainable use and E-environment (EEOP 6). | |

**Spain: Aragon and Andalucia regional operational programmes**

The Aragon and Andalucia regional OPs are examples of a strategic approach to tackling climate change at the OP level by including it in priorities, by specifying actions, and by making it a horizontal priority.

The objective of the **Aragon regional OP** is to tackle climate change by reducing GHG emissions. The OP highlights the need to integrate climate change concerns into research enterprises and public bodies and emphasises the importance of awareness of the effects of climate change in Aragon in order to establish appropriate adaptation measures for the most vulnerable sectors and territories.

Specific actions:

- audits related to the efficient use of energy resources;
- proposals for the integration of climate change considerations in green public procurement; and
- development of a climate atlas, an inventory of atmosphere-polluting emissions, a catalogue of green public procurement, and awareness-raising campaigns.

The **Andalucia regional OP** includes climate change as a horizontal priority. The number of activities to alleviate or prevent the effects of climate change is monitored as an output indicator (for more information on indicators, see Chapter 4). Andalucia's contribution to the mitigation and prevention of climate change will be achieved through:

- awareness raising and information dissemination among citizens;
- actions directed to those sectors not covered by the Trade Law (diffuse sectors);
- the combining of economic growth with the fulfilment of the Kyoto Protocol;
- management models for climate change control; and
- actions related to climate change under the Lisbon category of expenditure 57 (tourism).

Projects that take climate change concerns into account will be positively assessed. In relation to development of the tourist sector, it is foreseen that climate change considerations should be taken into account.

Support for renewable energies and energy efficiency can also be promoted through research and development and innovation activities, and are not always captured in the categories of expenditure.

## Key points

- Including a climate change–related priority in the OPs increases the possibility for successful implementation of climate change-positive projects.
- Energy efficiency and renewable energy measures related to climate change can be included under several types of priorities.
- The pure figures are not indicative of a country's performance, as they exclude national expenditures. One possibility would be to request that the share of energy efficiency and renewable energy is related to the national goals (such as the 2020 goals).

- The SEA process has not contributed sufficiently to strengthening environmental integration in the OPs at the time of their preparation.

## 2.3 Carbon-intensive investments in new member states and the role of the indicative lists of projects

Investments implemented under the Convergence objective represent the bulk of the most carbon intensive projects supported by the Cohesion Policy. Convergence regions are mainly located in the new member states but also include less-developed regions in the old member states[v].

All 12 new member states are eligible for both the European Regional Development Fund (ERDF) and the Cohesion Fund. A substantial part of Cohesion Fund allocations is dedicated to the transport sector. Of the overall allocations to transport, 55 percent is allocated to road construction (including motorways and national, regional and local roads). Less than one-third of the transport funding (EUR 15 billion) is to be invested in railway infrastructure and only one-tenth (EUR 5.7 billion) in urban public transport. Some countries have also planned to use Community funds to develop other modes of transport such as ports in Cyprus (30 percent of the overall allocation to transport), Latvia (16 percent) and Malta (25 percent).

Among the new member states, Bulgaria, Lithuania, Romania and Slovakia score the lowest on public transport, planning almost no, or only very meagre, EU funding for this sector. The largest relative EU funding support for public transport is planned in Hungary and Estonia. Estonia can be seen as a positive example for the way it sets appropriate objectives and indicators in its OPs: It aims to preserve the 35 percent share of public transport in total passenger-kilometers; to increase the number of passengers using electric rail by 50 percent; and to increase the number of tram and trolleybus passengers by 35 percent by 2013. Unfortunately, such objectives and indicators are rare among CEE countries (CEE Bankwatch/FoEE, 2008).

In many of the new member states, specific OPs for transport and environmental infrastructure were developed that included lists of indicative projects (or so-called major projects, including environmental projects worth more than EUR 25 million and transport projects above EUR 50 million). The lists are intended to demonstrate the readiness of a number of projects to be implemented within the 2007–2013 period and as such were approved by the EC as part of the OPs.

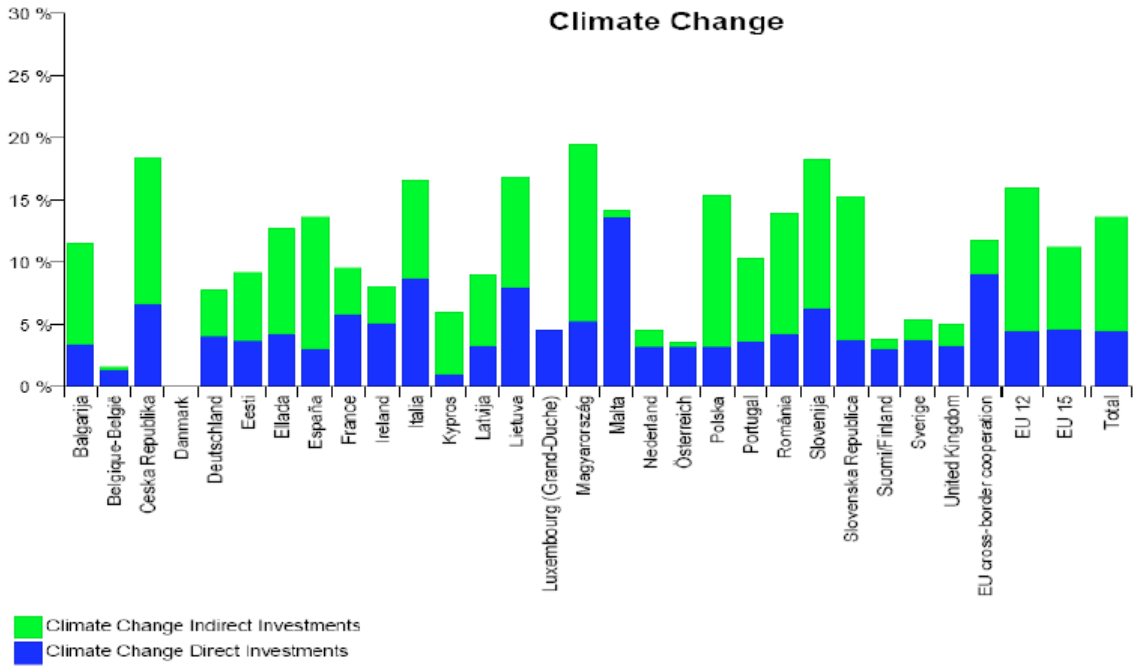
**Key points**

- The indicative lists of projects include carbon-intensive projects, which may be problematic in terms of the "climate neutrality" of the OPs.
- It is questionable how the "climate neutrality" principle was translated into the selection of individual projects, and whether any assessments were carried out on the projected cumulative or individual emissions reduced/induced by these projects.

## 2.4 Possibility for revising the current OPs

According to Article 33 of the General EU Fund Regulation (1083/2006), operational programmes may be re-examined and, if necessary, the remainder of the programme revised at the initiative of the member state or of the Commission in agreement with the member state concerned. The OP may be revisited following significant socio-economic changes or in order to take greater or different account of major changes in Community, national or regional priorities, as well as following implementation difficulties.

In the current programming period, EU funds for energy efficiency and renewable energy across the EU-27 account for EUR 9 billion, representing about 3 percent of total funding. In the new member states, this figure is EUR 4.2 billion (approximately 2.4 percent). Considering also the share of renewable energy investments in direct EU budget spending as part of the Recovery Plan (just EUR 500 million), allocation for energy efficiency and renewable energy from EU funds are now even more vital. An increase in EU fund allocations can be achieved though a revision of the OPs (CEE Bankwatch). A key opportunity is offered by the revision of the OPs in such a way as to include more climate change mitigation and adaptation measures per se, and to stimulate the incorporation of climate change mitigation and adaptation projects in other types of investments. The figure below shows Cohesion Policy 2007–2013 spending, both direct and indirect investments, on climate change.




Source: ENEA plenary meeting, November 26, 2008. John Walsh and Agnes Kelemen, European Commission, DG Regional Policy

The demand for EU funding for energy savings is rising in reaction to the economic crisis. In the light of the economic and climate crises, it is advisable for member states to conduct mid-term evaluations of the implementation of their OPs and to revise them in order to allocate more resources for climate

mitigation into housing. This revision has been made possible following the adoption of changes in the General EU Fund Regulation 1083/2006 in April 2009, allowing up to 4 percent of allocations for renewable and efficient energy in housing. Given the urgency of climate mitigation and adaptation investments, and based on the mid-term evaluations, member states may place an emphasis on developing roadmaps for low-carbon regional development. The evaluations could consider investment needs in terms of projects, training, employment, etc. for climate mitigation and adaptation at regional level. These needs should be addressed to as great an extent as possible through revisions of the current OPs or in the programming of OPs within the 2014–2020 period.

Moreover, in relation to territorial cohesion, the mid-term evaluations should take into account the territorial impacts of climate change (especially in regions that are particularly vulnerable, e.g. coastal regions, mountainous areas) and could evaluate which regions have potential for developing into low-carbon development champions. The current research project implemented by the European Observation Network for Territorial Development and Cohesion (ESPON 2009–2011) acknowledged the fact that, given the expected diverse impacts of climate change on the different regions/territories of Europe, these regions and territories need more innovative development strategies that go beyond the knowledge-based economy.

Climate change has gained significant momentum on the political and policy agendas only since the drafting of the programming documents for the 2007–2013 period, therefore climate change per se has not been incorporated to a sufficient extent in the programming documents. Some member states will use the opportunity for mid-term OP revision to correct this deficiency.

As regional climate plans[vi] are currently being drafted in **France**, the possibility to revise the OPs might be used to include more climate change adaptation considerations. A possible revision in France would also take into consideration the outcomes of the Grenelle de l'Environnement, an important framework for the consultation of environmental policies that led to concrete legislation proposals.

In recent years, revision of OPs in **Austria** has favoured environmental projects. As these projects were sustainable and without major risks, they were regarded as good opportunities for the investment of money that programme managers had problems spending on other instruments or sectors.

## Key points

- The funds allocated to investments in energy efficiency and renewables across the EU-27 are small. In the current programming period, they account for less than 3 percent of total funding, and this share is even lower in new member states.
- An increase in EU fund allocations for energy efficiency and renewables can be achieved though a revision of the OPs.

# Chapter 3 Climate Proofing the Project Cycle/Programme Implementation

This chapter focuses on the integration of climate change aspects into the development and delivery of projects financed by the Cohesion Policy. The chapter is divided according to the stages of the project cycle, starting with methods of project selection, design and preparation, to assessment and scoring. Project monitoring is discussed in Chapter 4.

## 3.1 Methods of project selection

It is important that the integration of environmental and climate change aspects is encouraged from the beginning of project development. This can be achieved by highlighting the environmental requirements of the programme; providing sufficient information to project proponents on how to comply with these requirements; and outlining environmental and climate-related evaluation criteria. There are different approaches to Cohesion Policy programme delivery: commissioning, general announcement and calls for proposals. Whichever method is used, the proper integration of climate-related aspects is of the utmost importance.

**Commissioning**

The commissioning-led approach to programme deliver is applied in South West England. The aim is to deliver an integrated package of investments and projects that are coherent with the aims and objectives of the region's two Structural Fund programmes. The commissioning approach involves a great deal of consultation and work with regional stakeholders and partners in the development of the OPs, yet the dedication of this time early in OP delivery has arguably led to a more coherent package of investments whereby, economically, the "whole is greater than the sum of the parts."

In the commissioning approach used in South West England, regional partners and/or South West RDA commissioning managers can submit project and investment ideas to the Programme Commissioning Delivery Board. The board assesses projects' strategic compliance with the OP, and, in the case of compliance, the commissioning stage starts, comprising the development of a business plan that is subsequently appraised and endorsed. In addition, there are various framework documents (localised strategies, either geographically or by investment type) that define a strategy for project delivery, i.e. detail the problems and issues experienced in an area and the type of investments and projects that would help to overcome them. These framework documents therefore give a clear indication as to what should be approved by the programmes.

A commissioning approach to programme delivery increases the opportunities to embed climate proofing and environmental sustainability into priority objectives and project design, scope and specification, thus allowing greater control over project delivery when progressing through the contracting and procurement processes.

**General announcement**

The general announcement is used to collect applications on a "rolling basis," without call or deadlines. Each project proposal is evaluated based on its own merits against the selection criteria. Projects are then funded on a first come, first served basis, as long as they score high enough to be approved.

**Calls for proposals**

The calls set out the basic characteristics of the projects to be funded. Calls for proposals are used to invite project proposals for a specific bid, and available funding is awarded to the top-ranked applications. The way in which the calls for proposals are formulated can steer the direction of project development and can therefore have a positive influence on project formulation. The authors assume that properly formulated calls for proposals, in which climate change aspects are accommodated and clearly spelled out, may lead to better-quality projects from a climate change point of view.

At this stage, the incorporation of climate change considerations can be enhanced by ensuring that the standard application form includes questions on compliance with relevant climate change targets, as well as a section allowing applicants to describe potential carbon impacts. The need to comply with minimum climate requirements can improve project objectives and outputs from a climate perspective.

The preparation of climate-related projects can be stimulated by launching thematic calls for proposals. Good examples of such calls can be found in Finland.

**Finland**

In some regions in Finland, thematic calls for proposals have been used to attract projects to specific areas of growth and development. For instance, environmental and climate change themes have been launched in the calls in order to give increased emphasis to the role of environment and climate change in spending programmes. A case study on Finland is included in Annex 2.

Climate proofing at the initial project stage is a particular challenge in the case of transport infrastructure projects in the new member states. According to the Bankwatch/Friends of the Earth Europe report *Do EU Funds Contribute to Climate Change Abatement in the New Member States?*, 55 percent of EU funds in CEE-10 countries for the transport sector will be allocated to road infrastructure projects (motorways, highways, and regional and local roads). Support for carbon-intensive investment raises the question of assessing the effects of these projects on emission increases and measures to mitigate adverse impacts.

**Key points**

- In addition to calls for proposals and programme announcements, another approach is the commissioning process applied in the UK, which enables climate proofing to be embedded to a greater extent in project scope and design.
- There is insufficient knowledge among project applicants of the opportunities offered by hat climate change–related projects. There is also limited experience of the possible types of activities and outputs of such projects. Knowledge can be increased and capacities strengthened by organising thematic calls for proposals and by providing technical assistance to project applicants.

## 3.2 Project preparation and design

The design and preparation stage is critical for environmental integration, as at this stage project goals and outputs are defined. The two main ways in which OPs can improve the integration of climate change considerations into project development and preparation are through project application documents, and through assistance and guidance to project applicants.

This section presents some good examples of application documents, followed by guidance documents for project applicants and managing authorities and technical assistance approaches. As there is insufficient knowledge of how to design projects that are positive from a climate perspective, effective communication practices and awareness-raising activities are also outlined. The tools presented can be applied to both Structural Fund projects and other investment programmes.

### 3.2.1 Application documents

The application documents provide an opportunity for the project applicant to demonstrate how environmental considerations are integrated into the scope of the project. In order to stimulate climate change integration specifically, application forms should contain relevant questions that enable applicants to fully consider and convey these aspects of a project. Generally, application forms can contain the following:

- a question on compliance with relevant environmental legislation, and particularly its climate change–related aspects;
- a separate section for applicants to describe the potential climate change impacts of the project;
- an opportunity to state the climate change targets to be achieved by the project; and
- information about any special incentives to proactively encourage projects to consider environmental and climate change–related components, such as higher grants, etc.

In this respect, a good practice can be highlighted in the implementation of the Berlin OP (Germany). A system of environmental indicators was introduced in the application process, referring to i) investment projects in industries with higher than average energy consumption and carbon dioxide emissions; and ii) service-oriented businesses. Regarding investment projects, applicants are required to specify the energy consumption and carbon dioxide output associated with project implementation. In the event of negative impacts on the environment, the project can only be approved subject to modification of the proposal or by introduction of an environmental management system. Regarding projects in the service

sector, applicants need to demonstrate that the businesses have an environmental management system (EMS) in place or apply climate-friendly business practices (Kurzdarstellung des Umweltkennziffernsystems fur die Forderperiode 2007–2013 [2015]).

In order to streamline the effectiveness of EU and national funding in some countries (France, Austria), a common application process is applied for both ERDF and state funds. In **France**, following the "common governance" concept, there is a common application form for ERDF and state funding (Nord-Pas de Calais). Section II of the application form is "Analysis of how the environment is taken into consideration." Part 1 analyses the legal environmental procedures with which the project proponent must comply during project implementation. Part 2 is "Potential negative environmental impacts, correction measures and project monitoring indicators." This obliges the proponent to consider such correction measures, and the first vector of action is "combating climate change" (see Annex 3). The proposed measures are improved and strengthened with the support of the evaluators during the preparation of the project. The project beneficiary has to fill in a set of obligatory indicators, but other potential indicators for monitoring the environmental performance of the project must be offered as well. At the end of the project, the beneficiary makes a final statement of the performance of the project and compares this statement with initial assessments.

**Environmental sustainability reporting form (UK)**

This Excel document must be filled in by applicants and focuses on priority- and project-relevant output, as well as the outcome of environmental indicators. Some of these refer to compliance with the environmental principles of reducing carbon intensity and moving towards a low-carbon economy. The form includes questions regarding the environmental sustainability of infrastructure projects, revenue/business support–based projects and revenue-based/business support–focused investments. The form can be found in Annex 4.

### 3.2.2 Guidance facilitating the project design

The advice and guidance given to project applicants will depend on the specifics of the project, their capacity and knowledge gaps. A number of guidance documents have been developed by the managing authorities with the aim of supporting project design for the better integration of environmental sustainability issues. Since the reflection of climate change issues in OPs is an emerging area, guidance for their integration is a component of the overall guidance documents on environmental integration. However, with the increasing priority of climate change, the existing toolkits can serve as a basis for developing toolkits that specifically focus on climate change. Some of the extant tools are listed below.

**Generic environmental sustainability guidance (UK)**

The purpose of this guidance is to provide an overview of the environmental responsibilities and commitments that delivery partners are to consider in development of projects and commissioning activities as part of the EU programmes operating in South West England between 2007 and 2013 (ERDF, ESF including both Convergence and Competitiveness, and the European Rural Development Programme for England). The guidance supports the commissioning process and is more generic in nature, coupled with tailored on-site support (where deemed relevant), to demonstrably embed environmental sustainability in such a way that potential benefits and opportunities are maximised. The guidance elucidates the six key environmental strands that projects and commissioning activities should consider and embed within project design and development. More information is provided in Annex 5.

All guidance seeks to differentiate between the strategic, implementation and operational environmental impacts and opportunities of projects and investments; and helps to raise the environmental awareness of investment partners at the project inception commissioning stage.

For some OPs in **Hungary** (e.g. Economic Development), guidelines for the integration of sustainable development were prepared in 2008, with the intention of helping project proponents to include sustainable development considerations during the project cycle. The guidelines precisely describe the 60 eligible actions, four of which directly concern energy efficiency, two renewable energy, and one the reduction of carbon dioxide.

### 3.2.2 Technical assistance for strengthening environmental and climate change aspects of projects

The authors have collected examples of institutional structures or other mechanisms that have been established to strengthen the environmental/climate change components of projects to be funded.

The **Swedish Network of Municipalities on Climate Change** was launched in 2003 and consists of municipalities and county councils that share a commitment to reduce greenhouse gases at the local level. One of the services provided by the network is the **climate coach**, a phone service via which municipalities can obtain targeted assistance in initiating climate work at the municipality level and in developing climate strategies. The service is free of charge for municipalities and is financed by the Swedish Environmental Protection Agency. Services provided include:

- answers to general and specific questions on energy and climate statistics and climate strategies;
- access to contacts of other stakeholders and experts, as well as media;
- advice on developing a climate change strategy;
- advice about climate change measures; and
- feedback on drafts and ideas for strategies and plans (www.klimatkommunerna.se).

A year and a half after the launch of the project, half of the municipalities that received help from a climate coach now have a climate strategy either fully adopted or in preparation. In the rest of the municipalities, the process of developing a climate strategy has begun. The climate coach has shown that, by combining various skills from several municipal administrations, all the necessary competence is often already available (*Journal Nordregio*, 2008).

In **Austria,** through a similar mechanism to the Swedish climate coach, it is possible to obtain state-subsidised advice from regional and national agencies. Consultancy for the identification of climate measures (such as the need for energy efficiency measures) can also be financed by Structural Fund programmes (e.g. the eco-business plan for Vienna–Gyor financed by INTERREG). Investment projects that result from this consultancy, while not related to Structural Funds, can obtain financial support from Structural Funds. Austria has also included a link between investments and consultancy/coaching in national funding: For example, applicants can receive 5 percent more funds if an energy consultant is engaged. This approach can be extended to Structural Funds.

In **South West England,** two cross-programme advisory groups have been established for both Competitiveness and Convergence programmes, one related to environmental sustainability and the other to equalities. The role of secretariat for both groups is provided by the South West RDA's environmental sustainability manager and equalities advisor. An environmental sustainability manager assists investments and partners to deliver the strategic environmental sustainability objectives of the OPs. The Environmental Sustainability Advisory Group is chaired by the Environment Agency's regional director and includes regional key statutory, NGO and local authority environmental partners. The purpose of this group is to set requirements for investments and projects in terms of reducing their environmental intensity; to analyse and adopt best practices from around the region; and to ensure adequate and auditable project environmental outputs and outcomes.

In the **Merseyside region of the UK**, a cross-cutting theme manager has been designated to ensure the environmental sustainability of all submitted projects. The cross-cutting manager's duty is to develop guidelines on the cross-cutting theme, give intensive trainings on environmental impact awareness for a broad variety of stakeholders, and develop procedures for preparing, selecting and monitoring projects (REC report "Environmental projects financed by EU funds", 2006).

There is a unique and very successful structure in **France** (Nord-Pas de Calais), the Environmental Support Mission (MAE).[vii] It comprises one representative of the state and one from the region, with the goal to assist in integrating environmental considerations into Structural Fund co-funded projects. More information is available in Annex 6.

In the new member states, there is a greater need for assistance for project proponents regarding the integration of environmental considerations due to their limited experience and knowledge gaps. The assistance provided by the managing authorities is mostly connected to the preparation of proposals and compliance with administrative procedures. Non-governmental organisations can contribute to the capacity building of applicants by participating in trainings and sharing valuable expertise of how to make project proposals more climate friendly.

### 3.2.4 Communication, coordination and networking

The authors believe that improved communication, coordination and networking have the potential to improve the climate change performance of individual projects.

Communication and coordination exist on several levels:

- between managing authorities and project proponents, for the sake of better communicating the subject matter of the calls or the expected measures;
- between technical support bodies and managing authorities, for the sake of defending and insisting on stronger climate change measures within the projects; and
- between technical support bodies and project proponents, for the sake of better incorporating concrete climate-specific measures into the projects.

The whole system may also benefit from better networking between managing authorities, with or without facilitation from central authorities.

Below are some examples of awareness-raising models and good communication practices between managing authorities and project proponents, examples of techniques for good collaboration in view of enhancing climate change mitigation and adaptation aspects in Cohesion Policy–funded projects.

In **Austria**, the Conference on Spatial Planning (ÖROK) plays an important role as the coordinating body between the managing authorities and the national and European levels. The Austrian system for managing the Cohesion Policy in combination with a sound national climate policy and legislation results in a relatively high proportion of climate measures in regional OPs. Further information is available in Annex 7.

In **France**, for non-environmental OPs, awareness raising on better incorporating environment within their proposals is provided for project proponents. An example of this is the Environmental Support Mission (MAE); further information is available in Annex 6.

Best regional practices in term of integrating environmental considerations into Cohesion Policy programmes in France have been collected by DIACT[viii]. They vary significantly, since regions are free to choose their approach on the basis of their characteristics, priorities, the SEA of the OPs etc. The collection aims to strengthen the regions' awareness of incorporating environmental considerations into EDRF and CPER funding as a follow up to the SEAs conducted at the stage of drafting the OPs. The collection also aims to improve performance of all stakeholders in the regions as well as to enable exchange of good practices between regions. Further information is available in Annex 8.

Established in 1997, the **Spanish Environmental Authorities Network** is a forum for cooperation and coordination between authorities responsible for the environment and for the programming and management of Structural Funds and the Cohesion Fund at different levels. The network is managed by the Ministry of Environment. Its objectives are to ensure the integration of the environment in activities co-financed by Structural Funds and to monitor the implementation of, and compliance with, European environmental legislation. The network also supports working groups on incorporating environmental aspects in different economic sectors and has produced a range of useful guidelines and methodologies, for example on strategic environmental assessment. It has promoted environmental awareness by developing the "Environmental Awareness Module" for training courses and good environmental practice manuals for various professions (GRDP, 2006).

In 1998, **Italy** established a formal **Network of Environmental and Managing Authorities** at central and regional levels. In the previous programming period, the network promoted the integration of environment in all development programmes through technical support, training and information

exchange. It contributed to strengthening relationships between authorities in charge of different sectors and to increasing knowledge of environmental topics. Above all, it facilitated the integration of environmental and sustainable policies in Structural Funds programmes. The network was supported by a task force of experts with different skills who provided technical help to national and regional environmental authorities working on regional development programmes. The network has also produced technical and methodological guidelines, studies and analyses on specific environmental issues, and monitors environmental integration. It is foreseen that the activities of the network will continue in the 2007–2013 programming period.

**Key points**

- In some countries, positive steps can be observed in strengthening the environmental focus of application forms, including from the climate perspective, though the inclusion of questions related to emissions reductions and energy consumption.
- Existing guidance documents on how to reflect environmental sustainability issues in project proposals are an instrument for improving the quality of proposals also from a climate perspective and for enhancing applicants' knowledge.
- Technical assistance to project proponents plays an important role in strengthening their knowledge of integrating climate change considerations into project proposals. Designating personnel to provide support to applicants (e.g. environmental sustainability managers or climate coaches) is a positive example of targeted support.
- Consultation with environmental authorities at the application phase is a good practice that is to be strongly encouraged. In some countries, there is accumulated experience with environmental networks that maintain active dialogue with project applicants and assist with the integration of environmental aspects into project proposals.

## 3.3 Project selection, assessment and scoring

In the case of individual projects, the selection and evaluation process is based on the principle of competition among proposed projects, or on using a "threshold" score. In some cases — as in the UK — concrete projects are commissioned, and these projects get either EU funding or no funding at all. Other countries (such as Austria) elaborated completely different selection procedures in which EU projects are chosen from a sample of projects pre-selected for national financing.

This section presents some examples of the selection process in the case of calls for proposals. The selection procedure in the commissioning process in the UK is also outlined.

**Commissioning process**

The commissioning process in **South West England** requires projects with low carbon/environment credentials within all stages of project evaluation or investment life cycle: commissioning, business plan, appraisal, endorsement and monitoring. This approach allows for greater control over the investment on the part of regional partners, creating a more coherent and integrated package of investments, and also over project procurement management and delivery processes. Both economic and environmental impacts can be greater than the sum of their individual parts, as investments and projects "work together".

**Calls for proposals**

**Assessment criteria** play an important role in ensuring that projects adequately address environmental and climate change considerations. The exact formulation of the criteria will depend on the specifics of the project, but in general they should refer to the potential impacts of the project on energy consumption and carbon emissions. Sound environmental management practices can also be introduced as a criterion.

In the UK, projects need to demonstrate that environmental issues have been proactively considered. Six environmental strands must be addressed within each project:

- The management of environmental assets, taking into account climate change and increased extreme weather events.
- The incorporation of environmental management skills within businesses through training and awareness raising.
- The encouragement within the business sector of research and development and know-how uptake.
- Increased resource efficiency for better competitiveness, including reduced carbon emissions due to improved energy efficiency and diversification; the incorporation of renewable energy sources and BREEAM[ix] building design; and the calculation of the carbon footprint of a project or activity.
- The retention of skills, business and investment in the region, creating relevant partnerships and networks.
- The promotion of environmental branding, niche marketing and carbon literacy through awareness raising, environmental training and education, and community involvement.

In the programme manual and special application guides in **Slovakia**, applicants are asked to specify if and how they intend to support sustainable development through their project. Indicators related to energy efficiency and renewable energy should be obligatorily presented in applications for projects that implement measures in connection with energy efficiency and renewable energy. Applicants for other types of projects can state within the application form whether the project contributes to the mitigation of climate change impacts or whether it includes climate change adaptation measures. This means that projects that do not contain any energy efficiency or renewable energy measures are not obliged to take into consideration any climate change–related measures or fill in indicators related to energy efficiency and renewable energy.

In **Hungary**, for the current programming period, project proponents for some OPs can state their contribution to sustainable development in the application form and, depending on the number of actions undertaken, can receive between one and five additional points.

For all types of projects in Slovakia, the technical feasibility part of the selection has a weighting factor of between 30 and 50 percent, thus it plays an important role during the selection phase of energy efficiency and renewable energy projects. For other projects, sustainable development criteria are evaluated under this technical feasibility part. As these criteria are evaluated as a single group, no special

emphasis is given to the evaluation of climate change indicators, and applicants could receive only one point out of 100 for the whole group of sustainable development indicators.

In the case of infrastructure project development in the **Austrian region of Burgenland**, it is mandatory under national and regional rules to undertake energy-saving measures. In order to obtain national and regional funds, every project has to prove that it is energy efficient. It is therefore national standards, regulations and practices (including EIA and SEA) that drive projects within every OP to be climate beneficial.

Regional measures in **France** for ensuring that environment is taken into consideration (collected by DIACT)[x] are divided into criteria (**eco-conditionality**) and recommendations (**eco-compatibility**). In the case of eco-conditionality, if the project does not comply with the criteria it is not selected. Eco-compatibility is a little more lenient and projects that comply with the priority criteria have an advantage. Further details on eco-conditionality and eco-compatibility, as well as examples of concrete measures, can be found in Annex 9.

The example of France (Nord–Pas de Calais) includes a matrix for the evaluation of projects under the thematic call "Territorial Excellence". The matrix is included in Annex 20. Further examples include **Vlaanderen, Belgium**, where the target of carbon neutrality is a starting point for project appraisal. In **Sachsen-Anhalt, Germany**, a demographic check is applied to the selection criteria for infrastructure projects in order to analyse whether the infrastructure is needed, taking into account the expected population changes in the given area (EPRC, 2008).

### 3.3.1 Environmental assessments of project proposals

Different institutional mechanisms can be applied in the process of project appraisal, for example evaluation panels, specialised approval committees, etc. Whichever approach is used, it is important that the scores assigned to environmental and climate change aspects are sufficient to ensure that the project does not have a harmful effect on the climate.

The involvement of civil society in the assessment committees is a possible way of improving the assessment process, raising awareness and ensuring transparency. The participation of NGOs or other representatives of civil society can also contribute to strengthening the capacity of managing authorities, especially in new member states where there is still a lack of experience and knowledge of incorporating climate change considerations. Some OPs provide financing opportunities for funding NGO involvement.

Between 2004 and 2006, experts from an environmental NGO in **Hungary**, the National Society of Conservationists, cooperated with the managing authority for Structural Funds to ensure environmental sustainability in the quality control of proposals during project selection. As a result, regional development agencies changed their pre-selection and scoring criteria and the managing authority adopted new guidance on environmental aspects for applicants. This also influenced other managing authorities to reconsider environmental criteria for their 2007–2013 programmes (GRDP, 2006). In the current programming period, the National Society of Conservationists is planning to evaluate the impacts of selected projects on climate change. (GRDP, 2006).

One of the biggest challenges in **Finland** is to ensure the expertise and organisational capacity of the implementing authorities and to increase their commitment to carrying out an environmental assessment of project proposals[xi]. In response, six regions in Finland, comprising one-third of the country's regions, have formed **environmental assessment panels** comprising the implementing authorities of the region that oversee and participate in environmental assessment of project proposals. In southwest Finland, this practice is further developed and a special EIA manager has been established. The Regional Management Committee has authorised the regional environment centre to assemble an EIA panel comprising EIA managers nominated to each implementing authority. The environmental assessment of Structural Fund projects should not be confused with the EIA proper, as regulated by the EIA Act 468/1994.

The checklist for the assessment of project proposals has been standardised in the 2007–2013 period and can be found in Annex 10. The role of the panel is to participate in, and to develop, the environmental assessment proposals at authority level through the dissemination of information and capacity-building activities. The EIA panel comprises representatives of the regional council, the Employment and Economic Development Centre, the regional environment centre, the state provincial office, the Finnish Maritime Administration, and the regional department of the Finnish road administration (SYKE, 2008 and Häme Regional Environment Centre). The appointment of EIA managers enforces the task of developing the assessment procedure in the organisation and ensures quality.

The tasks of the EIA panel are to:

- monitor and evaluate actual environmental impact of projects;
- develop a common environmental assessment procedure of projects, for example through giving advice and guidance to managing authorities;
- assess the impacts of individual projects, if needed; and
- prepare an annual report to the regional management committee on the functioning of the panel and managers.

### 3.3.2 Generic checklists and guides for project assessment

Assessment of the integration of environmental sustainability and of project impacts on emissions can be improved with the help of comprehensive checklists. These also serve as an important tool for raising awareness of environmental considerations among project applicants at the project preparation phase. Climate change–related questions are usually integrated in the checklist, focusing on a number of environmental topics and priorities. Examples of valuable checklists are presented below.

**Environmental selection criteria of 2007–2013 ERDF programmes (Finland)**

A report from the Finnish Environmental Institute (SYKE), "Environmental integration in the implementation of Finnish Structural Fund programmes", states that compliance with sustainable development is an eligibility criterion in all OPs, but that the criteria fail to fully incorporate the environment. However, the report concludes that southern Finland is an exception and can be regarded as a best practice example regarding compliance with the sustainable development criterion. In southern

Finland, environmental impacts are one of six main criteria to be applied to all priority axes. The environmental impacts criteria are broken down into three sub-criteria:

- Promoting environmental know-how and environmental management.
- Impacts on consumption, production, energy production/use, emissions, traffic, and combating climate change.
- Welfare factors in relation to society and the environment.

Preference is given to projects that comply with the programme's cross-cutting principles, and sustainable development is one of these four (SYKE, 2008). The Häme Regional Environment Centre, in cooperation with the Uusimaa, Southeast and Southwest Finland Regional Environment Centres, has developed an additional sheet supporting the selection criteria and a definition of sustainable development to guide the implementing authorities through the selection (Annex 11) (Häme Regional Environment Centre).

**Guide to ensuring the integration of the horizontal priority "environment" (Sweden)**

A guide supporting project owners and desk officers in selecting and enhancing environmental aspects of Structural Fund projects has been developed by the Swedish Environmental Protection Agency on behalf of the national managing authority (the Swedish Agency for Economic and Regional Growth). In particular, it supports the owners of projects related to environmental technology, energy production, energy efficiency and thus climate change mitigation. However, no explicit reference is made to climate change adaptation. The guide has been widely accepted and is used as a self-assessment tool by the majority of project proponents. It asks concrete questions that stimulate clear answers and enable evaluations. The guide represents an awareness-raising effort aimed at stimulating greater environmental awareness among project proponents, managing authorities and the selection committee. As it is not a detailed document, the guidelines function more as an inspiration. At present, there is no plan to make the criteria stricter in terms of climate change, for example. At this stage, the priority is to increase integration of the OPs themselves and to establish closer cooperation with business (Swedish Agency for Economic and Regional Growth). Further information about the guide is available in Annex 12.

Self-assessments are also used in the electronic application form in Denmark, where project owners are required to assess the environmental impact of the proposed activities with respect to carbon emissions and renewable energy.

**UK: Sustainable development toolkit for ESF projects, applicable in ERDF-funded programmes**

In a web-based questionnaire, applicants must answer 14 questions about the sustainability of the project. As a result, the applicant receives a score and recommendations for improvement, as well as links to and contacts of organisations that can help. This is a self-assessment tool for use by Structural Fund managers. The toolkit is available in Annex 13.

**Key points**

- Innovative institutional mechanisms (e.g. environmental panels) are examples of bringing expertise and knowledge to the assessment of the environmental aspects of projects. They contribute to strengthening the integration of environmental issues and to building the capacity of project applicants.
- Checklists and guides for the assessment of environmental sustainability issues play an important role in the evaluation of project impacts on the environment. Climate change considerations are integrated in these checklists.

# Chapter 4 Project and Programme Monitoring and Evaluation

The monitoring of individual projects and programmes in terms of their carbon impact is an issue of the utmost importance and represents a challenge to all member states and to the European Commission. In a period in which EC climate change policies are becoming stronger, it is essential to align all other policies — including big expenditure policies such as the Cohesion Policy — with climate change policies. This has been stated in the White Paper on Adapting to Climate Change (EC, 2009a). There will therefore be increasing pressure on the EC and the countries to fund projects that do not contribute to GHG emissions on an individual level, or at least on an aggregated programme and/or regional level.

Several countries have project and programme monitoring systems in place, but they are either at a very early stage of implementation or have deficiencies and thus provide only limited analytical frameworks. This is therefore an area that needs significant improvement in the next programming period.

This is all the more true now that the reduction of GHG emissions (carbon dioxide and equivalents, in kg) has become a regional, as well as a national and international issue, encompassing both the Lisbon and Gothenburg agendas. It is also one of the core indicators: 31.5 percent of Competitiveness Programmes (35 OPs) and 15.7 percent of Convergence Programmes (17 OPs) provide indicators for the reduction of GHG emissions (Nordregio, 2009).

The **strategic environmental assessment (SEA)** process can strengthen the integration of climate change–related priorities and measures in OPs. In **Scotland**, SEA recommendations have led to an extended scope of activities eligible to receive support for environmental audits and carbon footprints, and for resource and energy efficiency initiatives for enterprises in the two OPs. The results of an SEA can also feed into the later stages of the programme cycle — for example, in **Wales**, the SEA conclusions, and the risk assessment specifically, are used as a reference point in the approval process. In **Lombardia**, **Italy**, the SEA has been designed as an ongoing process, following and informing other phases in the programme. Such approaches to the use of SEA results are new in the current programming period: previously, the environmental effects of programmes were confined to specific occasions (EPRC, 2008). In some cases, the SEA has also been useful in setting indicators.

**Climate Change Indicators**

Nearly half of the member states (13 of 27, including Austria, France, Germany, Italy, Portugal, the UK, Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovakia and Slovenia) referred to GHG emissions in their national indicators. However, countries express the reduction of GHG emissions in different units, so it is not possible to aggregate the amount of carbon dioxide that will be reduced by the programmes. Some programmes in France and Hungary, for instance, measure the generated or reduced GHG emissions per year; Umbria, Italy, measures these reductions per capita; while Slovenia measures the reductions in percentage terms (Nordregio, 2009).

| Table 3: Examples of GHG emission indicators | | |
|---|---|---|
| **OP** | **Type** | **Indicator** |
| UK, OP South East England | *impact indicator* | To contribute to the regional target of stabilising the region's ecological footprint, from current annual growth rate of 1.1 percent per capita; 85,000 tonnes reduction in the region's carbon dioxide emissions. |
| Greece, OP for Competitiveness and Entrepreneurship | *result indicator* | 566,594 citizens will be supplied with natural gas (baseline: 266,594) for a reduction of 4,100 KT of carbon dioxide per year (baseline: 2,000 KT). |
| Spain, Andalusia OP | *output indicator* | The OP specifies that five actions are to help in achieving the reduction of GHG emissions to 38 million tons by 2013 (baseline: 40.844 million tons). |

A SYKE report concludes that a conventional indicator approach to monitoring may not be sufficient for environmental monitoring in the context of Structural Funds and SEA monitoring. Monitoring based only on baseline indicators does not meet the minimum requirements of the SEA Directive (2001/42/EC), as baseline indicators are particularly sensitive to the impacts of OPs. Due to the small average size and/or nature of the projects, establishing a project-specific monitoring system is not usually justifiable, and thus an approach based on financial indicators is proposed. Financial indicators provide information on the pressure factors caused. By looking at what kinds of projects have been funded, indirect information on impacts can be obtained. Such monitoring will not yield information on actual environmental impacts but will capture financial inputs that will provide indicative information on the programme's impact (SYKE, 2008).

In the case of Finland and Sweden, it is very difficult to apply impact indicators to monitoring because large-scale projects with directly measurable impacts are not usually funded, while project-specific monitoring systems for small projects are not usually justifiable.

## 4.1 Project monitoring methods

Examples of methods for monitoring individual projects in an ongoing manner or ex-post are presented below.

### 4.1.1 Project monitoring

**Checklist for SEA monitoring, Austria**

The project proponent of each project in Austria that receives funding from Structural Funds has to answer questions on the environmental performance of the project, such as the application of environmental certifications (EMAS, ISO 14001). Projects are divided into investment and non-investment projects. Non-investment projects (soft measures) are divided into projects below and above EUR 350,000. The next criterion is the EU intervention code.

The system is designed in such a way that every region (via implementation agencies selected by regional managing authorities) should collect SEA monitoring data from their regional OPs and the projects belonging to them, and should send them to a central database system. All regions use the same system, with small regional modifications where needed. There is a common format for sending the data to the central database, determined by an SEA monitoring guiding document/checklist developed in 2007, which provides the methodology and questionnaire for SEA/EIA monitoring (SUP-Umweltmonitoring für die Programme „Konvergenz" und „Regionale Wettbewerbsfähigkeit & Beschäftigung" 2007–2013).

The checklist includes a section on air and climate change impacts and a section on energy efficiency issues, and it contains indicators and questions, for example on the use of fossil fuels; emissions of air pollutants; improving efficiency in production; services and mobility systems; direct or indirect project impacts on energy and/or resource efficiency; and direct or indirect impacts on mobility systems.

In theory, the Austrian Cohesion Policy SEA monitoring system provides a good basis for collecting and comparing data related to the climate change impacts of various OPs and different projects within them. However, the actual analysis of monitoring data in Austria will start in 2010 and the first monitoring reports will be available by the end of 2010. The actual virtues and drawbacks of the system will only become clear at this point.

In the case of the Austrian SEA monitoring mechanism described above, it is worth mentioning that the mechanism is integrated into the overall Cohesion Policy monitoring system. In addition, SEA monitoring data can be used for Cohesion Policy monitoring, but also separately (only in the environmental context) at both national and regional level.

The ENEA WG Cohesion Policy and SEA draft report from May 2008 also points to the Austrian model for the successful integration of OP and SEA monitoring, setting national standards and allowing evaluations and comparisons between different OPs.

The checklist is available in Annex 14**.**

**France**

The PRESAGE software was developed for the 2000–2006 period for the monitoring of Structural Funds and CPER, and it is the responsibility of DIACT [xii] (http://presage-info.org/no_cache/accueil.html). An updated version was made for the 2007–2013 period, through wide consultation with stakeholders. The European Commission was closely involved in the development of the tool. The network connects all actors — managing authorities, certification authorities, evaluation services, regions and municipalities. The online, real-time system allows the monitoring and management of all projects in France, from submission to archiving. Funding for the system is jointly provided by the EC, DIACT and other ministries.

Such a system for the electronic monitoring of each submitted project must be developed in each country that is a beneficiary of Structural Funds. In Slovakia, the ITMS system contains all project data and is accessible by the EC. Data related to the carbon emissions of a project are inserted into this system, and it is potentially easy to obtain aggregated data for the carbon emissions of all projects.

**UK**

The OPs and their delivery frameworks (DFs) require all projects to provide a certain type and number of mandatory outputs. Project monitoring processes should be aligned with the mandatory targets set by the OP and DF; all possible negative impacts should be quantified and mitigated; and all additional environmental inputs and outcomes should be delivered as far as possible according to 10 identified sustainability principles ("living planet" principles).

It is envisaged that carbon footprinting and carbon intensity will also be considered during project monitoring processes through application of carbon indicators and demonstration of carbon savings. Project proponents must demonstrate proactive consideration of environmental issues, and particularly environmental gains produced, by analysing and identifying potential negative and positive environmental impacts and incorporating appropriate environmental policy. Further guidance will be developed regarding carbon monitoring requirements. Delivery partners will be required to:

- define an appropriate methodology;
- specify the boundary and scope of coverage (aligning to standards and best practice where possible);
- collect emissions data, calculate footprints and demonstrate savings over baselines; and
- where relevant, externally verify results.

The ongoing management of cross-cutting theme delivery and monitoring will be achieved through consultation with the Cross-Cutting Theme Team by project engagement and risk assessment visits (PEVs), and ongoing project progress and verification visits (PAVs). Through cross-cutting theme engagement at these stages, it will be possible to monitor the delivery of cross-cutting theme requirements whilst also capturing foreseen and unforeseen project impacts.

Selected international, national and regional practices for monitoring environmental sustainability (including the monitoring approach adopted in previous EU programmes) are provided in Annex 15.

**Sweden**

In Sweden, the horizontal criteria (one of them environmental sustainability) should be taken into account in the monitoring and evaluation process. It is recognised that not every project can have a positive impact on the environment. The impact of projects therefore needs to be balanced against the overall objectives of the programme. For this purpose, the following environmental criteria have been developed for the horizontal theme:

- is directly aimed at improving the environment;
- has a predominantly positive impact on the environment; and
- has a predominantly negative impact on the environment.

The indicator system for the 2007–2013 period has been developed in terms of increasing the number of indicators, but more importantly by eliminating the option of neutral environmental impacts (i.e. the project needs to be classified as having either a positive or a negative impact) (EPRC, 2008).

### 4.1.2 Carbon neutrality and programme monitoring

**Carbon neutrality, France**

For the 2007–2013 programming period, France has adopted the concept of **carbon neutrality**. The NSRF for 2007–2013 states that "all state-region project contracts and operational programmes should aim to be carbon neutral. A monitoring system will be put in place to ensure this."

This means that the regional state representatives responsible for negotiating each contract must factor in carbon neutrality, that is, the overall investments written into the contracts should not lead to the emission of any additional GHGs. This objective should be adhered to throughout the life of the contract and corrective measures should be enforced if necessary. The issue of territorial scales in this context is of the utmost importance, as carbon neutrality is aggregated on a national level but has to be organised on a regional level in order to exert greater pressure on the regional governments to minimise carbon impacts.

The carbon neutrality principle takes into account the constraints linked to the contractual requirements of state-region contracts (CPERs) as follows:

- Project applicants, project developers and contractors must **justify and minimise the impact of any project that generates carbon emissions,** for example by imposing a high energy efficiency standard to new buildings planned within the project contract.
- Carbon emissions must be compensated through the development of low-carbon projects, such as the development of renewable energy or public transport schemes.
- Carbon neutrality means setting objectives that are easily achievable by all in the short term, whilst adhering to the longer-term process of Factor 4 (that is, achieving a fourfold reduction in GHG emissions in France by 2050).

The challenge of measuring carbon neutrality was approached through the development of NECATER, a system for monitoring the carbon performance of regional programmes based on an aggregation of project-specific data. The tool is used both for projects funded from Structural and Cohesion Funds and for projects funded through the budget. It measures the GHG emissions of OPs and is used for related decision making. Further information on NECATER is provided in Annex 16.

**Climate Change Escalator of Ambition, UK**

In 2007, the South West RDA launched a special initiative aimed at significantly reducing the carbon impact of investments based on year-to-year improvements in order to achieve zero impact in five years. Operating principles are currently under development to achieve a net zero carbon annual investment portfolio by 2013. The Energy White Paper from 2007 specifically committed the RDA to set carbon reduction targets in the corporate plan and annually to estimate and publish carbon-saving estimates of policies and programmes (DECC, 2007).

A special carbon bank balance is created to manage investments in projects with a negative carbon impact, leading the carbon balance into deficit; and investments in projects with a positive carbon

impact, contributing to overall impacts and taking carbon balance into credit. It is intended that a net zero carbon annual investment portfolio will be achieved by 2013. Further information about the steps in the programme is provided in Annex 17.

**Finland**

The environmental/climate change monitoring of programmes can draw on data from the environmental assessment of project proposals. Climate change impacts can thus be monitored by looking at the share of the total assistance that has been given to projects with positive or negative climate impacts. The necessary information can be obtained from EURA 2007, the IT system for collecting project data. The benefit of this approach is that it takes advantage of an established procedure, as in the environmental assessment of project proposals in Finland (SYKE, 2008).

## 4.2 Evaluation

Evaluation is another stage of the programme cycle at which environmental integration and climate resilience can effectively be ensured. Evaluations are an integral part of a sustainability management system, ensuring support for, and the legitimisation of, decision making while being a vehicle for institutional learning (Schubert and Stormer, 2007). They are particularly important planning tools as they can take place prior to, during or after a programme is carried out, with the aim of providing knowledge feedback and ultimately of improving the quality of a development programme. All EU spending programmes should therefore be subject to the evaluation of their coherence with EU environmental/climate policies and strategies, their efficiency and effectiveness, but also environmental/climate trends, impacts, challenges and opportunities.

According to Article 47 of General Regulation 1083/2006, EU funding programmes are subject to ex ante, ongoing and ex post evaluation. An EEA study found that many evaluations of the Cohesion Policy were undertaken focusing on the level of spending or the distribution of investments between sectors within a country, but no evaluation was made of the actual effectiveness of measures and their impacts. Overall, the study points out that evaluations are not properly embedded into the spending cycle. For example, ex post evaluations are not used as a source of information when preparing for the next cycle, which starts before the evaluations have been completed (EEA, 10/2009).

In theory, this type of evaluation offers opportunities for environmental integration and the climate proofing of EU funding programmes across the entire spending cycle. For instance, the ex ante evaluations of 2007–2013 OPs integrated SEA. The aim of integrating the two evaluation systems was to make the OPs subject to an integrated assessment where environmental objectives were on a par with economic and social objectives.

Experiences from new member states show that SEAs helped to identify environmental selection criteria for projects and determined a number of environmental indicators for monitoring. Still, the evaluations were carried out relatively late and, given the low evaluation culture and traditions in these countries, there was little impact on the greening or climate proofing of the OPs. Another challenge is that the environmental indicators identified in the SEAs need to be integrated in the ongoing evaluation systems, but there is little understanding among national authorities of when and how to organise this process.

The ongoing evaluation aims to check the relevance of interventions to the original programme's objectives; and their quality and effectiveness in terms of pursuing a preliminary set of targets. This is a new approach introduced by the EU in the current EU funding regulations, replacing the mid-term evaluations previously carried out, which are to be organised solely by the national authorities as a series of evaluation exercises in case the OPs need revision.

For instance, ongoing evaluations can include an explicit assessment of the impact of EU funding programmes and projects on GHG emissions or ancillary effects from climate mitigation projects on the social and economic domains. Given the adopted 20/20/20 targets of the EU climate and energy package, member states can also use the ongoing evaluations to identify climate mitigation and adaptation investment needs, which can serve as a basis for the post-2013 programming. There is a danger that if no timely assessment is made at regional/national level of the impacts of climate change and of investment needs for the implementation of the EU climate package, it will be very difficult to carry out adequate programming for the post-2013 financial period and to determine the contribution of EU funds to addressing climate change in European regions.

Ex post evaluation is the final evaluation that studies the outcomes of a programme and analyses them against its objectives. The evaluation is carried out by the EC and also has the potential to streamline environmental and climate objectives. For instance, it should be used to achieve a better understanding of the impact of Cohesion Policy allocations on GHG emissions — that is, whether and how it contributes to their reduction or increase. Evaluation should also analyse absorption capacities for climate projects; and identify common barriers and success factors. In this way, the EC can invest in overcoming these barriers by adapting the ESF to explicitly support capacity building, skills development, awareness raising and innovative institutional mechanisms and change agents so as to improve the programming, implementation and monitoring of climate projects and to improve the quality of the project pipeline. The EC should also evaluate the possible role in JASPERS[xiii] in assessing different project alternatives, taking into account their climate impact and assisting member states to choose and implement projects that are least harmful to the climate. The EC will also be able to generate and disseminate best practices in climate financing and to foster policy learning across the EU.

**Key points**

- The monitoring of individual projects and programmes is a challenge for all member states and the EC, and increasing efforts will be made to design and implement performance monitoring systems.
- The common monitoring of carbon emissions caused by EU-funded programmes in member states will be a necessity but also a big challenge for the future programming period. However, without some monitoring of OP performance in the area of climate change and without inventories of carbon emissions produced, it will not be possible to evaluate whether EU funds have contributed to combating impacts of climate change.
- It will be of paramount importance for the European Commission to further adapt the Cohesion Policy to integrate climate change policies.
- The EU can increase pressure on member states to use EU funds only or primarily for projects that are carbon neutral by reinforcing conditionality in the use of funds.

- In the case of Finland (and Sweden), it is very difficult to apply impact indicators to the monitoring since large-scale projects with directly measurable impacts are not usually funded, while project-specific monitoring systems for small projects are not usually justifiable.
- In some member states (e.g. France), the concept of carbon neutrality has been adopted and carbon neutrality has to be reached on a programme and/or regional level.
- The most elaborated software tool in the EU for measuring the carbon impact of individual projects and programmes mainly on an aggregated regional or national level is NECATER.
- It is important to strengthen evaluation systems in EU funding programmes that focus on climate trends, impacts, challenges and opportunities prior, during and after EU-funded programmes are carried out.
- It would be desirable to carry out a rigorous ongoing evaluation of the 2007–2013 period to identify investment needs for climate mitigation and adaptation from EU funds in European regions, and to use it as a basis for post-2013 programming.

# Chapter 5 Climate Change as an Economic Driver: Examples of Climate Change–Related Projects Financed by the Cohesion Policy

## 5.1 Climate change as an economic driver

The Lisbon objectives continue to be at the core of EU Cohesion Policy objectives. Enhancing EU resilience to the impacts of climate change will offer opportunities to invest in a low-carbon economy. This synergy is emphasised in a statement by Danuta Hübner, European Commissioner for Regional Policy:

"Support for the Green Economy and the environment goes hand in hand with the Cohesion Policy objective to deliver sustainable growth, jobs and competitiveness. In a difficult financial climate, this investment will be instrumental in creating long-term employment and reviving local economies as well as underpinning the EU's commitment to fight against climate change." (Rapid Press Release, IP/09/369)

The Stern Review assessed a wide range of evidence regarding the impacts and economic costs of climate change. The review suggested that the costs of inaction would be crippling for the world economy, with a decrease in global GDP ranging between 5 and 20 percent. It also highlighted that actions to combat climate change can create significant business opportunities. New markets will be created in low-carbon energy technologies and related to low-carbon goods and services. These markets have good growth potential, and employment in these sectors will expand accordingly. Changes in energy technologies and in the structure of economies have created opportunities to decouple growth from GHG emissions (Stern, 2007).

Energy and climate change are key areas linked to several economic sectors and with an effect on the achievement of the Lisbon objectives. These sectors include renewable energy (wind, solar, biomass, hydroelectric, geothermal) and energy efficiency; as well as co-generation and energy management, which are also eligible for earmarked funding in support of Lisbon goals. In addition, climate change–related measures provide opportunities for growth and employment through investment, as well as having a strong indirect effect in developing and disseminating eco-efficient technologies. It is expected that the significance of such measures will increase in the current economic crisis.

Energy efficiency and renewable energy measures are identified as one of the 12 priority areas for EU-funded investments in the Community Strategic Guidelines. Their increased prominence in the EU Cohesion Policy is supported by the fact that EUR 105 billion will be invested in the "green economy" through the EU Cohesion Policy in 2007–2013. The funding represents more than 30 percent of the regional policy budget for the same period (Rapid Press Release, IP/09/369). Even though investments with a positive impact on climate change are increasing compared to the previous period, further measures ensuring the climate resilience of the Cohesion Policy are needed. This trend is amplified by the Barca report, where it is argued that climate change should be one of the future priority areas of the Cohesion Policy. Barca also suggests that adaptation to climate change and a low-carbon economy should receive priority in future interventions (Barca, 2009).

Focusing on the environment as one of the main drivers for the economic development of a region will potentially lead to the increased competitiveness of its industries and of the region as a whole. It will also have numerous social spillover effects through employment, improved living environment and health.

The GRDP toolkit for integrating the environment into regional development recognises several other benefits such as "promoting the identity of an area based on its environmental quality and sustainability as part of inward investment strategies" and also "offering benefits to specific economic sectors like tourism" (GRDP, 2006).

**The Swedish approach**

The vision of environmentally driven growth is central to the Swedish Structural Fund programmes and is seen as a motor for regional economic development. The Swedish approach to environmentally driven growth is found throughout the OPs. During the 1999–2006 period, Swedish GHG emissions remained under the 1990 level by 4.5 percent on average. At the same time, its GDP has grown by an average of 3 percent a year. Consequently, Sweden's GHG emissions are among the lowest in the OECD countries on a per capita basis. This example shows that it is possible to combine economic growth with an improved environment (SEPA website). The incentive for further integration will be increased in line with the new EU climate package that implies sharper targets for Sweden (40 percent reduction compared to 1990 levels by 2020). There is interest in increasing investments in this field on the part of several of the biggest actors, such as the Swedish Agency for Economic and Regional Growth, the Swedish National Rural Development Agency, the Swedish EPA and the National Road Administration (Swedish Agency for Economic and Regional Growth and SEPA, 2009).

The Mid-North Sweden OP stands out in its efforts to reflect climate change mitigation and adaptation. The first priority axis of the OP is "Renewal of industry, energy and environment-driven development", which is given approximately 73.9 percent of the total funding.

## 5.2 Examples of climate change–related projects financed by the Cohesion Policy

The authors have made a brief overview of projects funded by Structural Funds that have an innovative element. Projects have been divided into:

- mitigation projects;
- adaptation projects;
- projects that make the economic case for investments in low-carbon economies — clusters for environmental technologies;
- examples of how conventional economic projects and/or projects that have no vertical environmental outcomes have been adapted or changed to reduce their carbon/environmental intensity; and
- skills-/education-based projects that have a carbon literacy development aspect.

### 5.2.1 Mitigation

**Accessibility of large retail units and traffic emissions ($CO_2$) in the Oulu region, Finland**
The main goal of the project is to examine the accessibility of large retail units in the Oulu region; to determine carbon emissions caused by shopping trips made by private car; and to develop a tool able to illustrate the optimal location of large retail units in relation to population concentrations and job locations. The aim of the project is to improve the location of large retail units in order to minimise carbon emissions from shopping trips and other traffic emissions. The total cost of the project is EUR 240,000 (North Ostrobothnia Regional Environment Centre).

**North Ostrobothnia regional climate strategy, Finland**
The main goals of the project are to draft the regional scenario for climate change, a basic strategy for adaptation and mitigation, climate programmes for different sectors (energy, industry, traffic, land use, building, health, travel industry, private consumption etc.) and climate programmes for regions (several municipalities). The total cost of the project is EUR 117,000 (North Ostrobothnia Regional Environment Centre).

**Northern Maritime Corridor (NMC), Sweden**
The aim of this two-phase project was firstly to establish new/improved short sea shipping services to shift cargo from road to sea and thereby contribute to sustainable transport. The second phase aimed more broadly at integrating the Northern Maritime Corridor as a "motorway of the sea" within the TEN-T network, thus improving the accessibility of the North Sea and the Northern Periphery regions. Total project funding was EUR 6.4 million, of which EUR 5.3 million was European and Norwegian funding (DG Regional Policy, Regio Stars Awards 2009).

**Energy Agency.NRW, Germany**
In times of volatile energy prices and supply, it is vitally important to develop innovative energy technologies and provide impartial guidance to companies, local authorities and individuals on sound energy management and the potentials of renewable energy. This is the role of EnergyAgency.NRW, the new central contact point for all energy issues in North Rhine Westphalia (Germany). Total project funding is EUR 42.9 million, of which EUR 6.3 million is European funding (DG Regional Policy, Regio Stars Awards 2009).

**ISFOC: "A Channel of La Mancha towards the Future", Spain**
The starting point for this project was a research and development plan for the concentration of solar photovoltaic energy (CPV) promoted by the Regional Ministry of Education and Science of Castilla la Mancha and the Polytechnic University of Madrid. As a result, a new, regionally owned research and development institute was created: the Institute for the Concentration of Photovoltaic Systems (ISFOC). In a short period of time, ISFOC has become a reference project for the commercial use of CPV, helping companies and universities to adapt their supply to technological demand. Castilla La Mancha is the leading region of Spain in terms of solar photovoltaic energy and aims to reach 100 percent energy consumption from renewable sources by 2012 (DG Regional Policy, Regio Stars Awards 2009).

**European Technology Centre (EEE) in Gussing, Burgenland, Austria**
Cohesion Policy investment is helping Burgenland to develop cutting-edge technologies in the renewable energy sector. EU funding was an essential lever for triggering this development: nearly EUR 20 million plus additional regional and national funding has been provided to date for renewable energy projects in the Gussing area (DG Regional Policy, Regio Stars Awards 2009), The so-called Gussing Model is the strategy of decentralised, local energy production with all available renewable resources in a region. Since every region has certain renewable energy resources in different proportions, the model can serve as an example for many communities. Further details are available in Annex 18.

**Central production of photovoltaic electricity on Reunion Island**
The project has enabled the realisation of a 1.433 MW power-generating photovoltaic system on industrial buildings, reinforcing the island's power and creating local employment. Development techniques for the installation of solar panels serve as a model for countries facing similar conditions. Total project costs are EUR 6.9 million, including EUR 623,000 from the ERDF (DG Regional Policy, Regio Stars Awards 2009).

### 5.2.2 Adaptation projects

**CoastAdapt**
The Sea as Our Neighbour: Sustainable Adaptation to Climate Change in Coastal Communities and Habitats on Europe's Northern Periphery. Total budget is EUR 1.4 million (www.northernperiphery.eu/en/projects/show/&tid=61).

**Safe roads in a new climate**
The project aims to upgrade the country roads in the mid-north region of Sweden and to adapt them to the changing climate. New knowledge will be developed and disseminated about climate adaptation of roads and the use of bio-ashes. Pilot projects will be carried out on road regeneration that will reduce the environmental impact of transport. (ERDF funding of around EUR 400,000) (http://projektbanken.tillvaxtverket.se/).

### 5.2.3 Making the economic case for investments in low-carbon economies — Clusters for environmental technologies.

**Lahti Cleantech cluster**
The Cleantech cluster encourages innovation and investment in environmental technologies, particularly recycling, energy efficiency, water management and soil decontamination technologies, by bringing together different stakeholders to "connect and develop", including small and large enterprises, educational institutions and regional and local authorities. The cluster aims to promote regional development in Finland; to encourage collaboration between centres of expertise; and to generate new, expertise-intensive businesses. The centres of expertise established within the project now cover around 60 percent of Finland's cleantech business and 80 percent of the cleantech research.

The Lahti Cleantech cluster in Finland is a good example of promoting eco-innovation in SMEs. The community has invested EUR 1.5 million (EUR 700,000 from the ERDF). As a result of the programme, 170 new jobs have been created; 20 new cleantech companies have been set up in the Lahti region; and the project has attracted more than EUR 30 million in total investments (Rapid Press Releases IP/09/369). The project has had a significant snowball effect on the development of environmental businesses in the country and even on an international level. A network of private and public companies was established throughout seven regions in the south of Finland.

Initially there were 700 companies, and the number has now risen to 7,000, coming from seven countries. The initiative has set up over 50 second- and third-generation projects (DG Regio website, success stories).

**Krinova Environment Arena, Sweden**

Krinova Environment Arena in Kristianstad, Skåne-Blekinge region, aims to encourage enterprises of East Skåne to transform climate and environmental issues into business. The aim is to mobilise and strengthen companies' environmental awareness and to develop sustainable enterprise clusters within the climate and environment field. Another objective of the project is for companies within the cluster to work towards the innovation and renewal of the activities they implement. The dissemination of practical solutions and good examples in relation to how climate adaptation leads to profitability is a central part of the project. Networking and the transfer of knowledge and experience between companies, and between companies, universities and colleges, will be part of the process. The project received around EUR 71,000 from the ERDF, with 50 percent co-financing from the municipality of Kristianstad (http://projektbanken.tillvaxtverket.se/).

**Swedish model for clean growth**

Skåne is investing in environmental technology as one of its major growth areas. One example is the project "Clean Growth", which received a grant of almost EUR 1.4 million from the ERDF under the priority "Innovation and Renewal". The objective of the Clean Growth project is to develop environmental technology innovation in the Skåne region. The main target group is SMEs, which dominate the environmental technology sector. Models of cooperation between research institutions, the public sector and companies are established. The Clean Growth project will assist companies and SMEs to find the right markets; provide consulting and market and export development; carry out analyses and studies; and map environmental companies and business opportunities. Efforts are being made to stimulate green public procurement in order to develop the environmental technology sector. Creating awareness of environmental technology among the municipalities, and promoting exports are vital aspects of the project (http://projektbanken.tillvaxtverket.se/ and Sustainable Business Hub).

**Environment Park, Piemonte region, Italy**

The Environment Park is a science and technology park (STP) that combines environment and business. It is part of a project involving four other STPs in the Piemonte region. The project is a cluster in which SMEs, research bodies and start-up companies can share services, join in new initiatives and develop new projects. The project has been made possible through close cooperation between local authorities and business associations.

The benefits of the Environment Park include: large-scale remediation of an industrial area in the centre of Turin; 20 new businesses started in the park since 1999; eight foreign companies located in the park; about 500 people working in the park, 80 percent of whom are graduates; and about 150 new jobs created since 1999. The Environment Park's facilities were planned according to the principles of green architecture and make intensive use of innovative technologies, particularly in energy and water management. The Environment Park is an innovation among European STPs thanks to its ability to combine technological innovation and eco-efficiency, hosting several companies and research institutes operating in both environmental protection and information and communication technologies (GRDP, 2006).

### 5.2.4 Examples of how conventional economic projects and/or projects that have no vertical environmental outcomes have been adapted or changed to reduce their carbon/environmental intensity

**Carbon neutral development of Newquay Airport: Airport development with a focus on becoming operationally carbon neutral by 2015 and totally carbon neutral by 2025**
Newquay Airport is a small airport in Cornwall that plays an important role in overcoming the region's relative isolation. The delivery of a "whole-project" approach to environmental sustainability is core to Newquay Airport's development objectives and helps to develop and embed environmental sustainability into non-ERDF-funded programmes and investments, while also acknowledging that environmental sustainability is a long-term and ongoing objective (Alex Huke, Regional Development Agency, South West). Further details are available in Annex 19.

**ArcelorMittal** (Provence-Alpes-Côte d'Azur, France)
The aim of this project was to achieve a substantial reduction in atmospheric emissions from the ArcelorMittal facilities in Fos-sur-Mer by implementing innovative technologies to deal with ammonia stack effluent and to reduce sinter emissions from the factory. Total cost: EUR 19.3 million, including EUR 2.4 million from the ERDF (DG Regional Policy, Regio Stars Awards 2009).

### 5.2.5 Examples of skills-/education-based projects that have a carbon literacy development element

**Sustainability and Climate Change Awareness in the Kainuu region (feasibility study, managed by Oulu University, 2009)**
The project will examine the current situation and development needs with reference to Local Agenda 21 for the Kajaani City region. The objective is to study the needs of local actors in terms of cognitive, operational and communicational assistance in order to achieve the nationally and internationally set targets. Based on the analysis, themes and concrete actions will be proposed to advance the achievement of nationally set energy and climate targets in Kainuu (Kainuu Regional Environment Centre, February 13, 2009).

**Clim-ATIC - Adapting to Impacts by Communities in Northern Peripheral regions**
The overall objective of the project is to establish a sustainable advice and training service for community climate change adaptation across the whole of the Northern Periphery. The project will have a particular emphasis on identifying how climate change can bring opportunities for fostering the sustainability of communities in the Northern Periphery through local employment opportunities, social benefits and environmental management. The Northern Periphery Programme 2007–2013 is part of the European Commission's Territorial Cooperation objective (INTERREG IIIB) and is part-financed by the EU and the ERDF. Participating countries are Scotland, Sweden, Finland, Norway and Greenland (www.clim-atic.org).

**Skills for Climate Change (co-funded by ESF)**
The focus of this project is to improve the climate change skills of the local workforce within both the public and private sectors; to promote access to learning and skills training for adults; and to encourage the take-up of higher skills training by those in employment.

Project partners represent key strategic organisations that are integrally involved in defining what a low-carbon economy means for Cornwall and in identifying the skills and resources required to achieve it. Each organisation is a key stakeholder in the development of the **Cornwall Climate Change Action Plan** (3CAP), led by Cornwall Council. Work in developing the 3CAP has already identified that public sector procurement can play a key role in both climate change mitigation and adaptation by including carbon requirements in specifications and tenders. This in turn will encourage supply chain businesses to adopt carbon management standards within their business planning, processing and manufacturing.

The key objective of the project is to develop, test and deliver innovative approaches to increase the level of carbon literacy within the workforce in order to develop the necessary capacity, skills and knowledge exchange to drive low-carbon economic development.

Project activities will be developed and delivered according to the following four interlinked work packages:

1) Leadership and procurement management skills for climate change.
2) Procurement skills for climate change.
3) Skills for low-carbon supply chains.
4) Outreach and dissemination. (Alex Huke, Regional Development Agency, South West)

**Key points**

- Strengthening EU resilience to the impacts of climate change will offer opportunities to invest in a low-carbon economy and to deliver sustainable growth, jobs and competitiveness.
- New markets will be created in low-carbon energy technologies and other low-carbon goods and services. These markets have good growth potential, and employment in these sectors will expand accordingly.
- Energy and climate change are key areas linked to several economic sectors and with an effect on the achievement of the Lisbon objectives. They are identified as one of the 12 priority areas for EU-funded investments in the Community Strategic Guidelines.
- The vision of environmentally driven growth is central only for a few countries, for example Sweden, where it has been recognised as a motor for regional economic development. It is subsequently reflected throughout the OPs.

# Chapter 6 Conclusions and Recommendations

Based on a review of the literature, research findings and discussions within the working group, the authors have come up with a set of conclusions and recommendations for the future. The recommendations are presented following the structure of the report. The authors have included a possible timeline for implementing each given recommendation, as well as the main actor responsible.

## 6.1 General conclusions and recommendations

- A **combination of approaches** is needed in order to increase the integration of climate change into Cohesion Policy projects. Interventions should be made at programming level through NSRFs and OPs. However, the process of project selection should be carefully scrutinised to strengthen all elements in this direction, from the call for proposals (general announcements) through project preparation to scoring. Climate impact monitoring systems should be developed, or, where available, further strengthened in order to inform programme managers of the actual impact of the funded projects. [**When: ongoing. Who: member states and managing authorities**]

- It should be borne in mind that **"best in class" or "good practice" might be good enough to limit the carbon impact** of the projects and programmes, but might not be sufficient to contribute to a significant reduction in carbon emissions. This is closely related to the level of ambition. For the time being, as a starting point, funds should be neutral overall but the goal should be far higher for the next programming period. [**When: ongoing. Who: member states and managing authorities**]

- When Cohesion Policy funds are used to fund carbon-intensive infrastructure projects, for example road infrastructure projects in new member states, other projects on a regional or national level should try to **counterbalance the carbon impact**. [**When: ongoing and post-2013. Who: member states and managing authorities**]

- **Incorporating a strong climate change element** into the projects should not be limited to projects with a specific environmental dimension under specialised environmental or energy OPs, as these projects should be climate proof by default. The integration of climate change issues in non-environmental projects (see previous recommendation) should receive central attention. [**When: ongoing and post-2013. Who: member states and managing authorities**]

- The **European Commission could reinforce its requirements on member states** in order to limit the carbon impact of projects financed through Cohesion Policy funds. For these programmes not only efficiently to deliver carbon neutrality but also to contribute to carbon reduction, the EC should gradually shift from softer, voluntary demands on member states to obligatory requirements. [**When: post-2013. Who: European Commission**]

- The guidelines provided in this report may equally apply to the agro-economic elements of rural development programmes, such as the European Agricultural Fund for Rural Development

(EAFRD). It is regrettable that these programmes do not recognise environmental sustainability, sustainable development and equalities in their regulations in the same way that ESF/ERDF programmes do. [**When: ongoing and post-2013. Who: member states and managing authorities**]

## 6.2 Programming

- In some European countries, climate change has gained momentum on the political and policy agendas only since the drafting of programming documents for the 2007–2013 period. The possibility for the **mid-term revision and evaluation of the programming documents** will therefore be an excellent opportunity to enhance the climate change emphasis of the OPs and to include climate change per se. Prior to this, member states should determine how climate friendly their OPs are. Countries may put an emphasis on developing roadmaps for low-carbon regional development. Moreover, in relation to territorial cohesion, the mid-term evaluations should take into account the territorial impacts of climate change (especially in regions that are particularly vulnerable such as coasts, mountains, etc.) and should evaluate which regions hold potential for developing into low-carbon development champions. [**When: 2009–2010. Who: member states**]

- It is suggested that the **NSRF explicitly emphasises the need to take climate change/environment into consideration** in all funded projects. Climate change, and especially the adaptation component, should be addressed per se, as it remains largely disregarded. If goals such as carbon neutrality are spelled out in the NSRF, there is a much greater chance that further projects and measures will follow. The NSRF should also map the potential of climate change measures for economic growth and job creation in order to strengthen the case. As the economy is always higher on the political agenda, the description and definition of synergies between climate change and economy might boost climate change integration into the Cohesion Policy. As a minimum, the NSRF should include linkages to other strategies such as the Climate Change and Adaptation Strategy. [**When: 2009–2010 and post-2013. Who: member states**]

- The SEA process did not contribute sufficiently to strengthening environmental integration, and even less climate change integration, in OPs at the time of their preparation. The SEA tool has great potential. In order to avoid EU funds contributing disproportionately to an increase in carbon emissions in the future programming period, **all programming documents — NSFRs and OPs — must undergo an SEA**, which would also include mandatory assessment of possible negative carbon impacts, the assessment of adaptation and mitigation measures, etc. [**When: post-2013. Who: member states**]

- In some member states, regional development programmes are closely linked with Structural Funds programmes, for instance providing co-financing to Structural Funds investments. There is added value in **adopting the common governance of state funds and EC funds, and in streamlining the application and evaluation procedures with a respective increase in the extent of climate change considerations**. The added value comes mostly from ensuring complementary actions and potentially raising the bar for national projects to the level of EU projects. [**When: ongoing. Who: member states and managing authorities**]

- **Earmarking minimum funding shares for key climate-friendly investments** such as energy efficiency, renewable energy sources and sustainable transport will contribute to a better reflection of climate change issues in the OPs. For the next programming period, earmarking funds for climate change mitigation and adaptation within Cohesion Policy funds is suggested. [**When: post-2013. Who: member states**]

- In the case of OPs for environment and transport that include indicative lists of infrastructure projects, it is very important that member states include only projects that are highly compatible with climate change policies in general, as well as with more specific requirements. The EC may consider introducing **minimum requirements for projects in the indicative lists** and **further strengthening the requirements** for these projects, for example by applying the principle of carbon neutrality. [**When: post-2013. Who: European Commission and member states**]

- While still taking into account economic, developmental and social considerations as part of the Cohesion Policy, the EC should **restrict, as far as possible, the financing of projects with a negative impact on the climate.** Where this impact is unavoidable, the climate change and environmental requirements on these projects should be extremely high. [**When: post-2013. Who: European Commission**]

## 6.3 Climate proofing the project cycle

- The **calls for proposals** should contain **minimum requirements for emissions reductions** in order to convey the right information and elicit the right approach from project proponents. [**When: ongoing. Who: managing authorities**]

- There are examples of good application forms that guide project proponents in incorporating the environment into the proposed projects. The dissemination of sample application forms may have educational benefits for proponents. There is a further **need to improve the quality of application forms and to include climate change mitigation and adaptation considerations**. The application forms are one of the tools for educating project proponents. There is added value in adopting common application forms for national development programmes and EU funding (see recommendation on common governance). [**When: ongoing. Who: managing authorities**]

- In the project selection phase, there are good examples of comprehensive checklists for ensuring the integration of environment into Structural Funds. They can serve as a good basis for incorporating climate change issues that are not tackled in detail. A good **project selection tool can bring positive effects in terms of fostering climate change integration** at the project level and can also strengthen the overall sustainability of the programme, especially if climate change is not comprehensively tackled at programme level. [**When: ongoing. Who: managing authorities**]

- It is extremely important to **educate the managing authorities and project evaluators** on opportunities to include climate change considerations within projects and on working with

project proponents in order to improve the quality of the project, especially from a climate change/environmental point of view. There are excellent examples of institutional innovations that are fulfilling this role. This work is closely related to the need for active and precise communication from the managing authorities to project proponents and beneficiaries (see recommendations on communication). [**When: ongoing. Who: managing authorities**]

- At the project level, the integration of climate change can be strengthened **by introducing energy efficiency criteria for all financed projects** and by ensuring the systematic integration of energy-saving measures as well as renewable technologies into all projects, where feasible. For example, the provision of energy information for each project can be made obligatory in order to assess whether the project is climate negative or positive. [**When: ongoing. Who: managing authorities**]

## 6.4 Communication

- There is a need to **raise project proponents' awareness** of the integration of climate change into their projects. Awareness raising and encouragement in order to stimulate climate change projects should be carried out at an early stage, before the project idea has been fully formulated. [**When: ongoing. Who: managing authorities**]

- The **dissemination of good examples** could promote the better integration of climate change and could stimulate projects with a positive climate impact in other countries and regions. It is not only positive examples that should be disseminated, but also less successful cases from which lessons can be learned. [**When: ongoing. Who: European Commission and member states**]

- The **active involvement of civil society** representatives in the project selection process should be encouraged. One of the positive side effects is that they will learn from their participation in the process and will therefore be able to contribute even more efficiently in the future and provide the often missing link with civil society. Opportunities for civil society involvement should be elaborated in order to see where synergies can be found. Although transparency may sometimes be problematic and slow down the selection process, it is a necessity. [**When: ongoing. Who: member states and managing authorities**]

## 6.5 Monitoring

- There should be **stronger pressure from the European Commission on member states to measure the carbon impacts of individual projects and programmes**. The EC may facilitate the process of designing and adopting an efficient common tool for this purpose. The first steps of collecting project and programme data should start during the present programming period and be significantly strengthened during the next programming period. [**When: ongoing and especially post-2013. Who: European Commission and member states**]

- For the present programming period, the EC should require information from member states on how current EU funds are contributing to climate change — whether increasing or reducing carbon emissions. All member states should try to start **collecting data about the amount of carbon emitted through OPs**. Even if the first data from member states are not perfect, they should at least lead to first steps (i.e. use of a tool such as NECATER). "Sector and regional programmes must be transcended by the principle of environmental, macro-economic and societal sustainability, and securing regional and social cohesion." [**When: current programming period. Who: European Commission and member states**]

- Some member states need a **stronger signal from the European Commission for the implementation of climate change measures**. Even though some managing authorities are already aware of the problem and would be willing to make their OP more climate friendly[xiv], factors such as the centralised coordinating system, the complicated administrative funding system, the great interest in funding opportunities amongst applicants and the lack of financial and human resources, make the voluntarily introduction of climate change measures almost impossible. Indeed, such measures must be recommended or required by the EU and followed by the dissemination of positive and precisely described country examples, possible tools (e.g. checklist), indicators or an effective monitoring system. [**When: current programming period. Who: European Commission and member states**]

- By the time efficient project monitoring tools are introduced, member states should **encourage self-evaluation by project proponents** in order to formulate lessons learned. Member states and managing authorities may also use financial incentives to promote the greater integration of climate change measures in project proposals. [**When: ongoing. Who: member states and managing authorities**]

- For the next programming period it would be good to **introduce an ex ante tool for screening projects, based on climate change criteria**. The tool would contain quantitative questions (e.g. how many tons of carbon dioxide would be emitted or reduced per year as a result of the project) and thresholds to be determined for different types of projects. In addition, thresholds could be determined for individual projects and all OPs, which could in turn be synchronised with national carbon (and other GHG) emission reduction targets for a given period. [**When: post-2013. Who: European Commission and member states**]

## 6.6 Climate change as an economic driver

- Member states should work on a paradigm change at all possible levels — political and business — and **recognise that climate change will offer opportunities to invest in a low-carbon economy** that will subsequently deliver sustainable growth, jobs and competitiveness. This would mean strengthening the vision of environment-driven growth. [**When: ongoing. Who: member states and managing authorities**]

- Member states should support in all possible ways — including through Cohesion Policy spending — the **creation of new markets in low-carbon energy technologies and other low-carbon goods and services**. These markets have good growth potential, and employment in these sectors will expand accordingly. [**When: ongoing. Who: member states**]

# Annexes

## Annexes related to Chapter 2

### Annex 1: NSRF France

Two thematic priorities in the French NSRF have an environmental and climate change dimension:

- To protect the environment, prevent risks, and adapt energy practices in a sustainable development perspective.
- To develop transport modes other than road for individuals and companies.

In order to promote a competitive and sustainable economy, it is necessary to support environmental innovations, to promote renewable energy sources, and to foster better management of natural resources. The ultimate goal is to cut GHG emissions by a quarter by 2050 (Factor 4).

The political will exists to direct ERDF and ESF funding towards the strategic Lisbon and Gothenburg themes. On a national level, 60 percent of the amounts dedicated to Convergence Programmes and 75 percent of the amounts dedicated to Regional Competitiveness and Employment Programmes must be spent on actions contributing directly to the implementation of the Lisbon strategy.

The NSRF states that "following the necessity to optimise funds and to contribute to reaching the objectives of the Lisbon and Gothenburg strategies, the partners have to fix in their operational programmes criteria and common objectives for the selection of projects."

It is also specified in the NSRF that projects funded from Structural Funds must fit in a sustainable development perspective considering the National Sustainable Development Strategy (NSDS) as a reference. Regions having suitable strategic instruments and complying with the reference framework (i.e. Agenda 21, national parks charters, climate plans, etc.) will have priority access to funds.

The CPER has five intervention priorities. Priority 2 is to "reconquer the environment and preserve the natural heritage." The first sub-priority of Priority 2 is "Regional Climate Plan and Environmental Quality." Here it is stated that the region is exposed to inundation risks and threats to water availability.

A Regional Climate Plan must therefore be drafted to:

- ensure management of natural and technological risks;
- raise awareness among all socioeconomic actors;
- maintain environmental management, clean technologies and eco-design;
- improve and develop environmental quality in construction, rehabilitation and territory management;
- encourage the source reduction of energy consumption, raw materials and water; and
- develop regional chains of resource valorisation and renewable energy stimulating new practices and behavioral changes.

# Annexes related to Chapter 3

## Annex 2: Thematic calls for proposals — Case study from Finland

In 2008, the North Ostrobothnia region applied the theme "Climate Change Adaptation and Mitigation" to a round of calls for proposals. The common application round was jointly organised by all financing authorities in the region. Funds administered by the North Ostrobothnia Regional Environment Centre were allocated to the theme. The North Ostrobothnia Regional Environment Centre has an annual budget of EUR 3 to 3.5 million from Structural Funds and approximately half of the yearly budget was available for climate change projects. Four of nine applications received were eligible for the theme. Two projects are being financed in 2009 (North Ostrobothnia Regional Environment Centre).

The dissemination of information about the thematic call is essential. The relevant public needs to be informed about the call before it is launched, since there is often little time between the launch and the deadline. In North Ostrobothnia, advertisements for the call for proposals were placed in the six largest newspapers, and there are plans to include a leaflet in a regional daily newspaper as a channel for awareness raising (Lapland Regional Environment Centre).

Under the OP for southern Finland, 25 percent of financing for the 2007–2013 period will be allocated to projects to be implemented under selected themes that are considered important for the development of the entire eligible area. In addition to environment, themes selected for financing are technology, well being, construction, and networking between the business and public sectors. The themes are applied to the first three priority axes: promotion of business; promotion of innovation and networking and strengthening of knowledge structures; and improvement of accessibility to areas and the operating environment (Hämeen Regional Environment Centre). In addition, 20 percent of the thematic budget will support the actions of other ongoing programmes, e.g. national technology policy or other EU programmes.

The environmental theme under the OP for southern Finland was launched in 2007. The call received huge interest from project applicants, which led to the reopening of the environmental theme in 2010. Through continuous support for environment as a cross-cutting theme, it is expected that the share of environmental projects will increase. The target in southern Finland is for 18.5 percent of total allocation of the OP to be allocated to environmental projects (Hämeen Regional Environment Centre).

# Annex 3: Analysis of environmental awareness within projects

## Environmental section of the application form for Structural Fund and CPER funding in Nord–Pas de Calais

In accordance with Directive 2001/41, environmental evaluations were carried out on OPs and CPERs. These evaluations make recommendations to reduce the environmental impacts of financed projects, and favour projects with high environmental awareness. The project guideline must identify and limit the environmental impact of the project, and project selection has to be carried out in accordance with the SEAs of the projects.

**Part 1 — Legal environmental procedures**

The project proponent has to specify the legal environmental processes with which the project must comply during project implementation, i.e. European directives, laws, impact studies, and administrative procedures for registration, authorization and project implementation in a Natura 2000 area).

**Part 2 — Potential environmental impacts, correction measures and environmental monitoring indicators**

The project proponent has to indicate the potential environmental impacts of the project and the measures to avoid, reduce or compensate negative effects.

| **Challenges** | **Environmental impacts** | | | **Measures to avoid, reduce or compensate negative impacts** |
|---|---|---|---|---|
| | Description | Effect (positive, negative, neutral) | Importance | |
| Climate change mitigation (emissions) | | | | |
| Biodiversity (preservation of natural areas) | | | | |
| Sustainable land use | | | | |
| Water preservation (quality and quantity) | | | | |
| Natural risk management | | | | |
| Technical risk management and soil pollution | | | | |
| Waste management (reduction and valorisation) | | | | |
| Harmful or unwanted sounds in the environment (prevention and reduction) | | | | |
| Environment as a development factor | | | | |
| Environmental awareness (eco-citizenship) | | | | |

# Annex 4: Environmental support mission

A unique and very successful structure exists in France (Nord–Pas de Calais) — the **Environmental Support Mission (MAE)**.[xv] Created in 2008, it comprises one representative of the state and one representative of the region, and its goal is to help integrate the environment as far as possible into Structural Funds and the CPER. It was established to respond to the Lisbon and Gothenburg priorities, including sustainable development.

In France, as in all member states, the environment is built into the Structural Funds and the CPER as a horizontal priority, with the goal to take the environment into consideration in an optimal way after identifying potential negative environmental impacts.

The MAE was established primarily to **assist the project evaluation services (committees)**[xvi] from the region and the state, which have a key role in working with project proponents in order to improve projects.

The main rationale behind the MAE is the concept of the **common governance of Structural Funds and CPER** and the incorporation of the environment into all funded projects. The main focus of the MAE is **education**.

The mission of the MAE is to:

- **assist project evaluation services** — to inform or educate them on environmental issues through kick-off meetings, annual meetings, and the development of guidance documents;
- **prepare and help strategic decisions** — to help evaluators with problematic applications in order to suggest environmental improvements. The evaluation services are not obliged to take into consideration the opinion of the MAE, although it happens in practice and there is good cooperation between them;
- **prepare the monitoring documents** — to monitor environmental considerations through formal evaluation; and
- **propose adaptations of the application forms for ERDF/CPER** — for the 2007–2013 programming period in Nord–Pas de Calais, there is a single application for EU Structural Funds and CPER.

**Success factors:** the relative independence of the structure vis-à-vis regional and national structures gives it speed and flexibility.

The role of evaluation services (committees) is to clarify:

- the environmental obligations of the project;
- potential negative environmental impacts;
- potential correction measures; and
- environmental indicators for monitoring the project.

The MAE has developed a guidance document on taking the environment into consideration in Structural Funds and CPER, for use by project proponents. The document is divided by type of investment: investments into buildings and territory management operations; material investments; immaterial investments (e.g. knowledge); infrastructure and transport investments; and investments linked to information technologies and communication.

# Annex 5: Austrian Conference on Spatial Planning

Within the context of European regional and spatial development policies, the Austrian Conference on Spatial Planning (Österreichische Raumordnungskonferenz — ÖROK) plays an important role as the coordinating body between internal and European levels. Apart from defining the status of Austrian regions and coordinating the national breakdown of EU Structural Funds, the ÖROK also drafts the Austrian NSRF and carries out strategic monitoring of its implementation. It also provides the secretariat for the monitoring committees for regional OPs for the Convergence and Regional Competitiveness and Employment objectives. The ÖROK also supports the regions in programming, negotiations, monitoring and evaluation, and the closure of OPs. It also serves as the national contact point and coordination body for European territorial cooperation.

Austria has a flexible and efficient system for managing Cohesion Policy, which, in combination with a sound national climate policy and legislation, results in the relatively high level of climate measures in regional OPs and their projects. Apart from strong national strategic, planning and legislative provisions for climate and sustainable energy, the administrative system in Austria provides the regions with a choice of how to comply with Cohesion Policy fund rules on the one hand, and with national legislation related to climate and energy on the other. Furthermore, the regional managing authorities use the right to outsource to different public companies (implementation authorities) the performance of specific technical and/or financing parts of Cohesion Policy fund management. At the same time, regions receive help in making such decisions from the national level, from ÖROK.

In the Burgenland region of Austria, communication and coordination activities related to climate change and sustainable energy are jointly carried out by the managing authority and by the Burgenland Energy Agency.

The Burgenland OP contains two measures that are relevant to communication and coordination:

- Sustainable company development.
- Public relations, information and communication measures.

The **first measure** is directed at sustainable development, including environmental protection and climate proofing, and can be funded directly from the OP. However, co-funding by national and regional funds is also applied (e.g. in the case of climate coaching). The Energy Agency has the role of attracting co-financing for energy-saving systems from regional and national sources. For example, if a company decides to apply energy efficiency measures (within an OP project), these specific measures will be funded by national and/or regional funds. The agency's role is to attract these funds by different means, including those described under the second measure.

The **second measure** is more horizontal: Firstly, it is not limited to a specific sector but each implementing agency takes care of public relations, information and communication within this domain. Thus, the Energy Agency (sometimes in cooperation with the managing authority) takes care of public relations, information and communication activities in relation to sustainable energy and climate proofing.

The Energy Agency organises and implements awareness-raising events, and also markets and finds national and regional co-funding for renewable energy projects and energy-saving systems and other climate-beneficial investments.

Apart from these "short-term" activities, a very good example exists of an entire project dedicated to education, information and communication for sustainable energy (with obvious implications for the climate confidence of the region). A college (awarding university degrees) of applied science focusing on sustainable energy was established in order to support the energy autonomy goal of the region of Burgenland. Since this was an entire project encompassing different measures from the OP, it was co-financed from the ERDF in addition to national and regional funds.

# Annex 6: Eligibility condition and priority criteria for ERDF-funded projects, France

**Eligibility conditions**[xvii]

| Description | Field |
|---|---|
| Mobile communication projects must incorporate analyses of environmental impacts:<br>• Biodiversity: impact on corridors;<br>• Principle of participation; and<br>• Landscape integration. | **Access to information** |
| Projects must justify their minimal impact on the environment and put in place the correct measures regarding:<br>• Location for the platform;<br>• Urban sprawl;<br>• Pollution; and<br>• Landscape integration. | **Access to transport** |
| For projects located close to sensitive areas, justification of environmental acceptability is needed. | **Access to transport** |
| Project must fulfill at least three of the following criteria to meet the three pillars of sustainable development (not including environment-related ones):<br>• Projects in urban transport, territorial cohesion and territorial management;<br>• Reduction of greenhouse gases;<br>• Promotion of inter-modal transport; and<br>• Introduction of carbon footprint measurement. | **Access to transport** |
| Buildings with high energy performance | **Business development** |
| Brownfield investments must ensure security, conservation of buildings and protection of the environment. | **Business development** |
| Buildings may only use materials with a reduced risk of soil compaction. | **Competitive agricultural organisation** |
| Machines using biodegradable hydraulic oil and non eco-toxic materials | **Competitive agricultural organisation** |
| Regional aid for buildings made entirely of wood | **Competitive agricultural organisation** |
| The project must submit an action programme on environment/climate over three years. | **Environment, risk prevention** |
| Natural heritage preservation projects must comply with local environmental conditions and ecosystem integrity. | **Environment, risk prevention** |
| Wood resources may only be exploited in accordance with environmental quality, i.e. resources must come from certified forests. | **Environment, risk prevention** |
| Renewable energy projects:<br>• Positive environmental impacts in terms of estimated energy savings and renewable energy production;<br>• Compliance with existing biodiversity; | **Environment, risk prevention** |

| | |
|---|---|
| • Support for forest recovery, taking into account the turnover of stock and speed of rotation; and<br>• Justification that power generation facilities do not pose risks to air quality or increase the degree of exposure to technological hazards. | |
| The contracting authority must conduct an impact assessment that shows that the project will not lead to the degradation of natural habitats, and must prepare a note on landscape integration. | **Environment, risk prevention** |
| The project must provide an initial inventory of the environmental situation in the area of project implementation; a presentation of the expected positive environmental impacts and compensatory measures for possible negative impacts; and a description of previous experience in the field. | **Environment, risk prevention** |
| Wood exploitation projects must meet at least the following sustainable development criteria (environmental criteria are not included here):<br><br>• Forest certification; and<br>• Part of a sustainable development project. | **Environment, risk prevention** |
| Buildings with high environmental quality by implementing energy management systems or by raising environmental quality | **General** |
| Innovations in SMEs: Actions financed must foster, for example, the promotion of clean technologies or focus on environmental protection. | **Research and development** |
| High energy performance for new buildings and D-level energy performance for renovated buildings | **Services, advice, training** |
| Sustainable tourism, by supporting sustainable transport modes or by implementing energy management systems | **Tourism, culture, university equipment** |
| The project proposal must contain recommendations concerning waste, including industrial waste and special wastes such as asbestos. | **Tourism, culture, university equipment** |
| The project must carry out a study on the integration of high environmental quality or high energy performance. | **Tourism, culture, university equipment** |
| Projects that integrate energy efficiency, reduce environmental pollution, support better water or waste management, or promote sustainable production and consumption patterns | **Urban projects** |
| Projects must integrate:<br><br>• Urban strategy for sustainable development of the agglomeration;<br>• Approved planning schemes; and<br>• Horizontal sustainable development aspects (with its different dimensions). | **Urban projects** |
| Urban projects:<br><br>• No project should contribute to urban sprawl.<br>• The precautionary principle should be taken into account.<br>• A social, health and environment study is required. | **Urban projects** |

**Priority criteria**

| Description | Field |
|---|---|
| Selection criteria for information communication technology projects:<br>• Consistency with sustainable development strategy.<br>• Commitment to continual improvement. | **Access to information** |
| Selection criteria for transport projects:<br>• Existence and quality of feasibility studies that evaluate the economic, social and environmental impacts, as well as the governance of projects, demonstrating the incorporation of sustainable development;<br>• Limiting damage to natural areas and limiting influence to an absolute minimum; and<br>• Use of clean energy. | **Access to transport** |
| Selection criteria:<br>• Preservation of habitats;<br>• Increasing the share of renewables; and<br>• Taking into account the principle of participation. | **Agriculture** |
| Selection criteria:<br>• Positive territorial impact of the project, i.e. job creation, environmental quality, economic benefits for the area;<br>• Use of clean technologies;<br>• Eco-innovation or renewable energy projects; and<br>• Impact on sustainable development, including side effects of projects that may have impacts on the environment. | **Business development** |
| Selection criteria for biodiversity projects:<br>• Projects that meet the priorities of the national biodiversity strategy;<br>• Projects outside Natura 2000;<br>• Projects encouraging the prevention of natural risks;<br>• Projects encouraging the reduction of primary energy consumption;<br>• Taking into account of the principle of participation; and<br>• Projects in line with the sustainable development strategy of the territory. | **Environment, risk prevention** |
| Selection criteria for wood and agricultural biomass energy projects: guarantee of local provision | **Environment, risk prevention** |
| Selection criteria for solar projects: European approval of the equipment installed | **Environment, risk prevention** |
| General selection criteria:<br>• Avoid sensitive natural areas;<br>• Limit damage to natural areas and limit influence to an absolute minimum;<br>• Focus on Natura 2000 and ENS;<br>• Preservation of habitats;<br>• Preservation of biological diversity; and<br>• Engagement to apply a territorial climate plan. | **Environment, risk prevention** |

| | |
|---|---|
| Selection criteria for projects to combat global warming:<br><br>• Tons of $CO_2$ emissions prevented;<br>• Reduction in GHG emissions caused by the implementation of the project; and<br>• Energy and GHG impacts, exemplary aspect, strategic coherence. | **Environment, risk prevention** |
| Selection criteria for water projects: Priority given to projects located in highly sensitive areas (basin, critical areas in terms of water pollution) | **Environment, risk prevention** |
| Selection criteria for waste projects: recycling should be prioritised | **Environment, risk prevention** |
| Selection criteria for energy projects:<br><br>• Positive energy performance (passive buildings and environmental quality system for buildings;<br>• Reduced energy consumption;<br>• Optimisation of waste streams; and<br>• Consistency with the strategy of sustainable development of the territory. | **Environment, risk prevention** |
| Selection criteria for water and aquatic environment projects:<br><br>• Reduction of water consumption;<br>• Reduction of discharges;<br>• Taking into account the principle of participation;<br>• Preservation of habitats;<br>• Prevention of natural risks;<br>• Long-term values; and<br>• Consistency with the strategy of sustainable development of the territory. | **Environment, risk prevention** |
| Selection criteria for projects with industrial risks:<br><br>• Preservation of habitats;<br>• Conservation of biodiversity;<br>• Optimisation of waste streams;<br>• Application of valuation principles, long-term care; and<br>• Taking into account the principle of participation. | **Environment, risk prevention** |
| Selection criteria for energy efficiency improvement projects of enterprises:<br><br>• Projects to improve energy supply;<br>• Projects integrating the dimension of transport related to industrial production; and<br>• Tons of oil equivalents and $CO_2$ avoided by the project. | **Environment, risk prevention** |

| | |
|---|---|
| Selection criteria for buildings:<br><br>• Positive environmental performance;<br>• Use of renewable energies;<br>• Wood construction;<br>• Level of energy consumption per square meter;<br>• Rainwater management;<br>• Minimised nuisances (noise and smell);<br>• Landscape; and<br>• High environmental quality in building design, aimed at reducing energy consumption per square meter. | **General** |
| General selection criteria:<br><br>• Sustainable transport solution;<br>• Priority for projects with a positive impact on the environment;<br>• Going beyond purely regulatory obligations;<br>• Environmental management of project activities, e.g. environmental management systems according to ISO 14001; and<br>• Projects that introduce a carbon footprint measuring tool. | **General** |
| Selection criteria for projects:<br><br>• Impact on sustainable development, including side effects of projects that may have impacts on the environment;<br>• Eco-innovation or renewable energy project;<br>• Ensure good environmental management activities or technologies developed vis-à-vis the major environmental issues in the region; and<br>• Proper management of the environmental impacts of the activity by setting up an environmental management system (such as Environment Business Plan developed by ADEME or ISO 14001). | **Research and development** |
| Clean and efficient technologies should be encouraged, specifically those which bring:<br><br>• Respect for nature and biodiversity;<br>• Reduction of environmental pollution, e.g. air emissions, GHG emissions, discharges into water, waste management; and<br>• Savings of water resources and energy. | **Research and development** |
| Selection criteria for research centres:<br><br>• Reduced energy consumption;<br>• Consistency with sustainable development strategy;<br>• Commitment to continuous improvement;<br>• Application of valuation principles, long-term care;<br>• Taking into account the principle of participation; and<br>• Industrial risk prevention. | **Research and development** |
| Priority criteria that can be used:<br><br>• Economic development respecting the natural environment and landscape; and<br>• Projects promoting sustainable transport. | **Services, advice, training** |

| | |
|---|---|
| Selection criteria:<br><br>• Feasibility study and evaluation on the costs of integration regarding high environmental quality and high energy performance; and<br>• Environmental consideration regarding the selection of materials, impact on the landscape and resources. | **Tourism, culture** |
| The environmental impact of urban development projects will be assessed in relation to the following themes: energy, water, waste, transport, noise, polluted sites and soils, biodiversity, floods and land use. | **Urban development** |
| Selection criteria:<br><br>• Taking into account the principle of participation;<br>• Reduction of energy consumption;<br>• Project consistency with the sustainable development strategy; and<br>• Commitment to continual improvement. | **Urban development** |

**Awareness raising of the beneficiaries**

| | |
|---|---|
| Sustainable development questionnaire attached to the project application form to take horizontal priorities into consideration | **General** |
| Project application dossier must include:<br><br>• Engagement in terms of sustainable development;<br>• Description of expected environmental benefits; and<br>• Supporting documents to justify the effectiveness of implemented actions. | **General** |

**Financial Incentives for the beneficiaries**

| | |
|---|---|
| For research partnerships: 5 percent eco-bonus.<br><br>Increased rate of grant for:<br><br>• Renovations for increased energy efficiency<br>• Encourage the development of programmes for environmental research;<br>• Support innovation in the enterprise; and<br>• Focus on development projects that use clean energy and eco-design or implement environmental management. | **Research and development** |
| Increased rate of grant<br><br>• Local actions for eco-development; and<br>• For projects that use clean energy, eco-design or implement environmental management. | **Services, advice, training** |

| | |
|---|---|
| Increased rate of grant for projects:<br><br>• With high environmental quality and high energy performance;<br>• That use wood for building construction;<br>• That reduce energy consumption or use renewable energy;<br>• That reduce impacts related to waste;<br>• That reduce water consumption and pollutant emissions;<br>• That introduce environmental management of rainwater;<br>• That integrate sustainable land management;<br>• That integrate landscape aspects; and<br>• That reduce emissions generated by transport. | **Business development**<br>**Research and development**<br>**Tourism, culture** |
| Feasibility studies (regarding ecological, economic and landscape impacts) are eligible for funding | **Agriculture** |
| An increase of grant by 5 percent will be given to any firm participating in a process of sustainable management, Interactive Forest Certification Database type, Forest-Quality. | **Agriculture** |
| For rural projects, increased aid will be given for achievements with at least three high environmental quality criteria. | **Services, advice, training** |
| Priority to projects that offer monitoring of sustainable development impacts | **Business development** |

# Annex 7: Eco-conditionality and eco-compatibility, France

Regional measures for taking the environment into consideration (collected by DIACT)[xviii] are divided into criteria (eco-conditionality) and recommendations (eco-compatibility). In the case of eco-conditionality, if the project does not comply with criteria it is not selected. Eco-compatibility is more lenient, and here projects that comply with the priority criteria have an advantage.

| Field | Concerned object | Type of action | Timing of intervention |
|---|---|---|---|
| - Accessibility: information systems<br>- Accessibility: transport<br>- Competitiveness and agriculture<br>- Enterprise development<br>- Environment: risk prevention<br>- Urban projects<br>- Research and development innovation<br>- Services, education<br>- Tourism, culture | - Immaterial actions<br>- Residential<br>- Residential external | (Type 1) Eligibility criteria (25 percent)<br>(Type 2) Recommendations<br>2.1 Priority criteria (29 percent)<br>2.2 Awareness raising among project proponents (3 percent)<br>2.3. Environmental assessment of the proposal<br>2.4 Monitoring of the efficiency of the actions/alert indicators<br>(Type 3) Incentive (additional funding) (11 percent)<br>(Type 4) Compensatory measures (beneficiary carries out compensatory actions, e.g. planting trees) | - Project development (48 percent)<br>- Project development + follow-up monitoring (1 percent)<br>- Project evaluation (39 percent)<br>- Project evaluation + monitoring at the end of the project (12 percent) |

The strength of the measure depends on the type of action, with Type 1 Eligibility criteria being the strongest. In most cases, eligibility criteria and priority criteria are drafted on the basis of SEA recommendations. They are checked at the moment of project evaluation.

From the assessment, it became clear that implementing priority criteria for selection of projects is the most common approach (29%), closely followed by eligibility criteria (25%). Regarding the moment of intervention, most of the practices are focused at the moment of project development (48%) and project evaluation (39%). However, there are a number of practices focusing on the moment of project completion.

# Annex 8: Checklist for assessment of project proposals in Finland

*The following guidance and form are incorporated into the EURA 2007 information system.*

The attached form is used by applicants to assess the environmental impacts of a project proposal. The potential impacts are marked using the symbols ++/+/0/-. The assessment concerns all projects and should indicate whether a project is:

- Environmentally neutral: 0
- Environmentally beneficial: + (minor beneficial effect) or ++ (significant beneficial effect)
- Environmentally harmful: – (minor adverse effect)

| Impact | ++/+/0/- | Description |
|---|---|---|
| **1. Impact on climate change** | | |
| Improving energy efficiency | | |
| Increasing the use of renewable energy | | |
| Mitigating the risks of climate change | | |
| Reducing the amount of fossil $CO_2$ emissions | | |
| **2. Impacts on emissions** | | |
| Water | | |
| Soil | | |
| Air | | |
| **3. Impacts on production and consumption** | | |
| Reducing the amount of waste | | |
| Waste reuse and recycling | | |
| Energy and material efficiency | | |
| Use of local renewable raw materials and services | | |
| **4. Impacts on the natural and built environment** | | |
| Landscape | | |
| Cultural environment | | |
| Biodiversity | | |
| Natura 2000 sites | | |
| **5. Impacts on people** | | |
| Living conditions and the attractiveness of living areas | | |
| Health | | |
| Safety | | |
| **6. Impacts on traffic** | | |
| Curbing the increase of private car traffic | | |
| Reducing the need for shipping | | |
| Improving logistics | | |
| Share of public transport and pedestrian traffic | | |
| **7. Impacts on research and training** | | |
| Environmental technology | | |
| Use of environmental management systems | | |
| Environmental know-how and awareness | | |

# Annex 9: Additional sheet supporting the definition of environmental assessment criteria and sustainable development of the Southern Finland OP

**ERDF, Regional Competitiveness and Employment objective 2007–2013**

**The selection criteria for interregional projects, priority axis 5.**

**Environmental impacts of the project:**

a) Promoting environmental knowledge, awareness and governance of environmental management systems;
b) Impacts on consumption and production, energy efficiency, emissions, traffic and climate change mitigation; and
c) Well-being factors for society and environment that will be promoted

**Definitions**

a) Promoting environmental knowledge, awareness and governance of environmental management systems

Promoting increased environmental knowledge, creating growth possibilities for environmental knowledge, promoting the development of environmental management systems of different actors, supporting and raising awareness of environmental responsibilities and the development of environment-friendly actions.

b) Impacts on consumption and production, energy efficiency, emissions, traffic, and climate change mitigation

Supporting actions that have an impact on reducing waste, saving energy and making use of local services and renewable raw materials. In all activities, energy and material efficiency and low emissions are criteria for eliminating climate change. This means, in practice:

- avoiding activities that will lead indirectly to increased consumption of electricity and private car use; and
- promoting actions that reduce the need for transportation, and a growth in the proportion of mass and light transport.

c) Well-being factors for society and environment that will be promoted

**1. Promoting a good and safe environment**

The quality of housing, communities and developed regions will be improved by material and energy efficiency. Existing infrastructure will be taken advantage of as a first priority, minimising emissions and taking into account perceptions of pleasantness, safety and health, plus landscape and cultural values.

**2. Protecting biodiversity**

The unity of natural areas will be secured in all nature reserves and Natura 2000 sites and other conservation areas, and valuable natural resources in general and endangered and rare species will be recognised. Ecological connections will be promoted and protected between conservation areas and other valuable natural areas.

**3. Preventing environmental hazards**

Assurance must be given that emissions to lakes, rivers and groundwater, soil and atmosphere, as well as noise pollution, will not increase. Environmental risk management and preventive actions will be promoted. To advance

a good chemical and ecological state in waterways, steps will be taken to combat eutrophication and the degradation of the state of surface water will be prevented. Water supplies of communities in important groundwater areas will be secured and safeguarded.

**4. Promoting living conditions**

Environmental skills, voluntary change to more sustainable and environment-friendly production and consumption and working conditions will be supported. The special needs of different population groups will be taken into consideration. The immediate surroundings of housing areas and centres will be developed and the utilisation of recreation and natural areas will be promoted. Training programmes will be developed to include and implement ecological and increased awareness targets, in addition to informational targets. Interactive planning and development methods will be put into practice. Possibilities for citizens to participate in community planning and decision making with respect to their environment will be promoted.

**Definitions a, b and c can be used as a definition for the compulsory criterion "Sustainable development" when the definitions of criteria a and b and paragraphs 1–4 with an explanation of criterion c are taken into account and put into practice.**

# Annex 10: Guide for ensuring the integration of the horizontal priority "Environment," Sweden

A guide[xix] supporting project owners and desk officers in selecting and enhancing environmental aspects of Structural Fund projects has been developed by the Swedish Environmental Protection Agency on behalf of the national managing authority. In particular, it supports owners of projects related to environmental technology, energy production, energy efficiency and thus climate change mitigation. However, no explicit reference is made to climate change adaptation. The guide has been widely accepted and is used by the majority of project proponents. It asks concrete questions that stimulate clear answers enabling evaluations. The guide represents an awareness-raising effort aimed at stimulating greater environmental awareness among project proponents, managing authorities and selection committees. As it is not a detailed document, the guidelines function more as inspiration for ideas.

Through the implementation of the guide, analyses of the replies have increased and been presented to the monitoring committee. If negative aspects are determined, the applicant is requested to amend and extend the application.

The three dimensions of sustainable development – economic, social and environmental – are taken into consideration in all stages of project implementation. Three horizontal priorities are developed, among them the environmental priority.[xx] The project's impact on the horizontal criteria will be assessed.

The information provided in the application will be followed up in progress reports during the implementation of the project.

**Guide: Horizontal criterion — The environmental aspects of the project (Sweden)[xxi]**

**Version of June 24, 2008**

**Introduction**

When implementing regional Structural Funds programmes, the three dimensions of sustainable development (economic, social and environmental), will be taken into account in all phases of implementation. Contribution to sustainable development is a key topic in Sweden as well as in the EU.

Each project implemented within the programme cannot be expected to be positive with respect to all dimensions of sustainable development. However, consideration should be given to the general objectives and priorities in order to ensure the sustainability of the overall development. A sustainable society is able to meet the needs of the present without compromising the ability of future generations to meet their own needs.

**The environmental aspects of the project**

Applicants for project funding from regional Structural Funds programmes are requested to describe how the project will impact the environment.

This is a guide for applicants filling in the application form. The first four questions should be addressed in the project application form. The additional questions function as assistance in the formulation of considerations of environmental aspects. The majority of the questions are relevant to all projects. Certain questions are relevant for specific kinds of projects. It should be borne in mind that what is stated in the application will be followed up in the reporting.

**Answers to the four questions below shall be included in the project application:**

- What are the environmental objectives of the project?
- What activities are planned in order to achieve the environmental objectives of the project? (The activities should be included in the activity plan.)
- What is the environmental impact of the project's results?
- Does the project have any impact on Natura 2000 areas?

**The questions below act as guidance for the formulation of the project application and for responding to the questions above:**

**All projects**

- How will the environmental operations be structured within the project and within the activities to which the project is expected to lead (e.g. environmental policy, environmental management systems)?
- How will the project lead to the more efficient use or increased recycling of energy, natural resources, water and other materials within the project and in the activities to which the project is expected to lead?
- Will the activities in which the project is expected to result lead to emissions of $CO_2$ or other greenhouse gases, emissions of toxic substances, waste, eutrophication, noise, or impacts on biodiversity? If yes, describe how.
- How will the project lead to the encouragement/stimulation of environmentally friendly travel, housing and restaurants/meals?
- How will the project contribute to the achievement of national or regional environmental objectives?
- How will the project lead to increased environmentally friendly transport and transport systems (public transport, renewable fuels, cycle lanes, etc.)?
- How will the project lead to reduced transport needs (e.g. through better planning, infrastructure or increased use of information technologies)?

**Questions for projects within innovation and renewal** (including entrepreneurship, cluster/partnership, environmental and energy efficiency or technical/organisational methods):

- Will the project lead to an increase in the number of environmental technology companies and/or lead to an increased application of environmental technology in existing companies?
- Will eco-innovative products or services be used/promoted?
- How will the value of experience of the natural environment, cultural environment or other environments be increased?

**The applicant's assessment of the project** (this assessment shall be included in the project application form):

Only one alternative to be selected

- ☐ Directly aimed at improving the environment
- ☐ Has a predominantly positive impact on the environment
- ☐ Has a predominantly negative impact on the environment

**Explanation of the assessment criteria**

"Directly aimed at improving the environment": Improvement of the environment is one of the main objectives, which is clearly reflected in the stated activities, objectives and expected results.

"Has a predominantly positive impact on the environment": The impact of the project on the environment is presented in the project description. The project is expected to have a predominantly positive impact. Several activities in order to improve the environment will be carried out in the project.

"Has a predominantly negative impact on the environment": The impact of the project on the environment is presented in the project description. The project is expected to have a predominantly negative impact. The project includes activities in order to minimise the negative impact.

**Definitions**

**Natura 2000** is a network of natural habitats most worth preserving in the EU and is one of the most important measures for preserving biodiversity. The member states shall nominate bird protection areas and other wildlife areas or natural habitats. In Sweden, Natura 2000 areas are protected with the support of the Environmental Protection Act and are categorised as being of national interest. As of December 2007, Sweden has 4,063 Natura 2000 sites.

**The natural environment** or "nature" is the external environment (comparatively) free from human impact. The notion of natural environment is very wide and includes natural environments with flora and fauna both on land and in water as well as bedrock, layers of the earth's surface and groundwater and air. Landscape scenery and cultural environments can also be included, as well as natural environments in the vicinity of urban areas.

**The cultural environment** is the environment that has been formed by human activities over time. It ranges from single areas or buildings to entire landscapes.

**Environmental management** is a method aimed at creating systematic and efficient environmental operations in businesses or authorities. The method leads to target-oriented environmental operations that follow a structure in which activities are seen in a holistic perspective. An environmental management system assists companies and authorities to direct environmental activities to efficient implementation.

# Annexes related to Chapter 4

## Annex 11: SEA monitoring system in Austria

**Questionnaires**

**Air + Climate**

**Category: 01-04, 07, 52, 59, 61 (investment measures)**

**Question project dimension:**

Total costs
> EUR 350,000

Indicator: Development of air pollutants

**Sub-question 1: Does your project lead to an increase/decrease in the use of fossil energy resources (oil, natural gas, coal ...)?**

Answer: Increase
Decrease
No change
Not applicable

**Sub-question 2: Does your project lead to changes of emissions of the following air pollutants?**

$CO_2$ Increase
Decrease
No changes
not applicable
..... Please insert the tons of CO2-equivalents/year, if available.

$SO_2$ Increase
Decrease
No change
Not applicable
..... Please insert the tons of $SO_2$/year, if available.

NOx Increase
Decrease
No change
Not applicable
..... Please insert tons of NOx/year, if available.

PM 10 Increase
Decrease
No change

Not applicable
…….. Please insert tons of PM10/year, if available.

Others: Increase
Decrease
No change
Not applicable
…….. Please insert tons/year, if available.

Noise Increase
Decrease
No change
Not applicable

Smell Increase
Decrease
No change
Not applicable

**Question project dimension:**

Total costs
< EUR 350,000

**Sub-question 1: Does your project lead to an increase/decrease in the use of fossil energy resources (oil, natural gas, coal …)?**

Answer: Increase
Decrease
No change
Not applicable

**For Category 06, 39-43 (investment measure) additional**

**Sub-question 2: Does your project lead to changes of emissions of the following air pollutants?**

$CO_2$ Increase
Decrease
No change
Not applicable
…….. Please insert tons of $CO_2$ equivalents/year, if available.

**Energy, resources, mobility I**

**Category: 01-03, 06 07, 11, 14, 15 (investment measures)**

**Question project dimension:**

Total costs
> EUR 350,000

Indicator: Increased efficiency of production, service and mobility systems

**Sub-question 1: On which level is your project located?**

Answer: Research and development (including infrastructure)
Market introduction (including pilot projects)
Market replication of products, processes, services

**Sub-question 2: Do you expect changes in energy and resources efficiency?**

Answer: Decrease of emissions to air/water/soil per production unit
Decrease of waste per production unit
Decrease of energy per production unit
Decrease of resources per production unit
Increase of the life span of the product
Other effects
No effects at all

**Sub-question 3: Do you expect direct or indirect changes to mobility systems?**

Answer: Increase in efficiency/sustainability of goods
Transportation
Increase in efficiency/sustainability of the transportation of people
Increase in road transportation of goods (including noise emissions)
Increase in road transportation of persons (including noise emissions)
No effects at all

**Question project dimension:**

Total costs
< EUR 350,000

No further questions

**Energy, resources, mobility II**

**Category: 04 (investment measures)**

Indicator: Increased efficiency in production, service and mobility systems

**Sub-question 1: On which level is your project located?**

Answer: Research and development (including infrastructure)
Market introduction (including pilot projects)
Market replication of products, processes, services

**Sub-question 2: Do you expect changes in energy and resources efficiency?**

Answer: Decrease in emissions to air/water/soil per production unit
Decrease in waste per production unit
Decrease in energy per production unit
Decrease in resources per production unit
Increase in the life span of the product
Other effects
No effects at all

**Sub-question 3: Do you expect direct or indirect changes to mobility systems?**

Answer: Increased efficiency/sustainability of goods transportation
Increased efficiency/sustainability of the transportation of people
Increased road transportation of goods (including noise emissions)
Increased road transportation of persons (including noise emissions)
No effects at all

**Energy, resources, mobility III**

**Category: 08, 09, 16, 26, 30 (investment measures)**

**Question project dimension:**

Total costs
> EUR 1,000,000

Indicator: Increased efficiency in production, service and mobility systems

**Sub-question 1: Do you expect changes in energy and resources efficiency?**

Answer: Increased energy efficiency (new insulation...)
Increased resources efficiency including waste reduction
Decrease in emissions to air, water and soil
Other effects
No effects at all

**Sub-question 2: Do you expect direct or indirect changes to mobility systems?**

Answer: Increased efficiency/sustainability of goods transportation
Increased efficiency/sustainability of the transportation of people
Increased road transportation of goods (including noise emissions)
Increased road transportation of persons (including noise emissions)
No effects at all

**Question project dimension:**

Total costs
< EUR 1,000,000

No further questions

**Energy, resources, mobility IV**

**Category: 39 – 43, 52, 57, 59 – 61 (investment measures)**

**Question project dimension:**

Total costs
> EUR 350,000

Indicator: Increased efficiency in production, service and mobility systems

**Sub-question 1: Do you expect changes in energy and resources efficiency?**

Answer: Increased energy efficiency (new, insulation...)
Increased resources efficiency including waste reduction
Decreased emissions to air, water and soil
Other effects
No effects at all

**Sub-question 2: Do you expect direct or indirect changes on mobility systems?**

Answer: Increased efficiency/sustainability of goods transportation
Increased efficiency/sustainability of the transportation of people
Increased road transportation of goods (including noise emissions)
Increased road transportation of persons (including noise emissions)
No effects at all

**Question project dimension:**

Total costs
< EUR 350,000

No further questions

# Annex 12: Selected international, national and regional practices for monitoring environmental sustainability (including monitoring approaches adopted in previous EU programmes)

**HM Treasury Green Book**

The document acknowledges that the evaluation of environmental costs and benefits is constantly evolving. With regard to climate change, the Green Book covers the following areas:

- Greenhouse gas emissions — This acknowledges that there is no standard methodology: emissions should be expressed in terms of carbon savings or in terms of additional emissions. In cases where quantification of climate change is impractical, an assessment of whether the policy is likely to increase or decrease emissions should be assessed. The cost of carbon emissions in terms of both social damage and monetary value should be considered.
- Vulnerability to the impacts of climate change — Linked to the UK Climate Impacts Programme (UKCIP), this helps to assess risks and uncertainties arising as a result of the changing climate and a methodology for costing the impacts.

**UK Sustainable Development Framework**

This framework provides several indicators concerning greenhouse gas emissions per capita, $CO_2$ emissions from the burning of fossil fuels, and energy used per capita along with the percentage of renewables in the total energy supply. Regional sustainable development frameworks monitor total $CO_2$ emissions and emissions per capita, and $CO_2$ emissions by end user. The South West UK sustainability operating principles support energy and resource efficiency and the wider incorporation of renewable energy; the promotion of a low-carbon economy through innovation, enterprise and economic development; the reduction of high-carbon travel; and a long-term approach regarding climate change mitigation and adaptation. Local area agreement environmental performance indicators to be reported by local authorities include: $CO_2$ reduction from local authority operations; per capita reductions in $CO_2$ emissions in the local authority area; the tackling of fuel poverty in homes with low energy efficiency; climate change adaptation; and the management of flood and coastal erosion risks.

**South West Regional Sustainable Development Framework**

To achieve the South West's sustainability mission, a set of practical sustainability operating principles have been developed for the region. These translate the UK's sustainable development strategy into a regional context. The framework provides ten sustainability principles that should be applied across all areas of activity in the region in order to achieve regional and national sustainable development objectives. The following principles refer to climate change:

- Be resource wise: Cut consumption of resources and adopt high energy, water and resource efficiency at home and at work; maximise the use of local, renewable energy; minimise waste; and prevent pollution.
- Support thriving low-carbon economies: Boost competitiveness, business markets and employment opportunities by supporting a low-carbon approach to innovation, enterprise and economic development in ways that meet local workforce needs, e.g. local renewable energy, sustainable construction and renovation, environmental technologies and local/regional supply chains.
- Reduce high-carbon travel: Use, promote and plan for low-carbon access/travel, e.g. walking and cycling, home-working, mobile services, ICT/video-conferencing, online facilities, local multi-service centres, demand-responsive public transport and alternative fuels.

**South West Regional Environment Strategy**

The strategy includes specific climate change actions such as a review of the key regional strategies:

- to identify the extent of the inclusion of climate change adaptation and mitigation measures and to incorporate these issues into regional spatial strategy and local development frameworks;
- to raise awareness of climate change issues in community planning processes;
- to develop regional sustainable energy strategies and sub-regional energy plans;
- to undertake landscape sensitivity assessments at county level to provide support to sub-regional renewable energy targets;
- to develop regional woodland and forestry frameworks to create strong mitigation and adaptation effects;
- to establish a programme management unit from SWCCIP to create a hub of expertise on climate change adaptation in the region; and
- to investigate the impacts of climate change on nature conservation efforts and to develop specific adaptation strategies to help protect priority species and habitats in the South West.

# Annex 13: French tool for monitoring the carbon performance of a set of regional projects funded by Structural Funds and the CPER

**NECATER**

DIACT has developed a tool together with the consultants Energie Demain and with the support of a steering group comprising DIACT, MIES (the inter-ministerial study group for greenhouse gases), ADEME [xxii] (Environment and Energy Agency), the Ministry of Environment, Energy, Sustainable Development and Territory Management[xxiii], and the Ministry of Economy, Industry and Employment[xxiv]. The tool is offered to the regions free of charge so that they may use it to measure their position vis-à-vis carbon neutrality. The tool is suitable only for climate change mitigation projects.

The tool is based on several factors linked to initial hypotheses:

- **Job creations per sector** — the effect of Structural Funds on employment. It allows the development of ratios and references later translated into carbon emissions, based on the fact that a job creates added value, economic activity and additional transportation, which in turn creates GHGs. Data come from the already available evaluations of employment and its impact on carbon emissions.
- **State of the region** — As each region is unique, its social and economic development through the demography and added value of each economic sector must be taken into consideration. The already available statistical data are used.
- **Structural data** — available through national statistics: transport flow per mode of transport, size of vehicle fleet, size of the region, infrastructure, housing typology, local weather conditions, etc.

The carbon impact evaluation tool can be used in two phases:

1. To serve as an initial evaluation of the CPER at the negotiation stage (macro-analysis based on the detailed list of LOLF[xxv] programmes' eligible expenditures).
2. To allow continuous monitoring of carbon emissions of operations financed by CPERs or European operational programmes.

There are currently three applications of the tool:

**1. To support the decision-making process during the negotiation of CPERs**
It is an easy-to-use and relatively conclusive tool aimed at supporting decision making. It provides a far better measurement of the whole set of projects in a region and it is not sufficiently precise for individual projects. The results of the evaluation will be taken into consideration during the mid-term revision of the CPERs.

**2. To evaluate greenhouse gas emissions of CPERs and OPs**
The tool supports the continuous monitoring of the carbon performance of projects throughout their life cycle and regions as a whole vis-à-vis the carbon neutrality objective.

The carbon evaluation tool has been adapted to the PRESAGE system,[xxvi] which is already used for the management of European programmes and CPERs. This means that the carbon evaluation tool will use the information on each operation that is systematically fed into the PRESAGE system obligatorily: adapted EC regulations, financial figures, and more precise physical indicators (e.g. jobs directly created by projects, $m^2$ built or renovated) which allow a better assessment of emissions.

It is of utmost importance to establish a good link between NECATER and PRESAGE in order to refine the hypothesis.

The tool then applies calculated ratios to these data and links investments to carbon emissions throughout the implementation of the projects and throughout their life (i.e. 50 years for big infrastructure projects).

**3. To provide environmental monitoring of CPERs and OPs**

The state of every region is modified by CPER and ERDF projects, thus NECATER helps to quantify the state of the region before the 2007–2013 programme and after it.

The tool for the evaluation of greenhouse gas emissions will monitor the environmental impact of OPs and CPERs in terms of greenhouse gases. DIACT offers a ready-to-use tool that complies with the environmental impact assessment requirements of the SEA Directive (2001/42).

# Annex 14: Reducing carbon impacts of investments: Climate Change Escalator Initiative, UK

In 2007, the South West RDA launched a special initiative aimed at significantly reducing the carbon impact of investments based on year to year improvements in order to achieve zero impact in five years. Operating principles are currently under development to achieve a net zero carbon annual investment portfolio by 2013. The Energy White Paper published in 2007 specifically committed the RDA to set carbon reduction targets in the Corporate Plan and annually estimate and publish carbon saving estimates of policies and programmes introduced by 2010 and 2020.

A special carbon bank balance has been created to manage investments in projects with a negative carbon impact leading the carbon balance into deficit; and investments in projects with a positive carbon impact that contributes to the overall impact and taking the carbon balance into credit. It is intended that a net zero carbon annual investment portfolio is achieved by 2013 with the programme outlined below.

**2008/2010 — Low Carbon Investment Portfolio**

During the first two years, sustainable construction standards will continue to be applied, as well as investments in carbon saving activities such as business resource efficiency advice. From April 2008 to March 2009, carbon credit and deficit projects underwent tests to elaborate a set of operating principles, and to assess the availability and applicability of methodologies for measuring the carbon footprint of the projects. The reason behind this was the period of learning required to move from a low carbon investment portfolio to a net zero portfolio.

During year two (April 2009–March 2010), the methodology will be further developed and other project types will be tested to see if they are suitable for incorporation into the escalator. The carbon footprint of applicable projects will be measured and efforts will continue to drive down their carbon footprint to achieve a low-carbon outcome across the investment period.

**2010/2012 — Transition to a Net Zero Carbon Investment Portfolio**

Toward the end of the current Corporate Plan period and during the following year (April 2010–March 2012), the carbon footprint of applicable projects will be further reduced, but the carbon bank balance will be available to inform investment decisions. With an understanding of the financial headroom, the carbon headroom will also become a considering factor.

Although it was initially anticipated that this period would be carbon neutral, offsetting the carbon impact by investing in carbon-saving projects outside the Corporate Plan, after further consideration it has been decided that a carbon balance will be achieved by intensifying investments in carbon-saving projects within the Corporate Plan. Thus, if some projects take the carbon balance into deficit, the investment in carbon-saving projects that the RDA is already supporting will be intensified, moving towards a carbon balance and ensuring a very low carbon outcome.

**2012/2013 — Net Zero Carbon Investment Portfolio**

Net carbon impact across all applicable projects in the South West RDA investment portfolio will be decreased to zero by reducing the carbon footprint of investments and investing largely in carbon-saving projects. The carbon bank balance will become the major factor to consider when taking investment decisions.

A panel of experts will be established in the near future to develop operating principles, monitor and report progress and engage stakeholders and the community. It is planned to incorporate the climate escalator into business planning and appraisal procedures and into environmental management systems applied in the region.

The technical skills needed will be identified, a common methodology for the carbon footprint assessment of investments will be agreed with the Department for Environment, Food and Rural Affairs (Defra), the Science and Industry Council, and other RDAs. Intensive awareness raising and training will be carried out internally and externally for all parties involved.

**Sustainable construction requirements**

The Convergence and Competitiveness operational programmes place strong emphasis on using high-standard sustainable construction methods and energy efficiency within buildings constructed under both programmes. This sustainability standard is to be largely achieved in the majority of capital builds through achieving a BREEAM rating of "Excellent." The delivery of BREEAM Excellence is required given the understanding that this will improve the overall efficiency of the building, its long-term economic resilience (to changing energy prices, client expectations, etc.), its future proofing against new legislation and regulation and through assisting the stimulation of demand for new sustainable building materials, services and technologies. Further information about BREEAM requirements and the process is provided in **Annex 1.**

**South West RDA commercial building guidelines**
South West RDA guidelines regarding commercial buildings require that financed projects should follow the carbon escalator policy as follows: low carbon from January 1, 2008 to December 31, 2010 (44 percent improvement in $CO_2$ emissions should be made compared to the 2006 benchmark); carbon neutral from January 1, 2010 to December 2011 (100 percent improvement in $CO_2$ emissions should be made compared to the 2006 benchmark); and zero carbon from January 1, 2012. Construction sites should meet and exceed draft regional spatial strategy policy RE5 regarding on-site renewable energy generation. Sites should also be designed to achieve the highest adaptability levels to meet climate change challenges. A feasibility study should be carried out regarding opportunities to provide space, infrastructure and technologies for the installation of photovoltaic and solar thermal equipment and on-site or remote energy generation on macro and micro scales.

# Annexes related to Chapter 5

## Annex 15: European Technology Centre (EEE) in Gussing, Burgenland

European Cohesion Policy investment is helping Burgenland to develop cutting-edge technologies in the renewable energy sector. EU funding was an essential lever for triggering this development: nearly EUR 20 million plus additional regional and national funding has been provided for renewable energy projects in the Gussing area (http://ec.europa.eu/regional_policy/sources/docgener/informat/country2009/at_en.pdf).

The so-called Gussing Model is the strategy of decentralised, local energy production with all available renewable resources in a region. Since every region has certain renewable energy resources in different proportions, the model can serve as an example for many communities.

Using wood from local forests in its biomass heating plant, the town of Gussing produces more electricity than it consumes and is able to provide power for the entire region. Over 50 companies and 1,000 jobs have been created in the renewable energy sector alone and, since 1995, Gussing has reduced its carbon dioxide emissions by 93 percent.

The European Centre for Renewable Energy (EEE) has its headquarters in Gussing (southern Burgenland). The EEE's main mission is to develop lasting regional- and community-based concepts for energy conservation and for the generation and use of renewable energy. The EEE acts as an umbrella organisation for all energy-related activities in the Gussing region. It also organises lectures and training in the field of renewable energy and tours through the "Eco Energy Land" formed by the EEE and 10 municipalities in the area around Gussing.

The EEE is a network organisation that is active on multiple levels. At the local/regional level, the EEE organises tours in the framework of eco-energy tourism and is the contact for information about the energy production plants in the Gussing district. At the national level, the EEE coordinates the exchange of information between research institutes, educational institutes and industry. At the international level, the EEE is involved in numerous networks in the field of renewable energy and participates in projects that have the goal of identifying so-called energy regions.

The EEE has created the biomass district heating plant in Gussing (the largest in Europe when it was founded), a biodiesel plant and the biomass power plant in Gussing, which is currently the only one of its kind in the world. A suitable logistics plan for wood supply was created, and a wood drying facility was built, which is essential to ensuring a year-round supply for the district heating network.

# Annex 16: Carbon neutral development of Newquay Airport – Airport development with a focus on becoming operationally carbon neutral by 2015 and totally carbon neutral by 2025

Newquay Cornwall Airport is a small airport that plays an important role in overcoming the peripheral region's relative isolation. Newquay Cornwall Airport is a long-established military airport that began civilian flights in 1993. Since then, the airport has become a solely civilian service. Until 2001, passenger numbers remained small (less than 100,000 per annum), but following the introduction of a London Stansted service in 2002, passenger numbers almost doubled to 185,000 per annum and rose to 350,000 in 2007.

Whilst the development of the airport is likely to have a modest impact on passenger growth (high growth scenarios envisage 1.8 million passengers per annum by 2030), Cornwall Council, as owners of the site, additionally envisage a range of supporting developments to build on the economic potential of the site, including a business development area, terminal development and other economic development projects.

As with any complex development project, ERDF is only partly funding the overall development costs. For the South West RDA, in managing the delivery of the Cornwall and Isles of Scilly Convergence Programme, it is therefore a complex process to determine which elements of environmental sustainability are part of the overall development or are exclusively ERDF funded.

With input from the region's **Cross-Programme Environment Advisory Group** and Cornwall Council, it was felt to be disingenuous to exclude environmental considerations from non-ERDF-funded elements, and therefore a "whole-project" approach to environmental sustainability should be developed. The delivery of a **whole-project approach to environmental sustainability** is core to Newquay Cornwall Airport's development objectives, helps develop and embed environmental sustainability into non-ERDF-funded programmes and investments, and also acknowledges that delivering environmental sustainability is a long-term and ongoing objective.

In order to ensure that environmental sustainability remains core to the development of Newquay Cornwall Airport, Cornwall Council has drawn up a variety of master planning documents, including a draft Sustainability and Environmental Management Strategy, a draft Surface Access Strategy, a Carbon Impact Study (to 2030) and a strategic environmental assessment. These documents have helped to shape Newquay Cornwall Airport's commitment to **carbon neutrality**, whereby it aims to deliver the carbon neutrality of all its terminal and ground operations by 2015 (including initiatives such as converting all ground vehicles to run on electricity; the installation of wind turbines and other micro-renewables; energy-saving initiatives and enhanced recycling; a bio-diesel taxi fleet and enhanced public transport; new developments to be constructed in line with BREEAM standards); and by 2030, the airport aims to be **carbon neutral** in terms of aviation and surface access.

Because of the complex relationship between different delivery partners, lengthy delivery timescales, commercial investment interests, complex planning processes and input from multiple funders, the **Cornwall and Isles of Scilly Convergence Programme** felt it best to work with Cornwall Council in establishing a **World-Class Newquay Cornwall Airport Environmental Steering Group** that would give expertise and help shape the concrete delivery of the airport's strategic environmental objectives in the short, medium and longer term. The steering group will meet quarterly with the minutes of meetings reported to the South West RDA as part of ongoing project monitoring. This steering group, imposed on the Airport Delivery Team as part of a **contract condition** for ERDF investment, will ensure that there is ongoing input and challenge from the environmental sector (via the steering group) in ensuring and helping Newquay Cornwall Airport to deliver the highest possible standards of environmental sustainability and to become a world leader in reducing the environmental intensity of aviation.

# Annex 17: Matrix for evaluating projects under the thematic call "Territorial Excellence" in Nord–Pas de Calais, France

| Themes | Not applicable | None/weak | Average | Good | Excellent |
|---|---|---|---|---|---|
| **Studies** | | | | | |
| Implementation of preliminary environmental assessment | | | | | |
| Quality EIA: What is quality EIA – EIA of quality? | | | | | |
| Participation of an environmental expert: where, in drafting of the project? | | | | | |
| **Management of natural resources** | | | | | |
| Contribution to the maintenance and development of biodiversity | | | | | |
| Qualitative and quantitative water management | | | | | |
| Waste management | | | | | |
| **Environmental practices** | | | | | |
| Environmental monitoring of the project | | | | | |
| Distribution of good environmental practices: Distribution for whom? By the project? | | | | | |
| **Sustainable urban development** | | | | | |
| Extent of taking the high environmental quality building standard into consideration | | | | | |
| Energy savings | | | | | |
| Promotion and use of renewable energy sources | | | | | |
| Transport accessibility | | | | | |

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# Notes

[i] EUR 347 billion in the 2007–2013 period
[ii] The ERDF and the CF are managed by DG REGIO, while the ESF is managed by DG EMPL.
[iii] In the EU-27, the convergence objective concerns regions with per capita GDP of less than 75 percent of the Community average. It includes 84 regions within 17 member states, with a total population of 154 million, and, on a "phasing-out" basis, another 16 regions with a total of 16.4 million inhabitants and a GDP only slightly above the threshold, due to the statistical effect of the larger EU (DG REGIO website, consulted July 22, 2009).
[iv] Contrat de Projets Etat Region
[v] Apart from new member states, convergence regions include Portugal, southern Italy, eastern Germany, southern Spain, parts of south-eastern England and Greece and the outermost French regions.
[vi] Plans climat
[vii] Mission d'Appui de l'Environnement (MAE)
[viii] Délégation inter-ministérielle à l'aménagement et à la compétitivité du territoire (inter-ministerial delegation for regional planning and competitiveness)
[ix] Building Research Establishment Environmental Assessment Method
[x] Délégation inter- ministérielle a l'aménagement et à la compétitivité du territoire : inter-ministerial delegation for regional planning and competitiveness.
[xi] Not to be mistaken with EIA as per EIA Directive 2003/35/EC
[xii] Inter-ministerial delegation for regional planning and competitiveness
[xiii] JASPERS is a technical support facility set up in 2006 to help the 12 new member states to identify and prepare projects potentially eligible for assistance under the EU Structural Funds (European Regional Development Fund and Cohesion Fund) as well as to make efficient use of the grant money. JASPERS is managed by the European Investment Bank (EIB), and the other partners are the European Commission, the EBRD and KfW.
[xiv] For example, in the Slovakian Ministry of Environment, a department of climate change has recently been established with a staff of five, to make a national climate change strategy and to enhance the horizontal integration of climate change issues.
[xv] Mission d'Appui de l'Environnement (MAE)
[xvi] Services d'instructeurs
[xvii] Translated from French to English by the authors
[xviii] Délégation inter-ministérielle a l'aménagement et à la compétitivité du territoire (Inter-ministerial delegation for regional planning and competitiveness).
[xix]
http://www.tillvaxtverket.se/huvudmeny/euprogram/ansokaomprojektmedel/handledningforifyllandeavprojektansokan/kapitelhandledning/11horisontellakriterier/guidemiljoaspekternaiprojektet.4.21099e4211fdba8c87b800016806.html (only in Swedish)
[xx] The three horizontal priorities are environment, equality and integration, and diversity.
[xxi] Translated by the authors from Swedish to English
[xxii] Agence de l'Environnement et de la Maîtrise de l'Energie
[xxiii] Ministère de l'Écologie, de l'Énergie, du Développement durable et de l'Aménagement du territoire
[xxiv] Ministère de l'Economie, de l'Industrie et de l'Emploi
[xxv] Loi organique relative aux lois de finances : Law on public finances

[xxvi] The PRESAGE software was developed for the 2000–2006 period for the monitoring of Structural Funds and CPER, and DIACT is responsible for it. There is an updated version for the 2007–2013 period. The European Commission was closely involved in the development of the tool. http://presage-info.org/no_cache/accueil.html