



INTERREG IVC Project 'RECOMMEND'

Screening of Good Practices in Regional Eco-Management and Eco-Innovation Support Schemes

A QUALITATIVE REVIEW

Sarine BARSOUMIAN
Simon HUNKIN
Katharina KRELL
Astrid SEVERIN

Brussels, June 2012

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Executive Summary

The INTERREG IVC project RECOMMEND (*Regions using ECO-Management for eco-innovation Development*) aims to deliver new and improved policy instruments to improve eco-innovation, such as enhanced eco-voucher schemes and eco-management practitioner networks.

The project partners have commissioned the present study to screen examples of regional good practice in eco-management and eco-innovation, with the aim of allowing comparability between tools and developing an understanding of the status quo of the partner regions. Moreover, the RECOMMEND partners aspire to transfer interesting good policy practices between the regions and are keen to understand which aspects of a policy practice can be transferred or needs to be adapted.

For the purpose of this study, the following definitions have been used:

- Eco-innovation: fostering innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle.
- Eco-management: enabling organisations to assess, manage and continuously improve their environmental performance, through systems such as the Eco-Management and Audit Scheme (EMAS) and ISO 14001.
- Good practice: a policy instrument that has achieved (or promises) impressive results and that can be developed and transferred to new regions and organisations.

A total of 15 case studies have been collected and examined: nine submitted by the RECOMMEND partner regions and six that were collected from non-partner regions by authors of the report. The majority of good practices collected are grant schemes (8) out of which four are green innovation voucher schemes. Other good practices are accreditation / certification schemes (3), eco-innovative clusters (2) as well as one voluntary agreement and one open scheme (operational programme).

The study presents a qualitative snapshot of the collected policies and provides conclusions comparing good practices from eco-innovation and eco-management, seeking common features and similarities of the good practices collected and focusing on the different aspects to be considered for the transfer of good practices to other regional contexts. Moreover, the study makes the following recommendations to the RECOMMEND partner regions:

1. Undertake a comprehensive and systematic mapping exercise of all existing eco-innovation and eco-management policy instruments in place in own regions and conduct a subsequent gap analysis to see what types are missing in each one.
2. Encourage bottom-up approaches in order to match political priorities with local/regional realities.
3. Identify the low-hanging fruits in regions that need to improve environmental performance and encourage stricter benchmarks and eco-innovation in regions that are further advanced or want to specialise in eco-innovation.
4. Ensure and utilise complementarities of different policy instruments (planned or in place) in a more proactive way.
5. Design and implement innovative policies that inspire European industries to implement eco-management as well as eco-innovative practices in their businesses.
6. Consider combining different good practices in order to create synergies and make best use of the resources available.
7. Define clear regional targets and target audiences for regional eco-innovation and eco-management policy measures.
8. Choose good practices that are best answering specific regional objectives and needs of regional actors.
9. Break down each best practice into its constituting aspects before considering transfer.
10. Analyse and adapt each aspect of a good policy practice to your regional context before implementing it in your region.

Overview of good practices collected:

Instrument Name	
<p>Copenhagen Cleantech Cluster (Denmark)</p>	<p>Aim: To attract foreign cleantech investment and companies, but also strengthen members of the cluster and foster a more closely connected value chain, as competitiveness of the industry depends on ability to be innovative.</p> <p>Administrative Agency: Copenhagen Capacity Target Group: Research institutions, universities, financial institutions, business organisations, business incubation environments.</p>
<p>Instrument type: Cluster</p>	<p>Sector: Renewable energies, energy efficiency, eco-design, waste collection and recycling</p>
<p>EnviroCluster (United Kingdom)</p>	<p>Aim: To help businesses and organisations develop new products and services that have a positive environmental impact or that help with environmental management.</p> <p>Administrative Agency: UK Centre for Economic & Environmental Development Target Group: Companies, local authorities and higher education institutions based in the East of England Sector: Energy, material and design, pollution prevention, waste and recycling, water and wastewater treatment, smart-tech and ICT, environmental services</p>
<p>Instrument type: Cluster</p>	
<p>Green Investment Scheme (Estonia)</p>	<p>Aim: To support the conversion of existing buildings into energy efficient ones, through adoption of new technologies and energy efficiency measures.</p> <p>Administrative Agency: KredEx Target Group: Building owners, apartment associations, building associations, communities of apartment owners Sector: Energy efficiency, sustainable construction</p>
<p>Instrument type: Grant</p>	
<p>GreenConServe Innovation Vouchers (Norway)</p>	<p>Aim: To transform the construction sector into a greener, value-adding service industry by providing small grants that can be exchanged for technical and business expertise to support innovation processes.</p> <p>Administrative Agency: Innovation Norway Target Group: Service companies defined as SMEs Sector: Services in the sustainable construction sector</p>
<p>Instrument type: Voucher scheme</p>	
<p>Innovation Vouchers (Czech Republic)</p>	<p>Aim: To act as a financial instrument to support co-operation between industry and R&D. Co-operation is defined as the purchase of external services, delivered by a researcher to an industrial partner, to improve innovation potential.</p> <p>Administrative Agency: Several Target Group: Entrepreneurs in the region Sector: Energy, water, waste, various.</p>
<p>Instrument type: Voucher scheme</p>	
<p>Intelligent, Resource-Efficient Production Technologies (EffTech) (Finland)</p>	<p>Aim: To develop energy and resource-efficient production technologies to meet sustainability goals for the forestry industry, by funding and supporting research consortia projects.</p> <p>Administrative Agency: Forestcluster Target Group: Forest industry, machinery and chemical suppliers, higher education institutions, research institutions Sector: Forestry, industrial production, resource efficiency</p>
<p>Instrument type: Grant</p>	
<p>Investors in the Environment (United Kingdom)</p>	<p>Aim: To help businesses save money and reduce their impact on the environment through an environmental accreditation scheme, as well as by providing networking and publicity for accredited companies.</p> <p>Administrative Agency: Peterborough Environment City Trust Target Group: Any business or organisation Sector: All sectors</p>
<p>Instrument type: Accreditation scheme</p>	

ITACA Protocol (Italy)	Aim: To evaluate the energy and environmental qualities of a building, thus encouraging sustainable construction of more environmentally friendly and energy efficient buildings.
Instrument type: Certification tool	Administrative Agency: ITACA (Institute for Innovation and Transparency in Procurement and for Environmental Compatibility) Target Group: Households, private and public actors involved in sustainable buildings Sector: Construction, sustainable buildings and energy efficiency
Long Term Agreements (Netherlands)	Aim: To stimulate eco-innovation and encourage eco-management amongst small, medium and large enterprises and organisations, whilst maintaining competitiveness through voluntary agreements, thus avoiding regulation.
Instrument type: Voluntary agreement	Administrative Agency: Agentschap NL Target Group: Mostly medium sized companies Sector: Energy efficiency, CO ₂ reduction
National Innovation Fund (Bulgaria)	Aim: To promote the implementation of scientific and applied research projects, and stimulate market-oriented applied research for industry, thus creating conditions for attracting private capital to finance innovations.
Instrument type: Grant	Administrative Agency: Bulgarian Small and Medium Enterprises Promotion Agency Target Group: Any legal entity registered under commercial law, but especially SMEs and universities Sector: No priority areas
Ökomanagement Niederösterreich (Austria)	Aim: To fund consultancy to private and public organisations in order to develop and implement environmental and climate friendly measures. To support SMES and communities in adopting environmental management systems.
Instrument type; Voucher scheme	Administrative Agency: Lower Austrian Regional Government, Office of Environmental Economics Target Group: SMEs, large firms, municipalities, education centres Sector: All sectors
Regional Operational Programme (Poland)	Aim: To help existing businesses to adapt to environmental protection regulation at the national and EU level. Actions are intended to limit undesirable impacts upon the environment, lower energy and material consumption, and reduce waste production.
Instrument type: Various	Administrative Agency: Regional Operational Programme Managing Authority for Kujawsko Target Group: SMEs Sector: No priority sectors
REMake Green Innovation Vouchers (Germany)	Aim: To give easy access to public funding for manufacturing SMEs wishing to become more environmentally friendly and save resources.
Instrument type: Voucher scheme	Administrative Agency: demea Target Group: SMEs Sector: Recycling, material and resource efficiency
SBToolCZ (Czech Republic)	Aim: To evaluate construction quality in accordance with sustainable construction criteria, allowing for the uptake of existing technologies, stimulating innovation.
Instrument type: Certification tool	Administrative Agency: Faculty of Civil Engineering, Czech Technical University Target Group: Developers, investors, engineers, architects, facility managers, real estate specialists, public bodies. Sector: Energy efficiency, construction materials, water consumption, recycling, renewable energies.
Welsh Recycled Content Grant Scheme (United Kingdom)	Aim: To assist manufacturing SMEs to incorporate, or increase, use of Welsh recycle as an input material for products, processes or packaging.
Instrument type: Grant	Administrative Agency: Wrap Cymru Target Group: SMEs Sector: Recycling, material and resource efficiency

1. Introduction

Regions using ECO-Management for eco-innovation Development (RECOMMEND) is a Regional Initiative Project under INTERREG IVC (Innovation and Environment; Regions of Europe Sharing Solutions). It is the opinion of the RECOMMEND partners that eco-management systems can play a major role in meeting environmental challenges, therefore the project aims to deliver new and improved policy instruments to improve eco-innovation, such as enhanced eco-voucher schemes and eco-management practitioner networks.

The project has nine partners from eight European Union member states, with a good mixture of regions that provide different levels of regional support for eco-innovation and eco-innovation. Partners from newer member states are particularly keen to increase the number of eco-efficient businesses within their regions. The partners are:

- Lower Austrian Regional Government Office, Department of Environmental and Energy Economics (Austria)
- Union of Bulgarian Black Sea Local Authorities (Bulgaria)
- Ekoport (Czech Republic)
- Tartu Regional Energy Agency (Estonia)
- Province of Ascoli Piceno (Italy)
- Kujawsko-Pomorskie Voivodeship (Poland)
- Local Energy Agency Spodnje Podravje (Slovenia)
- Opportunity Peterborough (United Kingdom)
- UK Centre for Economic and Environmental Development (United Kingdom)

The project lead partner is the Lower Austrian Regional Government Office, Department of Environmental and Energy Economics. Three of these partners are public authorities with responsibilities between businesses and the environment. The remaining six have a direct influence on regional policies that raise eco-efficiency through eco-management.

RECOMMEND aims to strengthen the commitments of regional policymakers and stakeholders for the realisation of Regional Implementation Plans created by the regional partners. The project partnership decided to divide the project in 5 interrelated phases from know-how exchange to the preparation of the Regional Implementation Plan.

1. Analysis of eco-management and eco-innovation model regions
2. Identification of good practice methodologies
3. Design of new instruments
4. Pilot actions / field missions
5. Preparation of Regional Implementation Plans

1.1. Good practice

This report represents the conclusions of phase 1 in the RECOMMEND plan: the analysis of eco-management and eco-innovation model regions. It has taken the form of a screening of good practice.

For the purposes of this study, *good practice* has been defined as a policy instrument that has achieved (or promises) impressive results and that can be developed and transferred to new regions and organisations. Although good practices can be taken as models for new instruments, there must be an awareness of different national and regional contexts including differences in regulation, environment and economy, and good practice should therefore be considered an adaptive learning process.

1.2. Objectives

The objective of this study is to screen examples of regional good practice in eco-management and eco-innovation, with the aim of allowing comparability between tools and developing an understanding of the status quo of the partner regions. Collecting good practice also allows for the identification of possible areas in which to develop support instruments that will lead target groups to an efficient use of eco-management systems as an instrument for eco-innovation.

The project will also increase awareness for sustainability and create a deepened commitment for programmes aimed at the mitigation of climate change through stakeholder involvement and interlinkage of participating regions.

1.3. Definitions

As defined in the scope of the RECOMMEND project, *eco-innovation* means the fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle. It can also apply to the process of innovation itself. *Eco-management* enables organisations to assess, manage and continuously improve their environmental performance, through systems such as the Eco-Management and Audit Scheme (EMAS) and ISO 14001.

1.4. Work plan

The writing of this report entails three stages:

- The creation of a questionnaire template for collection of at least one example of eco-management or eco-innovation from each participating region;
- Using the template to gather at least five international examples of eco-management or eco-innovation;
- Analysing the collected information to produce a written summary and recommendations.

The latter point requires three questions to be answered:

- What are the main similarities/differences in the eco-management and eco-innovation support schemes of the partner regions and beyond?
- What are the characteristics of a successful eco-management and eco-innovation support scheme?
- What are the implications for the RECOMMEND project? (Recommendations)

Collection and screening of regional eco-management required that a questionnaire be created to ensure comparability of collected information.

The questionnaire requested information on the following fields:

- Author information (regional partner, author name, contact information);
- Eco-management or eco-innovation classification;
- Name of policy instrument;
- Overview of instrument;
- Type of funding;
- Instrument design, background and rationale;
- Administering agency;
- Target group;
- Target sector;
- Expected effects and results (with ex-ante indicators);
- Instrument budget;
- Duration;
- Type of evaluation;
- Indicators used
- Transferability potential;
- Instrument website.

A copy of the questionnaire has been included as Annex II.

2. Summary of collected good practices

In total, fifteen case studies have been collected and examined: nine submitted by partner regions and six that were collected from non-partner regions by the report authors. A tenth collected study from a partner region was deemed inadmissible as it did not fit the scope of the study. This study will provide a qualitative overview of the collected good practices.

It must be remembered that this analysis does not claim to be exhaustive, but is based on the partner regions and the examples they have provided, as well as the international examples collected. As a result, the study presents a qualitative snapshot of the collected policies and trends present in the regions studied, rather than a quantitative study able to present broader trends.

Collected practices came from the partner regions:

- Austria (Lower Austria)
- Bulgaria (Sofia)
- Czech Republic (Central Bohemia) (x2)
- Estonia (Tartu)
- Italy (Ascoli Piceno)
- Poland (Kujawsko-Pomorskie)
- United Kingdom (East of England) (x2)

International examples were selected from countries not geographically represented by the partner regions, but with a reputation for environmental leadership. These countries were:

- Denmark
- Finland
- Germany
- Netherlands
- Norway
- United Kingdom (Wales).

2.1. Partner regions

2.1.1. Austria (Niederösterreich) – Ökomanagement Niederösterreich Eco-Management Vouchers

Ökomanagement Niederösterreich, a demand side voucher scheme administered by the Lower Austrian Regional Government Department of Environmental Economics, is designed to motivate enterprises and municipalities to begin the process of environmental management by providing them with access to environmental management systems and external expertise. The instrument, running since 1998, issues vouchers to cover 50% of the cost of one of 150 consultants registered with the *Ökomanagement* database. The remaining 50% of the cost is to be covered by the beneficiary company to show their commitment to environmental measures.

Vouchers can act as the most unbureaucratic way to motivate potential beneficiaries. By requiring environmental measures to be registered, they are counted towards the regions climate targets. In order to make the scheme as simple and unbureaucratic as possible, there are three different classifications of recipient. Classification determines the upper limit of funding that a company can receive.

- *Pionier*: small enterprises and small municipalities receive two days of funded project consultation at a maximum of €1,020;
- *Profi*: medium enterprises, tourism enterprises, education centres and municipalities receive four days of funded consultation at a maximum of €1,700;
- *Champion*: industrial firms, large municipalities and hospitals receive up to eight days of funded consultation, at a maximum of €3,060.

All companies that receive a voucher have access to environmental management systems and must implement one to three environmental measures. Champion companies are required to implement EMAS or ISO 14001. Funding is only paid to the expert after environmental measures to be taken have been registered with the *Ökomanagement* database and following a half day check that measures have been carried out. The scheme has been very successful, with a large number of participants, including 700 participants over the last four years. It operates on a budget of €900,000 per annum. Although similar systems are operational in all Austrian regions, it is only Lower Austria where the three-level voucher system is used.

Website: <http://www.oekomanagement.at/>

2.1.2. Bulgaria (Varna) – National Innovation Fund

The *National Innovation Fund* is a supply side measure, providing financial support to innovative SMEs and promoting the implementation of scientific and applied research projects and feasibility studies, to be absorbed by new or improved products, processes and services. The instrument assigns funding based on the basis of the quality of the proposal, and in order to qualify, the project must be transformative, scalable, and sustainable and result in additional benefits to society, especially environmental benefits (energy saving, resource efficiency, emission reductions, etc.).

The *Fund* started functioning in 2005, in accordance with the Council of the European Union's Innovation Strategy of Bulgaria (8/8/2004). It is administered by the Bulgarian Small and Medium Enterprises Promotion Agency, a body under the Minister of Economy. Its overall budget for the period 2009-2013 is €133m, working out at around €26,600,000 per year. This was by far the largest budget of any instrument surveyed, and reflects that it is a national scheme with broad target sectors and companies.

The funding rate is 50% of the cost of research projects, 25% of the costs of development projects and 50% of the costs of feasibility studies. The maximum grant for R&D is €255,623 and duration of implementation of 12-36 months. Maximum funding for a feasibility study is €25,562 with duration of implementation of 12 months. It has been a successful scheme, with 788 proposals submitted since its establishment, resulting in the signing of 319 contracts, amounting to a total of €47million in funding given.

Applications for funding are assessed by the following criteria:

- Whether the project is aimed at reaching a new and significant scientific or technological achievement;
- Additional benefits to society (including environmental protection, energy efficiency, reduced emissions, etc.);
- How project objectives are to develop the new products and services that can find marketing;
- New development leads that can lead to a change in production technology and product quality.

Website: <http://www.sme.government.bg/en/>

2.1.3. Czech Republic (Central Bohemia) – SBToolCZ

SBToolCZ is a demand side eco-management instrument. It is a certification tool for the evaluation of construction quality level in accordance to sustainable construction principles. It is offered to architects, engineers and building firms. The certification scheme acts as a marketing tool and act as inspiration for new innovative solutions.

The main aims are the elimination of environmental impacts of the building, support to improved energy efficiency (in accordance with EU directive 2010/31/EU), improve the interior environment of the building, and ultimately stimulate sustainable construction demand.

Certification costs between €200-2000, depending on the scale of the project. Certification is carried out by authorised auditors. The administering agency is the Faculty of Civil Engineering at the Czech Technical University in Prague.

SBToolCZ is available in Spain, Italy and Portugal, and was adapted for the Czech Republic with funding from the Ministry of Education. Although development began in 2005, the instrument was not rolled out until 2010. Two buildings were certified between 2010 and 2011, but it is hoped that more than 30 will be certified in 2012.

Website: <http://www.sbtool.cz>

2.1.4. Czech Republic (Central Bohemia) – Innovation Vouchers

The Czech *Innovation Voucher* is a supply side eco-innovation tool that has been designed to support co-operation between industry and university R&D. This is to allow for industry to purchase services from R&D players to allow them to improve innovation potential.

The voucher programme operates in each region of the Czech Republic. Each region has a budget of around 4m Czech koruna (c. €160,000), 3m of which comes from the European Regional Development Fund and 1m of which is financed by the region. Entrepreneurs producing new or innovative products or services can receive 75% of eligible costs for purchasing outside expertise (maximum of 149,000 CZK).

Administration is carried out at three levels: the regional authority (implements system, opens calls, evaluates project proposals, co-finances programme), R&D Institutions, and regional councils (acting as the contact point, collecting submitted proposals, sorting administration, evaluating payment claims, monitoring implementation). Interest in the tool has been high, with demand 40% higher than funding has allowed.

Website: <http://www.inovacnivouchery.cz>

2.1.5. Estonia (Tartu) – Green Investment Scheme

The Estonian *Green Investment Scheme* is a demand side, eco-innovation instrument, intended to improve the green credentials of apartment buildings and private properties. The objective of the instrument is to assist in reconstruction and renovation, achieve indoor climate and energy efficiency and support the take-up of renewable energies. It was noted that many buildings in Estonia were energy inefficient, using two to three times more energy than Nordic countries, despite having a similar climate.

The scheme is implemented in two streams: one for apartment buildings and one for small private properties. Both are funded by the Ministry of Economic Affairs and Communication, and administered by KredEx.

The apartment building stream has a budget of €30 million for the period of August 2010 to November 2012. KredEx together with KfW Bankengruppe developed a long-term renovation loan with preferential interest. The minimum loan amount is €7,340, and funding is assigned as 15, 25 or 35% of total costs.

The budget for private building renovation is €4 million for August 2012 to November 2013. Of this, €3m is for renovation grants, and €1m for the purchasing of green energy appliances. Minimum grant is €1,000, and maximum is €30,000.

Website: <http://www.kredex.ee>

2.1.6. Italy (Ascoli Piceno) – ITACA Protocol

The *ITACA protocol* is a demand side eco-management tool. ITACA (*Institute for Innovation and Transparency in Procurement and for Environmental Compatibility*) is a central government body that co-ordinates regional activity in public procurement. ITACA have drawn up a protocol for the evaluation of environmental sustainability to be adopted by the Regions in their building regulations.

The protocol was created in response to Italian laws intended to educate the business world to adopt good practices for reducing emissions of pollutants that contribute to the formation of greenhouse gases, and to encourage technological solutions that can reduce energy consumption and increase efficiency. The protocol was created to ensure that comparisons could be drawn between regions.

The protocol has been taken up in the Marche region as an energy and environmental certification tool. The protocol is made up of 70 criteria, though simplified versions are available. It aims to achieve sustainable land use, contribute to energy savings, encourage research and application of sustainable building technologies and develop design solutions to meet different demands for quality of living.

Website: <http://www.itaca.org>

2.1.7. Poland (Kujawsko-Pomorskie) – Regional Operational Programme

The *Regional Operational Programme* is demand side instrument, targeting both SMEs and large companies. Its targets were determined by European Strategic Guidelines, the national Strategic Frames of References, and the Development Strategy for Kujawsko-Pomorskie.

The *ROP* is designed to help existing businesses to adapt to environmental protection regulations at the national and EU level. Actions are intended to limit undesirable impacts upon the environment, lower energy and material consumption, and reduce waste production. Actions include the application of new organisational and technical solutions in production and services; construction or extension of installations and devices conduce to raw materials and energy saving; and, the application of environmental management systems.

The *ROP* has a budget of €3,239,638 over the period 2007-2013, awarded by the European Regional Development Fund.

Website: <http://www.mojregion.eu>

2.1.8. United Kingdom (East of England) – EnviroCluster

EnviroCluster is an active community of environmental and cleantech organisations; a supply side measure allowing networking between cleantech actors. The cluster consists of around 350 businesses, public authorities, investors and academic institutions supporting eco-innovation, helping businesses and organisations to develop new products and services that have a positive environmental impact, or that help with resource management. It provides innovation and incubation support, promotes skills and development, inward investment, sharing of knowledge and opportunities and helping members of the cluster into new markets.

The cluster is an initiative of the UK Centre for Economic and Environmental Development, a national charity supporting eco-innovation. It supports companies in five cleantech sub-sectors: energy, materials and design, pollution prevention, waste and recycling, water and wastewater treatment. As long as they are cleantech focused, any company, local authority or higher education institute may apply for membership. *EnviroCluster* are a leading cluster in the Eco-Innovation Cluster Partnership (EcoCluP) project.

EnviroCluster has a yearly budget of around €211,000. Funding comes from Peterborough City Council (€164,000), with the remaining €47,000 coming from Anglian Water and the East of England Development Agency.

Website: <http://www.envirocluster.co.uk>

2.1.9. United Kingdom (East of England) – Investors in the Environment

Investors in the Environment (IiE) is a demand side measure; a not-for-profit environmental accreditation scheme, designed to help businesses save money and reduce their impact on the environment. It is designed to fill a gap in the accreditation market; ISO-14001 can be expensive and difficult for smaller businesses to achieve. *IiE* is applicable to all businesses and has its own Environmental Management System. The scheme helps to promote environmentally friendly business through regular networking events and media exposure.

With start-up supported by the Environment Capital Partnership, the Environment Agency and Peterborough City Council (amongst others), *IiE* is now financially self-sustaining, as companies pay for accreditation. The initial start-up funding was £12,500, made through initial LPSA funding. Over 700 companies have pledged to undergo accreditation, with 100 having done so already.

There are three levels of accreditation: bronze, silver and green. Charges for accreditation vary (£150-800) depending on accreditation level desired and number of employees. Initially accreditation was for SMEs, but now it is open for any business that may wish to apply. The scheme has been franchised into Yorkshire, and is being examined by other English regions.

Website: <http://www.iie.uk.com>

2.2. International Practices

2.2.1. Denmark (Copenhagen) – Copenhagen Cleantech Cluster

Formed in 2009, the *Copenhagen Cleantech Cluster* (CCC) is supply side measure that aims to strengthen the cleantech industry in Copenhagen. It tries to attract foreign cleantech investment, help develop existing parts of the cluster and foster a more closely connected value chain. The competitiveness of the cleantech industry depends on companies' ability to be innovative and productive; companies in networks are more likely to be successful than those outside. This comes from spill-over effects such as knowledge sharing, use of research-based knowledge and access to highly-skilled labour.

The cluster is made up of research institutions, universities, financial institutions, business organisations and business incubation environments, thus representing the entire value chain. Cleantech refers technologies with a focus on renewable energies, energy efficiency, eco-design, waste collection and recycling. Services provided to members, include international networking, test and demonstration facilities, matchmaking and providing a 'One Stop Shop Knowledge Centre' on cleantech. CCC has a budget of 150m Danish Krone (c. €20.17m) for the period 2009-2014, and is administered by Copenhagen Capacity, the Confederation of Danish Industry, Scion DTU and the University of Copenhagen amongst others.

CCC has set itself ambitious targets, which it measures its performance against. These include creating 1,000 new jobs, attracting 25 foreign cleantech companies to the cluster and creating 30 R&I collaborations between members. Success is determined through monitoring reports, which examine a variety of indicators, such as the number of cleantech companies in Copenhagen; growth in employment, turnover; and labour productivity; number of new patents; the establishment of partnerships between researchers and industry; and the number of new enterprises created.

Website: <http://cphcleantech.com/>

2.2.2. Finland – EffTech

Intelligent, Resource-Efficient Production Technologies (EffTech) is a supply-side eco-innovation instrument that – over five years – seeks to develop energy and resource-efficient production technologies to meet sustainability goals for the forestry industry, by funding and supporting research and consortia projects. It thus contributes to the funding of R&D, but also to the creation of R&D Infrastructure and to network creation.

As forestry is a monumentally important part of the Finnish economy (making up 20% of exports), it was considered vital that the sector remain globally competitive, in a period of upheaval for the forestry industry (with competition from Latin America, where resources are cheaper; a drop in paper use; and greater awareness of the threat of deforestation).

The *EffTech* project is divided into three work-packages: Raw materials; Modelling and measurements; Processes and processing. Each of these has also been divided into smaller projects. In order to receive funding, members of the cluster submit a work plan demonstrating how the goal of the work-programme will be met and what each member of the cluster will do. This is then assessed by how well-equipped they are to achieve results. Due to the variety of research projects within *EffTech*, there is no one set of indicators used for assessment. However, carbon footprinting and Life Cycle Assessments and environmental monitoring systems are used to assess the environmental performance and resource efficiency.

With a budget of around €7.5m per year, the instrument is managed by Forestcluster Ltd., but was launched and funded by the Finnish Funding Agency for Technology and Innovation (Tekes).

Website: <http://www.forestcluster.fi/>

2.2.3. Germany – REMake Green Innovation Vouchers

REMake vouchers are a two-stage voucher scheme (auditing and implementation) set up to give easy access to public funding for manufacturing SMEs wishing to become more environmentally friendly and save resources. They are mostly a demand side instrument, allowing SMEs to hire an external expert to assess resource use and waste production, and then oversee the introduction of new technologies and services (technology transfer).

Voucher schemes have shown success in a number of countries, and Germany ran a trial from September 1st 2010 to March 31st 2011, before launching the scheme fully on April 1st 2011. The rationale behind the vouchers is that SMEs have many innovative ideas, but cannot always implement them due to a lack of technical or business expertise. This is particularly the case in manufacturing, where resource use is intensive.

The voucher scheme has two funding rates: 67% of consulting fees up to €15,000 and 50% up to €30,000. The scheme is only open to SMEs (less than 250 employees and turnover of less than €50m). REMake vouchers are administered by the German Material Efficiency Agency (demea) and have an approximate budget of €400,000 per year.

Website: <http://www.ecomanufacturing.eu/>

2.2.4. Netherlands – Long Term Agreements

Long-Term Agreements (LTAs) have been implemented in the Netherlands since 1990. They are voluntary agreements, negotiated between industry and public authorities, and are designed to stimulate energy efficiency measures in companies. Although voluntary, they are formed as contracts and can contain sanctions for non-compliance. It is an obligation for the company to produce an energy efficiency plan every four years, monitor their progress and implement a management system and standard (based on ISO 14001). The rationale behind *LTAs* is that by setting targets, rather than being overly prescriptive, industry can find innovative ways of implementing energy efficiency measures. By taking part in the programme, companies can avoid being regulated.

LTAs are administered by Agentschap NL. The instrument offers a wide variety of support measures including, financial support to hire consultancy for energy audit), training (working groups with consultancy support, technical assistance for monitoring methodologies, brochures and gap analysis. There are also a variety of financial incentives, including tax abatement and subsidy schemes.

Every year the organisation is required to report monitoring data to Agentschap NL, including consumption figures (gas, electricity, oil, on-site production), production data and implemented energy saving measures. No certification or external analysis is needed; only self-declaration. Each year, fifty organisations are randomly chosen for audit. Due to the wide variety of financial incentives available, it is not possible to give an estimation of budget. However, the basic premise of voluntary agreements and stimulation rather than regulation, can be transferred to a variety of regions, at various scales.

Website: <http://www.agentschapnl.nl/en>

2.2.5. Norway – GreenConServe Service Innovation Voucher

The *GreenConServe Innovation Voucher* – a demand side measure for technology transfer – support the transformation of the construction sector into a greener, value-adding service industry by providing small grants that can be exchanged for technical and business expertise to support innovation processes. The goal is to develop the service industry for sustainable construction, improving the carbon footprint of the sector.

In the framework of the GreenConServe project (under the CIP – Europe INNOVA initiative), Innovation Norway pilot tested the service innovation voucher scheme offering technical and business expertise support to Norwegian SMEs in the construction sector.

The agency designed its own voucher scheme, to fit the national context and the specific market conditions. Administered by Innovation Norway, the pilot project is running from mid-2010 to mid-2012, with a budget of €225,000. Each voucher is worth a maximum of €15,000 (modelled on a similar French scheme), but this was expanded to €30,000 mid-way through the pilot in recognition of higher prices in Norway than in France.

The voucher scheme is a two-step voucher, where SMEs need to use both technical and business support to get their innovation project off the ground. The first half is worth up to 7,500 Euros and should be used for technical consulting, while the second half is worth the same amount and must be used to acquire business development expertise. Together the two step voucher is worth up to 15,000 Euros. Vouchers can only fund 50% of a project's costs, while the SMEs need to contribute the other half, and they must be used to acquire external consultancy. The amount awarded is intended to cover 20 days-worth of expert assistance.

SMEs that received vouchers were required to report the outcome of the project and provide financial statements at project end. The project report and financial statements are approved by GreenConServe, in relation to the conditions: innovation level; revenue and value creation above industry average; international potential; and whether the project was transformative, scalable and sustainable. Evaluation is carried out by a client manager, chosen by Innovation Norway, who is in charge of following up proposals and evaluating against ex-ante targets.

Website: <http://www.europe-innova.eu/>

2.2.6. United Kingdom (Wales) – Welsh Recycled Content Grant Scheme

The *Welsh Recycled Content Grant Scheme*, a demand side measure funded through the Welsh government, offered capital support to assist manufacturing SMEs to incorporate, or increase, use of Welsh recycle as an input material for manufacturing products, processes or packaging. The instrument is intended to provide support in technology adoption to help Wales meet its aim of a 70% recycling rate by 2025, with 0% going to landfill by 2050.

Wales has a substantive manufacturing centre, with 99.2% of all businesses being SMEs. Of Wales' 22 local authorities, 6 of them are classed as convergence areas by the European Regional Development Fund. It is these areas that are covered by the scheme.

Funding for the project came from the Welsh Government and the European Regional Development Fund, giving an annual budget of £150,000 (€182,000). Grants covered up to 30% of total costs (up to £50,000), and were available for capital expenditure and some initial promotional costs to raise awareness of recycle use. Capital expenditure included costs of new production and packaging plants and equipment.

Website: <http://www.wrapcymru.org.uk/>

3. Analysis of collected good practices

The first part of the analysis of collected good practices will proceed by examining similarities and differences between the eco-management and eco-innovation support schemes of the partner and international regions. This will allow for the parameters of the schemes to be understood, to see where focus lies in the regions, and where there is room to improve.

It will look at case studies on a thematic basis, illustrating themes with examples from the collected practices.

3.1. Type of instrument

3.1.1. Eco-innovation and eco-management

Looking at the collected case-studies, eco-innovation instruments are much more prevalent than eco-management tools. These eco-innovation tools focused mostly on two areas: technology transfer (innovation adoption) and support for research and development (R&D). The former is a demand side technique, whilst the latter is supply side (see next section). Partner region focus on eco-innovation rather than eco-management suggests that eco-management is not implemented sufficiently at the regional level, with much scope for instrument development.

Eco-Management	Eco-Innovation
<p><i>Ökomanagement Niederösterreich</i> (Austria) <i>SBToolCZ</i> (Czech Republic) <i>ITACA Protocol</i> (Italy) <i>Long Term Agreements</i> (Netherlands) <i>Investors in the Environment</i> (United Kingdom)</p>	<p><i>National Innovation Fund</i> (Bulgaria) <i>Innovation Vouchers</i> (Czech Republic) <i>Copenhagen Cleantech Cluster</i> (Denmark) <i>Green Investment Scheme</i> (Estonia) <i>EffTech</i> (Finland) <i>REMake Green Innovation Voucher</i> (Germany) <i>GreenConServe Innovation Voucher</i> (Norway) <i>Regional Operation Programme</i> (Poland) <i>EnviroCluster</i> (United Kingdom) <i>Welsh Recycled Content Scheme</i> (United Kingdom)</p>

Eco-management tools mostly involved the creation of standards systems, labelling and certification, with the creation of audit schemes that were less strenuous than EMAS or ISO 14001, or schemes that were adapted to target specific groups. None of the collected eco-management instruments were mandatory, unlike many national and EU initiatives, such as carbon trading. However, the creation of such voluntary systems can stimulate eco-innovation and public uptake of environmentally friendly products and services, and are especially helpful in achieving regional goals. To do so, they can either promote resource efficiency as a cost-saving exercise, or eco-protection as projecting a positive image to consumers.

Eco-management systems were found in good practices from Austria, the Czech Republic, Italy, the Netherlands and the United Kingdom (see table, above). One such example, intended to make accreditation easier, promote environmental protection and stimulate purchase of environmental products was *Investors in Environment* (UK), which developed an accreditation scheme for local businesses. As ISO 14001 accreditation has an all-or-nothing approach and can be costly and complex, especially for smaller companies, *IiE* created a three-stage system where companies can work through the stages, taking on smaller and easier commitments to work towards energy and resource efficiency targets.

The *ITACA Protocol* also represented a good practice. The protocol was developed to target the construction sector and encourage the development of technological solutions that could reduce energy consumption and increase efficiency. It did this by providing a method of evaluating environmental sustainability, highlighting where changes could be made to company workings.

3.1.2. Supply and demand side

Supply-side instruments focus on supporting the development of new technology and service solutions, whilst demand-side instruments aim to build a new market for products and services. Many of the instruments presented had both supply and demand side aspects, but fell primarily under one or the other.

Demand side instruments included technology transfer initiatives (such as financial assistance to technology adopters), as the most prominent tool. The supply side measures that were present in the study were mostly focused on R&D or Cluster formation and networking. R&D support is one of the most wide spread instruments for eco-innovation in the EU, with every member state having at least one instrument in place, according to the Eco-Innovation Observatory.

The following table shows instrument types classified into either demand or supply side tools.¹ As many of the instruments collected in this study could be classified as having characteristics of several tools (i.e. mixed supply and demand characteristics, or a demand side measure showing both technology transfer and support of private demand), giving each instrument a classification has not been possible. However, the table has been provided for reference and will allow some observations to be made about the collected instruments.

Demand Side Measures	1.	Regulations and Standards	a) Regulations, targets, cap & trade schemes
			b) Performance standards, labelling and certification
	2.	Public Procurement	a) 'Green' public procurement of goods and services
			b) R&D procurement
			c) Pre-commercial procurement
	3.	Technology Transfer	a) Advisory support for technology adaptors
			b) Financial or fiscal support for technology adopters (e.g. grants for purchasing new technology)
	4.	Support of Private Demand	a) Tax incentives for consumers (e.g. for purchasing environmentally efficient products)
			b) Tax reductions for products and services (e.g. VAT reductions)
			c) Demand subsidies (e.g. eco-vouchers, consumer subsidies)
			d) Awareness raising and information provision
	Supply Side Measures	1.	Equity / Business Support
b) Public guarantee funds			
2.		Support for R&D in Public Sector and Industry	a) R&D funding
			b) Collaborative grants
			c) R&D infrastructure
3.		Fiscal Measures	a) Tax incentives for R&D start-ups
			b) Tax incentives for R&D personnel
4.		Education, Training and Mobility	a) Tailored training courses for companies and/or entrepreneurs
			b) Advice/consulting for start-ups, companies, and/or entrepreneurs
			c) Placement schemes for students
			d) Support for R&D workers recruitment
5.		Promoting Networks and Partnerships	a) Competence centres, clusters, science-technology parks
			b) Technology platforms and innovation networks
			c) Foresight and common vision building
			d) Market intelligence and other forms of information sharing

¹ Adapted from **Eco-Innovation Observatory**, *Closing the Eco-Innovation Gap: An Economic Opportunity for Business. Annual Report 2011* (Feb, 2012), pp. 52-53.

Looking at the provided instruments and comparing them with the classifications in the table, observations can be made that:

1. Based on the examples provided, demand side instruments are dominant in the partner regions. The next table re-divides the classification of eco-management and eco-innovation instruments along the demand/supply divide.

The reason for a lack of supply-side eco-management instruments is that eco-management tools will largely be about stimulating the use of management systems and standards; an inherently demand-side measure.

	Eco-Management	Eco-Innovation
Demand Side	<i>Ökomanagement Niederösterreich</i> (Austria) <i>SBToolCZ</i> (Czech Republic) <i>ITACA Protocol</i> (Italy) <i>Long Term Agreements</i> (Netherlands) <i>Investors in the Environment</i> (United Kingdom)	<i>Green Investment Scheme</i> (Estonia) <i>REMake Green Innovation Voucher</i> (Germany) <i>GreenConServe Innovation Voucher</i> (Norway) <i>Regional Operation Programme</i> (Poland) <i>Welsh Recycled Content Scheme</i> (United Kingdom)
Supply Side	X	<i>National Innovation Fund</i> (Bulgaria) <i>Innovation Vouchers</i> (Czech Republic) <i>Copenhagen Cleantech Cluster</i> (Denmark) <i>EffTech</i> (Finland) <i>EnviroCluster</i> (United Kingdom)

2. There are a variety of instruments that appear to be widely underused in the partner regions. It may reflect upon regional competencies that there was only one instrument that showed tax incentives (the Dutch *Long Term Agreements*; a national instrument), but an obvious missing opportunity can be seen in a lack of public procurement initiatives in any of the examples.

3.1.3. Awareness-raising and networking

Networking and awareness-raising provide an interesting opportunity to increase eco-innovation and eco-management practices in companies across different sectors. The use of targeted information and promotion through networks can have significant benefits when tackling environmental issues. They are more bottom-up approaches that allow for synergies to emerge naturally, and for the eco-related practices to become more prominent in traditional as well as modern industries.

On the supply side, clustering emerged as one of the key non-financial based instruments in the RECOMMEND study that utilises the idea of networks in promoting and supporting eco-innovation and eco-management practices. The clusters involved in the study were *Copenhagen Cleantech Cluster*, *EnviroCluster* and *Forestcluster*. (*Forestcluster*, however, was an administrative agency of *EffTech* and co-ordinator, rather than the target of the tool). However, the aims for *Copenhagen Cleantech Cluster* and *EnviroCluster* are very similar.

For *Copenhagen Cleantech Cluster* the aims are:

- To get more international and Danish Cleantech companies to locate and grow in Copenhagen and Zealand;
- To get existing companies to grow more than would otherwise have been possible;
- To foster the establishment of more new cleantech companies.

For *EnviroCluster* the aims are:

- To enable constituent members to grow and become competitive in global cleantech and environmental markets;
- To help businesses and organisations to develop new products and services that have a positive environmental impact or help with resource management;
- To support cleantech growth in the city by providing innovation and incubation support, promoting skills development, inward investment, sharing of knowledge and opportunities and helping members of the cluster internationalise into new markets.

Clustering can help to optimise use of both resources and personnel by connecting companies, universities, research centres and big industry. This results in a concentration of specialised expertise in geographical areas, and greater opportunities for synergies to emerge and a drive to innovate.

As an example of how the clustering efforts are benefiting companies in Denmark in eco-innovating or achieving better environmental performance, the *Copenhagen Cleantech Cluster* through its cluster structure offers a variety of services to their members such as: access to an international network for internationalisation, access to testing and demonstration facilities of new cleantech technologies and products, from initial idea to full-scale demonstration; facilitated matchmaking events between research institutions and companies to build networks with relevant stakeholders; business related support and intelligence on European and global markets; and a one-stop-shop point of information (“knowledge centre”) ensuring that the cluster’s stakeholders have access to relevant information, advice, materials and activities. The One Stop Shop provides an overview of players and initiatives and generates analyses that identify new opportunities, challenges and needs within the cleantech sector.²

All of these above measures offered by the cluster impact company behaviour and ability to eco-innovate and expand their business.

Other instruments that did not require a substantial budget were those intended to raise awareness, through certification, such as *Investors in the Environment*, which has already been discussed. Although not primarily an awareness raising instrument, the *Welsh Recycled Content Grant Scheme* included some awareness qualities in providing a small amount of funding to cover publicity costs to announce increased recycle use. In this way, the combination of a primary, supply-side goal (encouraging the use of recycled material by manufacturing companies) with a secondary, demand-side one (awareness raising), represents a good mix of policy characteristics.

3.2. Type of funding

Funding for eco-management and eco-innovation can come in a variety of forms. These funding initiatives can be divided into grants, equity, loans, fiscal initiatives and market stimulation. Despite this wide variety of potential tools, the collected examples were incredibly limited in their funding methods.

3.2.1. Grants

Grants were the most prevalent of the instruments collected, present in nine of the fifteen instruments. Although grants can come in a wide range of amounts, smaller grants (frequently targeted at SMEs) are often administered as vouchers, which can speed up administration. Grant payments were found in:

- Intelligent, Resource-Efficient Production Technologies [EffTech] (Finland)
- GreenConServe Innovation Vouchers (Norway)

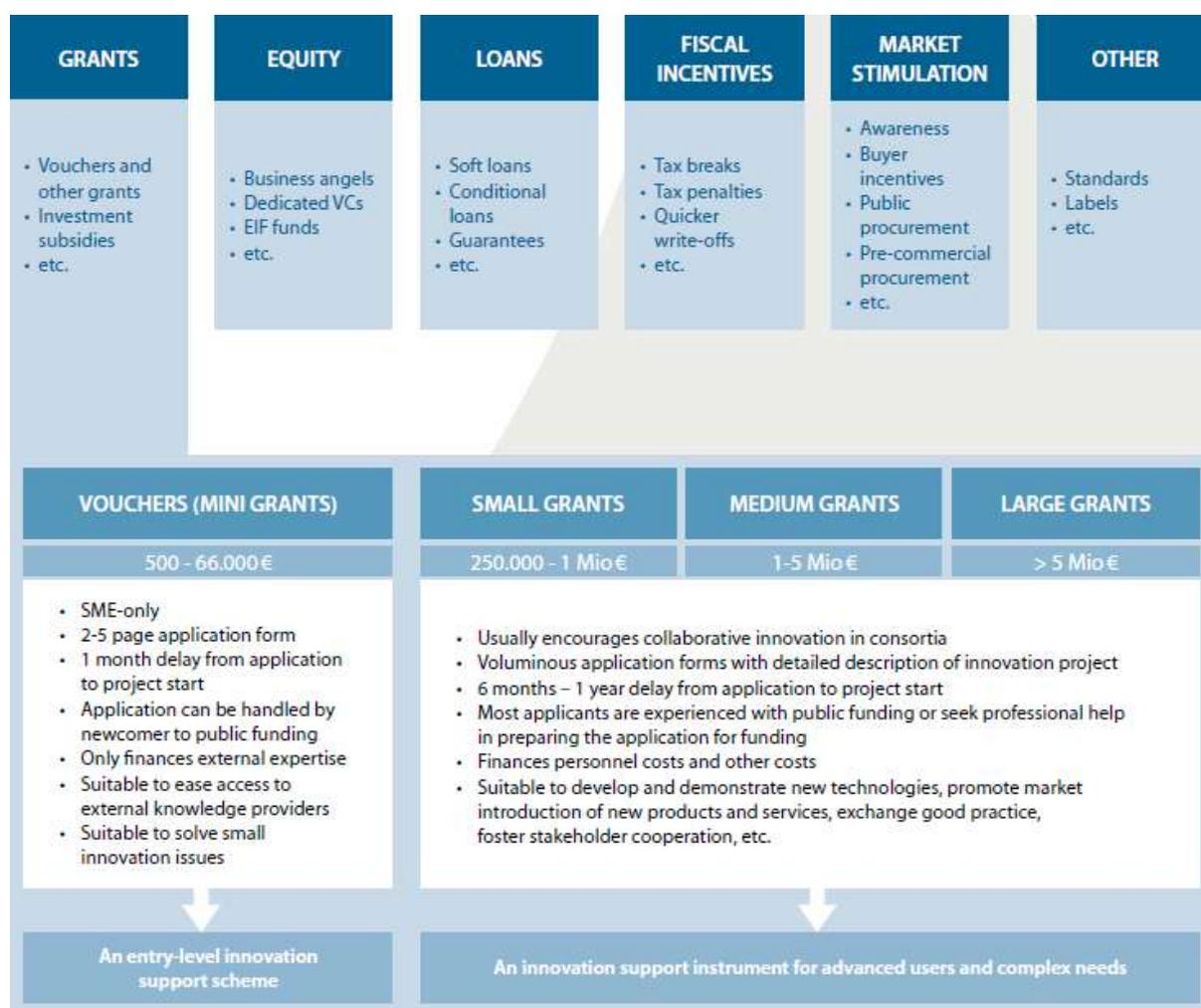
² www.cphcleantech.com

- Innovation Vouchers (Czech Republic)
- National Innovation Fund (Bulgaria)
- Ökomanagement Niederösterreich (Austria)
- REMake Green Innovation Vouchers (Germany)
- Welsh Recycled Content Grant Scheme (United Kingdom)

Of the remaining instruments, two (the Estonian *Green Investment Scheme* and Dutch *Long Term Agreements*) also showed aspects of grant funding. The *Green Investment Scheme* provided grants to renovate small private buildings, but also set up a long-term renovation loan with KfW Bankengruppe that gave preferential interest rates to those who were making apartment buildings and complexes more energy efficient.

There are a variety of types of funding in the funding instruments presented in this study. They can be categories as vouchers, small grants, medium grants and large grants.

The graphic below summarises the variety of funding schemes some of which are present in this list. As detailed in the graph, the purpose of each one can be quite different given the target audience for the support and the associated procedures which can facilitate the participation of certain type of actors in each of the programmes.



Source: KIS-PIMS brochure: http://www.greenovate-europe.eu/system/files/u87/KisPims_Brochure.pdf

3.2.2. Other

The Dutch *Long Term Agreements* were an unusual instrument amongst the selected cases, as they make use of a variety of different financial instruments, such as favourable taxation rates, subsidy schemes and pollution permits. This mixed incentive approach makes *LTAs* one of the most complicated instruments, but also one of the most successful. They are based on negotiated voluntary agreements between industry and regulators, focusing on energy efficiency. The voluntary aspect is recorded in literature as being as one of the key success factors, as the approach to it by industry is different than with strict regulation.

These latter two instruments highlight that there are other approaches to funding eco-innovation and management. Excluding grants, financial tools include:

- Equity related instruments, such as the facilitation of access to business angels, venture capital and European investment funds;
- Loans, including short loans, conditional loans and guarantees;
- Fiscal incentives of tax breaks, penalties, quicker write-offs, and;
- Market stimulation through buyer incentives, public procurement and pre-commercial procurement.

Of course, the appropriate type of funding depends largely on the aims of the instrument and the budget of the administering agency. Some instruments did not provide any direct funding at to recipients of aid, instead aiming to raise the saliency of eco-management and build networks. These included:

- SBToolCZ (Czech Republic)
- ITACA protocol (Italy)
- Investors in Environment (United Kingdom)
- EnviroCluster (United Kingdom)
- Copenhagen Cleantech Cluster (Denmark)

3.3. Administrative agencies

Collected good practices showed variety in the agencies responsible for administering them. The vast majority were run by either national or regional government, or government agencies.

3.3.1. Government agencies and departments

Instruments presented for this study were mostly administered by government departments, or departmentally run innovation agencies. Such bodies can develop long term plans and expertise, reflecting a political commitment to innovation. However, whether instruments were run by a department, or by a dedicated agency, varied.

Agencies also had different aims. For example, Copenhagen Capacity describes itself as an 'official inward investment agency', whilst Innovation Norway and Angentschap NL (under the Dutch ministry of economic affairs, agriculture and innovation) are referred to as 'innovation agencies,' highlighting the specificity of goals that agencies can have.

Some agencies have been in existence for a substantial period, and run several programmes. An example is demea, the German Material Efficiency Agency which was founded in 2006, but has been running the REMake voucher scheme for manufacturing SMEs since 2010, in tandem with its other projects.

Others have only just come into being, for a specific purpose. KredEx is responsible for administering the Estonian *Green Innovation Scheme*, having been created for this purpose by the Ministry of Economic Affairs and Communication.

Government agencies or departments included:

- Agentschap NL (Long term Agreements)
- Bulgarian SME Promotion Agency (National Innovation Fund)
- Copenhagen Capacity (Copenhagen Cleantech Cluster)
- German Material Efficiency Agency (REMake)
- Innovation Norway (GreenConServe)
- Lower Austrian Regional Government (Ökomanagement Niederösterreich)
- ITACA (ITACA Protocol)
- Regional Operational Programme Managing Authority for Kujawsko (Regional Operation Programme)

3.3.2. Research and innovation organisations

Although many eco-innovation schemes were under by national or regional governmental management, some were headed by research and innovation organisations; receiving financial and political support from local and national authorities. For example, *EffTech* is run by Forestcluster, a cluster of forestry companies, research institutions and universities. Part of the funding for *EffTech* comes from Forestcluster's member organisations, with the rest coming from the Finnish Funding Agency for Technology and Innovation (Tekes). The instrument was launched by Tekes, but administrative duties were handed to Forestcluster. As the instrument is aimed at the forestry industry, there is a clear logic to handing administration to an existing cluster.

In the Czech Republic, *SBTool/CZ* is administered by the Faculty of Civil Engineering at the Czech Technical University, in Prague. Based on an international tool (SBTool), initial development and adaptation to Czech conditions was funded by the Ministry of Education, but it is now self-funding initiative, making money from certification of buildings.

3.3.3. Charitable initiatives

In much the same manner, although receiving support from local government, and in line with policy agendas, all of the United Kingdom's examined policy instruments were administered by independent, charitable enterprises. EnviroCluster and Investors in the Environment are run by UK CEED and Peterborough Environment City Trust, respectively; both of which are independent, not-for-profit charities, dependent on donations for their operation. In Wales, the Welsh Recycled Content Grant Scheme is administered by WRAP Cymru, a not-for-profit company. WRAP Cymru receive funding from both the Welsh government, and the EU's regional development funds. The grant scheme was created in line with government objectives of becoming a zero-waste economy, highlighting the scope for independent organisations to assist in achieving policy objectives.

Both of the schemes in the East of England – EnviroCluster and Investors in the Environment – received regional government support, primarily in start-up costs. Investors in the Environment received £12,500 from Local Public Sector Agreement funding: a public sector grant administered by the local strategic partnership. EnviroCluster receives annual funding from Peterborough City Council, the East of England Development Agency and Anglian Water. Both of EnviroCluster and Investors in the Environment help Peterborough to meet its aims to become the UK's 'Environmental Capital'.

3.4. Target groups

Instruments can be broadly divided into those with specific target groups and those without. Target groups can include companies, classed by industry or size, or research organisations and non-commercial entities. There were also differing industry targets, for example, sustainable construction, manufacturing and forestry. Others focused on SMEs or large companies only.

Several of the instruments observed did not specify a target group, or targeted many groups at once. These included the Czech *Innovation Vouchers*, the East of England *Investors in the Environment* scheme and *Long Term Agreements* in the Netherlands. The untargeted nature of these instruments suggests flexibility in their construction, but may also be linked to their size. Instruments with smaller budgets or administration may need to be more targeted to achieve their aims.

3.4.1. Company by size

Many of the instruments examined focused on SMEs, with few focusing elsewhere. This perhaps reflects that large companies are handled by national and EU authorities, rather than regional ones. The instruments that showed slight exceptions were, in fact, national schemes: the Bulgarian *National Innovation Fund* and Dutch *Long Term Agreements*. However, even these had a primary focus on SMEs.

Targeting SMEs with policy instruments makes sense; they represent around 99% of European companies, but often lack the impetus to eco-innovate or eco-manage. This may be down to a lack of expertise, or a belief that becoming more eco-aware will be difficult and costly to implement. Grant schemes aimed at SMEs were particularly prevalent. The following instruments specifically targeted SMEs (either exclusively, or alongside other groups):

- GreenConServe Innovation Vouchers (Norway)
- National Innovation Fund (Bulgaria)
- Ökomanagement Niederösterreich (Austria)
- Regional Operational Programme (Poland)
- REMake Green Innovation Vouchers (Germany)
- Welsh Recycled Content Grant Scheme (United Kingdom)

3.4.2. Manufacturers

Manufacturing, as a resource heavy industry, provides much opportunity for eco-management and eco-innovation to be introduced. Both the *REMake Green Innovation Vouchers* in Germany and the *Welsh Recycled Content Grant Scheme* in the United Kingdom use eco-management systems to evaluate production methods and try to make them greener.

Both instruments are targeted at manufacturing SMEs. *REMake Vouchers* partner companies with a resource efficiency expert, who can audit the manufacturing production chain and locate inefficiencies that can then be rectified. The *Recycled Content Scheme* does not provide expert assistance in evaluating resource use, but instead issue a grant to help pay for new technologies to be installed, and to fund some promotion.

3.4.3. Construction and building owners

One of the main target sectors was green construction and energy efficient buildings. Four of fifteen studies were directly linked to buildings:

- Green Investment Scheme (Estonia)
- GreenConServe Innovation Vouchers (Norway)
- ITACA Protocol (Italy)
- SBToolCZ (Czech Republic)

They did, however, take very different approaches: two instruments can be classed as Technology Transfer instruments (the *Green Investment Scheme* and *GreenConServe Innovation Vouchers*), whilst the others are eco-management systems (the *ITACA Protocol* and *SBToolCZ*).

3.4.4. Research organisations

As noted in section 3.1.2., few of the instruments examined were supply side measures. In particular, these involved either funding R&D or clustering. The instruments were:

- National Innovation Fund (Bulgaria)
- Innovation Vouchers (Czech Republic)
- Copenhagen Cleantech Cluster (Denmark)
- EffTech (Finland)
- EnviroCluster (United Kingdom)

EnviroCluster, *Copenhagen Cleantech Cluster* and *EffTech* aim to involve universities and research institutions in their clusters, to network with industry and each other, with the aim of creating new technologies. In comparison, the Czech *Innovation Voucher* scheme and the Bulgarian *National Innovation Fund* both look to stimulate the relationship between SMEs and universities, to participate in research and development projects together, resulting in the creation and uptake of new technologies.

3.5. Target sectors

Target sector refers to the ecological aim of the instrument. This can include, for example, energy or resource efficiency. Whilst some instruments had clear sectoral focus, there were others where there was no single environmental target, with the instrument instead taking a broad approach. For example, both *Investors in the Environment* and *Ökomanagement Niederösterreich* were embracing of many different sectoral targets.

The instruments mentioned in the last section that broadly targeted research organisations were also unlikely to have specific sectoral aims, reflecting the need to research and innovation to remain bottom-up. However, all of the instruments that targeted research had an 'eco-innovation' rather than just 'innovation', aim, other than the Bulgarian *National Innovation Fund*. Of the Innovation Fund, it was stated that for a project to receive funding it needed to give a societal benefit, such as a,

“contribution to the environment (energy saving and non-renewable resources, reduce emissions, etc.), increase the safety of working environment and job quality, labor safety and improving the health status of population, etc.”

Of the sectors focused on by the instruments, energy efficiency, promotion of renewable energy use and resource efficiency were the most frequently occurring.

Material management and resource efficiency did not garner as much attention as energy efficiency, but emerged in good examples like the *Copenhagen Cleantech Cluster*, which is intended, in part, to push for eco-design innovation. The instrument most focused on material management and resource efficiency was the *REMake Green Innovation Voucher* in Germany.

The *Welsh Recycled Content Scheme* is an impressive instrument for the use of recycled material. Grant applications were judged for the potential amount of waste that would be diverted from landfill (amongst other criteria) and gave special focus to priority materials, such as paper, card and wood, showing a strong focus on achieving very clear aims.

Summaries of these instruments can be found in chapter 2 of this report. The table on the next page highlights the different sectoral focuses of the instruments, showing the wide variety of areas tackled by the partner regions, which will allow recommendations to be drawn in the conclusion.

Good Practice	Renewable Energy	Energy Efficiency	Sustainable Construction	Resource Efficiency	Recycling	Eco-design	Water treatment	Waste Management	Environmental Services	Comment
Copenhagen Cleantech Cluster (Denmark)	X	X		X	X	X			X	
EnviroCluster (United Kingdom)	X	X		X	X	X	X		X	
Green Investment Scheme (Estonia)	X	X	X							
GreenConServe Innovation Vouchers (Norway)		X	X	X				X		
Innovation Vouchers (Czech Republic)		X					X	X		
EffTech (Finland)	X	X		X	X	X				
Investors in the Environment (United Kingdom)	X	X	X	X	X	X	X	X	X	All sectors
ITACA Protocol (Italy)			X						X	
Long Term Agreements (Netherlands)	X	X		X						
National Innovation Fund (Bulgaria)										No priority areas
Ökomanagement Niederösterreich (Austria)	X	X	X	X	X	X	X	X	X	All sectors
Regional Operation Programme (Poland)										No priority sectors
REMake Green Innovation Vouchers (Germany)		X		X	X	X		X		
SBToolCZ (Czech Republic)	X	X	X		X		X		X	
Welsh Recycled Content Grant Scheme (United Kingdom)		X		X	X	X		X		

3.6. Expected results

There are both qualitative and quantitative results that are expected from the implementation of the eco-innovation and eco-management policy instruments evaluated in the study.

On the qualitative side, the regions expect to:

- Raise awareness on environmental / eco-innovative issues amongst the target audiences;
- Motivate (eco)-innovation i.e. in the construction sector;
- Promote regional cooperation and networking;
- Stimulate demand for eco-innovative products and services;
- Enable growth in regional industries (through resource efficiency);
- Raise the competitiveness of local businesses;
- Generally improve regional environmental performance of companies, organisations, buildings.

With regard to quantitative results, the regions focus on both economic and environmental results such as numbers of participants and projects, buildings refurbished, tons of waste and CO² reduced or eco-management certificates granted.

The indicators that are used to measure the expected quantitative results can be found in Chapter 3.8.2 'Indicators used'.

3.7. Duration

Good practices showed a variety of durations; from those that have been running for years, to those that have shown great promise over a brief testing period. Long-term instruments breed market and investor confidence, as they provide stability and predictability. Short-term instruments can be better though at achieving specific goals. The duration of an instrument can be linked to its aims, budget, and the need to evaluate and recalibrate to ensure that instruments remain well targeted.

A number of the instruments collected have no envisioned end date. In general, these are the instruments that require little-to-no public funding, but are instead maintained by charitable organisations, industry and research centres, including:

- EnviroCluster (United Kingdom) – launched in 2002;
- Investors in the Environment (United Kingdom) – launched in 2010;
- Copenhagen Cleantech Cluster (Denmark) – launched in 2009.

Publicly funded instruments with no envisioned end date are:

- Ökomanagement Niederösterreich (Austria) – launched in 1998, with a new strategy launched in 2007;
- Long Term Agreements (Netherlands) – launched in 1990.

Eco-management tools such as *SBToolCZ* (in development from 2005, launched in 2010) and *ITACA* (launched in 2004) also do not have an end date, but are monitored and updated to changing conditions.

This then leaves the instruments with a set duration:

- National Innovation Fund (Bulgaria) – 2005-2013;
- Green Investment Scheme (Estonia) – 2010-2012 (for the apartment buildings strand), 2012-2014 (for the private buildings strand);
- Regional Operational Programme (Poland) – 2007-2013;
- EffTech (Finland) – 2008-2013;
- GreenConServe Innovation Vouchers (Norway) – 2010-2012;
- Welsh Recycled Content Grant Scheme (United Kingdom) – 2011-2012;
- REMake Innovation Vouchers (Germany) – 2010-2011.

Many of these instruments receive end dates due to budgeting restrictions. For example, with a budget of €7.8m per year, it would be unrealistic for *EffTech* to be given an undetermined end-date. Providing an end date for the project allows for evaluation of results, and a recalibration of aims. Numerous of the instruments showed re-launch, or adaptation, features. For example, although the *Welsh Recycled Content Grant Scheme* ended in 2012, its aims were taken on by a new Recycled Content Scheme under their Accelerating Reprocessing Infrastructure Development (ARID) project. Similar occurred with *REMake vouchers* in Germany, where a new approach was launched after the successes of the trail, which ended in 2011.

3.8. Type of evaluation and indicators

3.8.1. Evaluation types

Partner regions were asked to describe the type of evaluation that was being undertaken; whether during implementation or post-implementation.

The instruments that had implementation exclusively during implementation (Ongoing implementation) were:

- Copenhagen Cleantech Cluster (Denmark)
- EffTech (Finland)
- Regional Operational Programme (Poland)
- Long-Term Agreements (Netherlands)
- Investors in the Environment (United Kingdom)

Most of these instruments involve the submission of annual or bi-annual reports, reflecting the long-term nature of these practices, and the need to ensure continuous good performance. This is contrasted by the instruments that have post/ex-ante evaluation, which are smaller and have more targeted aims:

- Ökomanagement Niederösterreich (Austria)
- Green Investment Scheme (Estonia)
- REMake Green Innovation Vouchers (Germany)

All of these tools provide grants to companies or individuals to carry out specific actions. As such, evaluation is best carried out once the implementation of the action had been completed. Some instruments were evaluated to different criteria ex-ante and ongoing:

- National Innovation Fund (Bulgaria)
- Innovation Vouchers (Czech Republic)
- GreenConServe Innovation Vouchers (Norway)
- Welsh Recycled Content Grant Scheme (United Kingdom)

A mixed evaluation allows for implementation to be monitored, as well as lasting impacts. The *National Innovation Fund* administering agency implements spot-checks and requires the receipt of reports on technical and financial performance. *GreenConServe vouchers* require the client manager to monitor the delivery of the funded project, and then ask the SME to submit a post-implementation report providing feedback on the scheme. This system provides both an evaluation of the project, and a feedback loop on ways to improve the scheme. The *Welsh recycled Content Grant Scheme* follows a similar system, with on-site visits by the administering agency, and the submission of final reports.

Other instruments do not demonstrate a clear evaluation system, with neither ongoing nor ex-ante evaluation. The *ITACA protocol* and *SBToolCZ* have no evaluation of their performance, as they themselves are evaluation systems. The *EnviroCluster* has not had an evaluation system in place, but will be introducing an ongoing, quarterly evaluation in 2012.

3.8.2. Indicators used

A variety of performance indicators were reported. These can be broadly split into environmental and economic impacts. For the purposes of this report, environmental impacts will include (for example) increased recycle use, reduced CO₂ emissions, and reduced energy used. Economic impacts include things such as business creation, product and service creation and creation of jobs. Whilst these measures can be measured in numbers, others cannot. These are therefore classified as 'Qualitative Impacts', such as beneficiary satisfaction, and change in management actions. Reflecting the difficulty in measuring them, there are fewer qualitative indicators used than quantitative. The most occurring qualitative measure is participant satisfaction, which is collected using feedback forms.

Some instruments had very narrow indicators, whilst others had mixed impact measurements. For example, the *GreenConServe Innovation Voucher* was concerned with SME satisfaction and with the volume of sales in the green construction service in the five years following voucher implementation. Whilst this is a suitable evaluation for the project, others have gained from broader measures.

Some evaluations only used indicators relating to environmental protection. For example, the *Regional Operational Programme* (which was designed specifically to help existing businesses to adapt to environmental protection regulation) included indicators on:

- Number of projects introducing environmental protection;
- Number of implemented EMS and certifications gained;
- Change in emissions of main air pollutants;
- Change in waste production;
- Change in water consumption;
- Change in sewage produced.

This can be compared with *Ökomanagement Niederösterreich* which mixed economic, environmental and qualitative indicators:

- Participant satisfaction;
- Follow-up activities;
- Environmental investments made;
- Number of measures implemented;
- Number of participants;
- Impact of measures;
- Management change in organisation.

The table on the next page shows indicators identified by the collected instruments.

	Indicator	Number of Instruments
Economic	Activities resulting from funding	1
	Number of measures implemented	1
	Number of funded participants	2
	Number of new products and services	1
	Number of applicants	2
	Contacts made between members (clusters)	2
	Employment growth/job creation	1
	Growth in turnover	1
	Growth in labour productivity	1
	Creation of new companies	1
	Expected sales of new services and products	1
Environmental	Conservation of energy/energy efficiency implementation	1
	Uptake of renewable energies	2
	Reduction in emissions	4
	Material/resource efficiency	4
	Number of certifications	2
	Change in waste production	1
	Change in water production	1
	Tonnage of recyclate used	1
Qualitative / Other	Beneficiary satisfaction	3
	Management and staff change in organisation	2
	Ability to deliver before a set deadline	2

All in all, there were more *types* of economic than environmental indicators measured, but more environmental indicators implemented. This suggests a greater variety of methods across narrow sectoral foci.

Some instruments did not present indicators. For example, the small apartment buildings strand of the *Green Investment Scheme* (although carrying out evaluations) does not have established evaluation indicators, due to the newness of the instrument.

3.9. Transferability potential

All of the regional project partners indicated a good or excellent potential for transferring the eco-innovation or eco-management instruments described, once adapted to local framework conditions. In several cases, the instruments had already been transferred from a different national or regional context. Most partners underlined that special attention has to be paid to the modification of a policy instrument to local conditions, for example, with regard to target audiences and support from national and regional funding sources.

Concerning the innovation voucher systems described, the partners pointed out that a number of pre-conditions have to be met in order to transfer this policy instrument, such as deciding where and how to choose the pool of consultants for providing the expertise.

The transferability potential of policy instruments can be improved if adaptability questions are raised in a consistent manner. As an example, given that there are 4 case studies focusing on vouchers in this report, the methodology on designing innovation vouchers as compiled by the GreenConServe project is presented below. The methodology defines the 5 major steps of a voucher scheme, and raises questions that entities thinking of implementing a scheme of their own need to ask themselves and subsequently define during the preparatory phases. The process flow outlines the main transferability considerations in the design and implementation of a voucher scheme:

1. **Voucher specification** – This step involves defining the objectives, sector and target group of the voucher, as well as establishing the size of the voucher and co-funding rates. These problems need to be decided by the relevant region – What are the problems that the region is facing? What is the existing industrial framework? What is the available budget?
2. **Application procedures** – The question of what sort of application procedure to use will depend on available resources and target sector and group. An especially important consideration is the size of the company and whether they will be able to handle administrative requirements.

For example, decisions will involve choosing a short eligibility check, or a complete quality assessment, with an automated web-based application system, or an evaluation team.

3. **Reporting payments and control** – In order to achieve policy aims, evidence should be requested that demonstrates the implementation of required activities and implementation should be linked to grant payment. In setting up a voucher, it must be considered where reports will come from: the beneficiary, or the contracted expert. Similarly, will payment go to the external expert, or to the voucher beneficiary? Stringent controls will be required to control any potential fraud, or possible inaction.
4. **Finding the right implementing body or organisation** – If it is a particularly large voucher scheme, then it may be worth creating an independent administrative agency. If not, then it is vital to check the flexibility of internal procedures of existing government departments or agencies, so see if they can take the extra workload. Otherwise, an external partner, such as a charity or not-for-profit organisation with similar goals and appropriate knowledge and experience may be suitable. It is important to choose the administrative body that will have least constraints.
5. **Choosing and guaranteeing quality of the external expertise** – Some of the matters to be considered in this stage include how to define appropriate knowledge providers for technical and innovation knowhow, how to appreciate limitations of experts within a country or region and where domestic experience may be insufficient, whether to run a continuous or limited call for experts, the use of public and private experts, and whether the beneficiary of the voucher should be able to have absolute free choice over who to choose as their external expert, or whether they will be constrained by a select pool of pre-vetted experts.

Although this flow is for a voucher scheme, a similar exercise pinpointing considerations to be taken into account can be applied to any eco-management or eco-innovation tool. Questions need to be raised and then answered, focusing on the target sector and group, available budget, evaluation and administering body (etc.); all factors that are essential are essential for any transfer of a policy instrument.

4. Conclusions and recommendations

4.1.1 Eco-management vs. eco-innovation

Eco-management and eco-innovation were the two concepts studied in this report. When discussing eco-management and eco-innovation one should keep in mind the nature of these two activities.

Eco-management entails better management practices within the setting of a company or an organisation that lead to better environmental performance of that specific entity. It tends to be based on simple rules and measures that can often be identified through an environmental audit, and can be implemented in a rather straightforward and even cost-effective way.

Eco-management measures do not necessarily entail innovation. The process can apply across the board to different types and sizes of companies and organisations. It has the potential to vastly improve the environmental performance of most European industries/sectors (especially manufacturing ones) which often go hand in hand with profitability stemming from cost cuttings achieved through avoiding wastage in systems.

Eco-innovation on the other hand is a more complex process and it is not applicable to all industries in the same manner. It entails innovation that has positive environmental effects and relates to new or improved services or products, the invention of new ways of working and new business models as well as changes in production process or materials. The overall aim here is to change business and manufacturing processes in a way that affects core business and / or approach and can lead to different results / business development and growth.

The complexity of promoting eco-innovation through policy instruments is also explained in the Final Report of the eco-innovation sectoral watch (2008): *“fostering more eco-innovation requires a better understanding of the specific drivers and barriers, which include notably, pricing of resources (including via taxation); an information/education gap with respect to the life-cycle cost of products and services; and the 'system innovation' character of eco-innovations (success being dependent on a range of stakeholders changing their behaviour or legislative and regulatory adjustments).”*

Currently, eco-innovation appears to be more prominent in the so-called eco-industries such as waste treatment, water and renewable energies. Nevertheless, eco-innovation is also applicable to traditional industries.

In the present study, it can be observed that RECOMMEND partner regions exemplify their environmental performance related policies by focusing on eco-innovation support schemes and instruments in place, rather than eco-management ones. The authors of the study tried to complement the eco-innovation instruments presented by the RECOMMEND partners regions by eco-management policy instruments to be presented in the international case studies. However, this has proven difficult and the desk research revealed more abundant examples of eco-innovation policy instruments than policies specifically directed at supporting eco-management.

The reason might be that the application of eco-management practices in real life is often a direct response to regulatory demands. Additional policy instruments specifically targeting eco-management might therefore be less widespread than eco-innovation policy tools.

However, the authors believe that eco-management instruments do exist in all the concerned regions and therefore recommend that all partner regions start by mapping the policy instruments they have in place both for eco-innovation and eco-management as a first step towards the aim of comprehensive good practice identification and subsequent policy exchange efforts. In addition, each region should identify the level of modernisation and the needs of industries in their specific regions. With these two points covered, concrete steps can be taken in looking for policy practice exchanges and setting up of new policies in their respective regions.

Regional specificities in industries should also be accounted for. Eco-management policies can have a big role to play in countries/regions where industries still need to modernise and achieve targets for pollution reduction as set in regulations. There are a lot of low hanging fruits that these types of eco-management instruments can support in their efforts to establish eco-management practices in their operations.

In some other European countries, this transition to modernise industry has already occurred, and the potential for eco-management policies to have an impact might be lower. In these countries, there are two things to consider: eco-management policies need to set increasingly stricter benchmarks and targets (following Top-runner policy approaches); and eco-innovation policies can actually play a bigger role in the next transition of industries i.e. innovate to develop new products/services.

Recommendations for rECOMmend partner regions:

1. Undertake a **comprehensive and systematic mapping exercise of all existing eco-innovation and eco-management policy instruments** in place in own regions and conduct a subsequent gap analysis to see what types are missing in each one.
2. **Bottom-up approaches need to be encouraged.** A mapping of the needs of local and regional industrial actors needs to be done as well for each of the regions. Priorities in policy actions need to match local/regional realities.
3. **Identify the low-hanging fruits** in regions that need to improve environmental performance and **encourage stricter benchmarks and eco-innovation** in regions that are further advanced or want to specialise in eco-innovation.

4.1.2 Common features / similarities

In the cases presented in this study, the majority of the policy instruments can be grouped in the following manner:

- Cluster initiatives (2 cases)
- Funding (4 grant cases, 4 voucher cases)
- Accreditation/certification schemes (3 cases)

Within each one similarities and differences can be pointed out.

Looking at the overall picture, it can be said that none of these policy instruments are novel or highly innovative in their own right. They tend to be straightforward interpretations of traditional funding such as grants or cluster policy, either adjusted and targeted to a sector or left open to a variety of sectors.

However, there are also new elements and innovative ideas that have been introduced by a number of regions. Innovation vouchers are a relatively new funding instrument that is now being used by a number of regions not only to facilitate access to research but also access to business expertise or expert knowledge around resource efficiency. Moreover, interesting combinations of policy instruments have been used such as eco-management and public procurement of innovative services that have been combined with green innovation vouchers to bring the necessary external expertise to businesses.

The **cluster initiatives** all support networking and internationalisation activities, focusing both on eco-innovation as well as eco-management. They have their own respective sectoral focuses given the industries present in the regions and support is geared towards the cooperation of triple helix actors typically found in cluster initiatives: large and small companies, academia and public actors.

Whilst the general set-up of the eco-innovative clusters is similar, they may differ in the ambitions to reach extended networks outside of Europe and tap into international markets in more substantial ways. For the Danish cluster, internationalization is crucial given the small size of Denmark's domestic market and the highly modernised level of their eco-industries. In other cases, support of eco-management practices through cluster networks and the development of a regional network may take priority over internationalisation. The crucial part is the ability of the cluster initiative to respond policy-wise as well as in their implementation part to the needs of local business stakeholders.

The **funding schemes** are both present for eco-management as well as eco-innovation type of support. Again, some such as the *Ökomanagement Niederösterreich (Austria)* voucher scheme supporting eco-management are open to all sectors, while others such as the *GreenConServe voucher scheme* (Norway) supporting eco-innovation focus very specifically on construction service SMEs with an environmental added value. The focus area is often reported to be a response to the demand of companies in the regions and the ambition to reach targets set by policy priorities.

Within the voucher schemes, the Norwegian actors tested the use of innovation vouchers in combination with another type of policy incentive, public procurement. In the GreenConServe project, Innovation Norway collaborated with NDEA, the largest public procurer of building works in Norway. NDEA has published an invitation to tender for the construction and equipment of a modern gas-mixing building complex in Bergen. NDEA has requested the use of digital building information models and a high degree of efficiency during the construction process and over the life-cycle of the building. The tender specifications were so demanding that it was expected that SMEs in the market could hardly meet the requirements. In order to become a successful bidder, the SMEs could use a GreenConServe innovation voucher from Innovation Norway supporting them to acquire the missing skills and to develop further business opportunities. While the impact of this action is still to be measured (pilot test still running), the feedback from the agencies and the SMEs until now is very positive.

While pilot testing allows this type of experimentation, the success of a policy instrument relating to environmental aspects can also be dependent on the security and confidence of industry at the stability of the instrument on the long run. Environmental taxes and incentives are known to be subject to budget cuts and to political change, as such the security that can be attached to them, contributes to their long term success. One such long running example in the cases presented in this report are the *Long-Term Agreements (LTAs)* have been implemented in the Netherlands since 1990. They are voluntary agreements, negotiated between industry and public authorities, and are designed to stimulate energy efficiency measures in companies. Although voluntary, they are formed as contracts and can contain sanctions for non-compliance. It is an obligation for the company to produce an energy efficiency plan every four years, monitor their progress and implement a management system and standard (based on ISO 14001). The rationale behind *LTAs* is that by setting targets, rather than being overly prescriptive, industry can find innovative ways of implementing energy efficiency measures. By taking part in the programme, companies can avoid being regulated. The annual reporting structure also allows the agency to keep track of the impact of the programme, which in its turn gives longevity to it.

Accreditation/certification schemes were also brought forward by the partner regions. A major similarity here is that these schemes are all eco-management schemes. They are straightforward and rather technical; measuring performance for certification purposes. Whilst certification for eco-management might be straightforward, the lack of the certification schemes for eco-innovation is indicative of the fact that eco-innovation is a very complex concept that cannot easily be measured and assessed. This remains one of the main challenges of eco-innovation support schemes.

Recommendations for rECOMmend partner regions:

4. Ensure and utilise complementarities in policies. Eco-management and eco-innovation policies are never stand alone policies. Complementarities with other industrial policy instruments (planned or in place) need to be utilised in a more proactive way, not forgetting the market pull and push effects that are crucial to act together for significant change to be achieved.

5. Innovation in policy should not be forgotten. Innovative approaches in the design of policy instruments and schemes can play a crucial role in mainstreaming actions in more effective ways. Tried and tested recipes in policy design are a solid foundation to start from; yet innovation in policy design and implementation can give rise to the extra push that European industries need to implement eco-management as well as eco-innovative practices in their businesses.

6. Consider combining different policy instruments in order to create synergies and make best use of the resources available. This might for example be a combination of demand and supply side measures.

4.1.3 Transferability potential

European good practices in eco-management and eco-innovation can inspire regional players to implement similar policy instruments in their regions. To spark ideas, they can collect practices, interview their counterparts in other regions and go on a study visit to get a hands-on view of the implementation of a practice. Nevertheless, it is important to understand that a policy instrument cannot be transferred in its entirety into a different regional context. Each good practice has to be broken down into its different constituting elements or aspects which then can be transferred and adopted to a new regional or local context. This was confirmed by the regions participating in this study. They have all pointed out that their good practices can be transferred in a relatively easy manner but that attention has to be paid as to a careful adaption to the regional context.

In the following, we will look into the main building blocks of a ‘good practice’ and determine which aspects can be transferred to another context.

Transferable aspects

- **General approach / idea**

The general approach or better the idea for a eco-innovation / eco-management policy instruments can easily be “transferred”. In other words, a region can easily get inspired by a policy instrument that provides for incentives of building owners to introduce energy efficiency measures.

Whilst the idea can travel, the entire policy practice with its various elements cannot be taken as is and put 1:1 into a different regional context.

TRANSFER **Easy to transfer into different regional context**

- **Strategic approach**

At the beginning of the process developing or transferring a policy instrument stand a range of strategic decisions. The point of departure is a definition of regional needs and objectives for example CO2 reduction targets, environmental targets such as water quality and waste reduction or energy efficiency in buildings as well as economic aims such as job creation, company growth or the development of certain industry sectors.

Once these strategic objectives have been established, the target groups need to be defined. This can vary greatly from building owners and public authorities to SMEs and academic institutions. In addition, the target audiences might be better be defined With regard to SMEs they would also

ADAPT **The strategic decisions can only be taken at regional level and cannot be transferred from a different regional context.**

- **Funding schemes**

Funding schemes ranging from grants including innovation vouchers, soft loans and tax incentives, etc. Generally the choice of funding scheme to address a certain audience can be transferred.

TRANSFER **The general funding scheme i.e. an innovation voucher can be transferred.**

However, close attention has to be paid to implementation modalities of such a funding scheme such as the legal framework, payment conditions, duration, audit processes, co-financing, etc.

It might become necessary to undergo a transfer process looking into each of the specific modalities of a chosen funding scheme and to adapt each different aspects to a different regional context.

ADAPT **The modalities of the funding schemes have to be identified and adapted on a case-by-case basis.**

- **Managing body**

The type of body / organization to be chosen for the implementation of a particular heavily depends on the local context for example as regards the legal structure, the mission of the implementing body, its legal boundaries, etc. However, choosing the right implementing body can be critical for the success of a given policy scheme.

As the present study has shown, in some instances the UK has used in charity bodies to implement eco-innovation policies. In a different regional or national context this might not be possible. Others, instead of using an existing organization as implementing body have favoured to create a new organization dedicated to the implementation of a policy scheme. This has allowed them to tailor the policy instrument exactly as needed without having to obey to the legal or regulatory limitations of an existing organization.

ADAPT **From the case studies that have been collected for the purpose of this study and taking into account the feedback from other relevant eco-innovation policy projects, it is clear that the organisations / bodies implementing the policy instruments are key to the success of a measure. A lot of attention should therefore be paid to the choosing the most suitable organisation.**

- **Application process / accessibility**

The application process or aspects of the application process can also be transferred. This might also include a strong element of "inspiration" avoiding to reinvent the wheel.

On the one hand, the application process strongly depends on the rules and regulations of the implementing organisation. In some countries, a complex selection process might be put in place or a strong element of control will be built in in order to avoid fraud; in other countries the process might be fully automated online.

On the other hand, it might be possible to use evaluation criteria from the policy instrument that is being transferred.

ADAPT **Whilst aspects of the application process can transferred as is, others have to adapted to the rules and regulations of the organization or region.**

- **Promotion and awareness**

Aspects of promotion and awareness-raising might also be transferred but need to be adapted to the target audiences that should be reached and resources that are available. However, interesting and often cost effective ideas might easily be transferred.

In case training programmes are being implemented to educate the audience for example on energy efficiency measures for retrofitting buildings, training curricula can be transferred from other regions without greater efforts of adaptation and might simply be completed with regional statistics and examples and translated into the local language.

ADAPT

As with many of the afore-mentioned aspects, general approaches and ideas for promotion and awareness-raising can be transferred but then need to be adapted to the local circumstances.

- **Evaluation / indicators**

Evaluation criteria and indicators in terms of environmental or climate impact will be relevant in a different context as well and can be transferred easily. Economic indicators such as growth rates or job creation might also be used in a different but might need adaptation in order to reflect the local economic conditions.

TRANSFER

Most evaluation for eco-innovation and eco-management schemes can be transferred.

Recommendations for rECOMmend partner regions:

7. **Define clear regional targets and target audiences** for regional eco-innovation and eco-management policy measures
8. **Choose good practices that are best answering specific regional objectives and needs of regional actors**
9. **Break down each best practice into its constituting aspects**
10. **Analyse and adapt each aspect of a good policy practice** to your regional context before implementing it in your region

Annex I – Partners

Partner	Region (NUTS Level)
Lower Austrian Regional Government Office, Department of Environmental and Energy Economics	1: Ostösterreich 2: Niederösterreich 3: Sankt Polten
Kujawsko-Pomorskie Voivodeship	1: Polnocny 2: Kujawsko-Pomorskie 3: Bydgosko-Torunski
Ekoport	1: Ceska Republica 2: Stredni Cechy 3: Stredocesky Kraj
Tartu Regional Energy Agency	1: Eesti 2: Eesti 3: Lõuna-Eesti
Province of Ascoli Piceno	1: Centro I 2: Marche 3: Ascoli Piceno
UK Centre for Economic and Environmental Development	1: East of England 2: East Anglia 3: Peterborough
Opportunity Peterborough	1: East of England 2: East Anglia 3: Peterborough
Union of Bulgarian Black Sea Local Authorities	1: Severina I Iztochna Bulgaria 2: Severoiztochen 3: Varna
Local Energy Agency Spodnje Podravje	1: Slovenija 2: Vzhodna Slovenija 3: Podravska

Annex II – Questionnaire Template

RECOMMEND Partner:

Author:

Telephone:

Email:

Eco-management	(enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
Eco-innovation	(fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	Please provide the official name of the instrument.
Instrument's Overview (Nature, Main Goals)	Please provide a comprehensive and clear executive summary of the instrument. Start by mentioning the instrument's overall and specific objectives, then summarise information from other sections: forms and levels of funding (if any), targets and beneficiaries, any key results achieved to date and point out unique identifying features of the instrument.
Type of Funding	Whenever referring to a funding instrument, please indicate the form of funding provided (e.g. grants, subsidised loans, venture capital, guarantees, tax incentives). For non-subsidy instruments please indicate: "no direct funding provided". For the remaining forms of support please mention: "other (please specify)".
Instrument's Design Background and Rationale (Context / Drivers)	Please refer to the precise reasons why the instrument was launched in relation to the national research system citing, wherever possible, background studies, a national policy debate (e.g. consultation with business sector), statistical evidence, etc, that justify public intervention, (what sort of market or system failure is the instrument addressing). Also, please point out if the measure was inspired by trans-national policy learning, or the need to meet policy objectives.
Administering Agency	Please indicate the Administering Agency. Whenever different from the "administering Agency", please refer to the "Launching Agency" and the "Funding Agency".
Target Group of Instrument	Please indicate which group(s) is the target of the instrument (beneficiaries) and also which group(s) is eligible to apply (e.g. SMEs - Large companies - associative structures - municipalities).
Target Sector of Instrument	Please indicate which sector(s) is the target of the instrument (e.g. material, water and energy efficiency, recycling, climate mitigation, sustainable construction, renewable energy, etc).

Expected Effects/Results, Ex-ante Indicators	Please indicate if any indicators were specified ex-ante for the measurement of results. If yes, what were they? Please present as much details as possible on indicators used for the instrument's monitoring.
Overall Budget	An estimate of the overall funding (in Euros) for a specified period should be provided. There is a difference between funds spent (in the past) and budgetary commitments made for a future period (e.g. Structural fund programming for 2007-13). However, the aim of this question is to have an approximate budgetary estimate that allows comparison of scale of instruments.
Duration	Launching and closing date. If not yet closed, please refer to the envisioned ending date.
Type of Evaluation (If Available)	Please indicate which type of evaluation, (if any), has taken place: On-going/Mid-term; Final/Ex-post; or both.
Indicators Used	Please refer to concrete qualitative/quantitative indicators used in the evaluation assessment and provide references to any published evaluation report/review.
Transferability Potential	Please refer to the degree to which the support measure can be characterized, extracted from its present context and transferred to other contexts or settings. If the instrument already resulted from trans-national policy learning/transferability, please mention from which country/region was it "transferred"/adapted from.
Website / Link	To be provided

Annex III – Returned Questionnaires

III.I. Partner Region Good Practices

III.I.I. Austria (Niederösterreich) - Ökomanagement Niederösterreich Eco-Management Vouchers

RECOMMEND Partner: Gov. of Lower Austria (LP)
Author: Benjamin Kuscher
Telephone: +43/676/352 33 69
Email: benjamin.kuscher@conplusultra.com

X	Eco-management (enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
	Eco-innovation (fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	Ökomanagement Niederösterreich
Instrument's Overview (Nature, Main Goals)	<p>Established in 1998 the Ökomanagement funding scheme has much experience in funding consultancy to private and public organisations in order to develop and implement environmental and climate friendly measures. Ökomanagement supports SMEs and communities in adopting environmental management systems. Due to smooth co-operation between the regional economic department and the department for environment it was possible to concentrate the public support for the economy on environmental-friendly measures which resulted directly on a positive influence on the regional climate targets</p> <p>“Ökomanagement” also sees itself as a facilitator for SMEs to access investment support from another regional funding scheme on environmental investment promotion “Betriebliche Umweltförderung”. Both these instruments follow the principle to make the access to funding for the SMEs as unbureaucratic as possible. Only in that way it will be possible to motivate as many businesses as possible to start the process of eco-management systems such as EMAS or ISO 14001.</p> <p>The unbureaucratic funding system is reflected in an easy to access three level voucher system (Pionier, Profi , Champion). Applicants select out of the 150 Ökomanagement consultants and together with them they make an online request for funding. The funds will be only paid after the environmental and climate friendly measures are described and registered in the Ökomanagement database. The implementation of the indicated measures will be checked some months later.</p> <p>Results achieved so far are a high increase of participants, registration of private environmental and climate friendly measures, more awareness of regional SMEs and communities on resource effectiveness and sustainability. In 4 years more than 700 participants. The flexible and easy access to funded consultancy on env. and climate measures is the main identification feature of Ökomanagement.</p> <p>The focus is not on the methodology of the consultancy, but much more on the final result of a consultancy project. The funds are bound on the development and implementation of env. and climate measures and not on a special training or Work Shop.</p>
Type of Funding	<p>The voucher grants covering 50% of the costs of the external consultant, the remaining 50% must be met by the beneficiary. The limit of the grants defers from level to level.</p> <p>Pionier: 2 days of funded project consulting + ½ day for the check (€ 1.020) Profi: 4 days of funded project consulting + ½ day for the check (€ 1.700) Champion: 8 days of funded project consulting + ½ day for the check (€ 3.060)</p>

Instrument's Design Background and Rationale (Context / Drivers)	<p>Voucher schemes: The target of Ökomanagement is to motivate micro enterprises, SMEs and municipalities to start the process of environmental management. Therefore it is important to enable the first contact to env. management systems. This is only possible by reducing all potential obstacles on this way.</p> <p>Thus the policy rationale behind vouchers for external expertise is that this is the most flexible and most unbureaucratic way to motivate potential beneficiaries. Further the vouchers can be used by the consultants as an additional selling argument for their services.</p> <p>Further the funding is limited to 50% of the cost. The policy argument behind that is that the beneficiary needs to show a certain degree of commitment. The funding is also bound to the registration of implemented env. and climate measures. The policy argument behind that is that the registered environmental-friendly measures can be included in the fulfilment of the regional climate targets.</p>
Administering Agency	Lower Austrian Regional government office Department of environmental economics
Target Group of Instrument	<ul style="list-style-type: none"> ▪ Pionier: small enterprises and small municipalities ▪ Profi: medium enterprises, tourism enterprises, education centres and municipalities ▪ Champion: Industrial firms, large municipalities, hospitals
Target Sector of Instrument	All sectors
Expected Effects/Results, Ex-ante Indicators	<p>Companies that receive the voucher will have first access to environmental management systems and will implement 1 to 3 env. and climate friendly measures. Champions will need to implement EMAS or ISO 14001.</p> <p>Ex-ante indicators are:</p> <ul style="list-style-type: none"> - Number of participants - Number of measures - Follow up funding for investments on env. measures - Re-use of Ökomanagement vouchers in the following years
Overall Budget	€ 900.000 per year
Duration	<p>Launch date: 1998</p> <p>New Strategy since 2007</p> <p>Ökomanagement Niederösterreich is an ongoing funding scheme. There is no envisioned end date.</p>
Type of Evaluation (If Available)	<p>In the past there was a yearly external evaluation. The main indicators were the results of the registered measures.</p> <p>Since 2012 there will be an internal evaluation with qualified interviews on follow up activities of the beneficiaries.</p>
Indicators Used	<ul style="list-style-type: none"> - Satisfaction - Follow up activities - Env. Investment - Number of measures - Number of participants - Impact of measures - Management change within the organisation
Transferability Potential	<p>Similar instruments exist in all Austrian regions. But none of them follows the flexible three level voucher scheme methodology. In quarterly meetings the regional funding schemes meet to discuss their experiences. The learning process is enormous. Minor adaptations were already transferred to other regions, but the entire methodology was not so far.</p> <p>We believe that Ökomanagement is easily transferable. The preconditions for a public funding scheme is the following.</p> <ul style="list-style-type: none"> - Database - Pool of consultants - Fast handling of applications
Website / Link	http://www.oekomanagement.at/

III.I.II. Bulgaria (Varna) - National Innovation Fund

RECOMMEND Partner: Union of Bulgarian Black Sea Local Authorities
Author: Mariana Ivanova
Telephone: + 359 52 600 266
Email: office@ubbsla.org

	Eco-management	(enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
X	Eco-innovation	(fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	National Innovation Fund (NIF)
Instrument's Overview (Nature, Main Goals)	<p>National Innovation Fund (NIF) is a financing scheme to support innovative SME. The Fund is to promote the implementation of scientific and applied research projects and feasibility projects, which are absorbed by new or improved products, processes or services.</p> <p>The NIF is the financial instrument for the implementation of Bulgarian innovation strategy. The strategic objectives set by the Fund are to enhance the competitiveness of Bulgarian economy by stimulating market-oriented applied research for industry and creating conditions for attracting private capital to finance the innovations.</p> <p>NIF has no priority areas of its own, it assigns only on the basis of quality of the proposed projects. In order to qualify for grants, the SME must prove the project is transformative, scalable and sustainable and resulting in additional benefits to society - a contribution to environmental (eco-) protection.</p> <p>The budget of the NIF is part of the budget of the Ministry of Economy, Energy and Tourism.</p>
Type of Funding	<p>Two kinds of projects eligible to apply for the fund are:</p> <ul style="list-style-type: none"> ➤ Scientific applied research project (R&D projects) ➤ Feasibility studies <p>The basic principle is that 50% of the costs of Research projects, 25% of the costs of Development projects and 50% of the costs of feasibility studies are subsidized.</p> <p>The maximum grant for R&D projects is 255 623 Euro, with duration of implementation of 12 - 36 months</p> <p>The maximum grant for feasibility studies projects is 25 562 Euro, with duration of implementation till 1 year.</p>
Instrument's Design Background and Rationale (Context / Drivers)	<p>NIF was created in accordance with Council of Ministers № 723 of September 8, 2004 to adopt the Innovation Strategy of Bulgaria. The Fund is a financing scheme to support innovative SME.</p> <p>Since its establishment, four sessions for competitive projects are organized. 788 proposals were submitted. 319 beneficiaries have already signed contracts. The total value of approved proposals amounted to 47 million Euro.</p>
Administering Agency	The management and the administration of the National Innovation Fund are assigned to the Bulgarian Small and Medium Enterprises Promotion Agency (BSMEPA). The Agency is a government body under the Minister of Economy.

Target Group of Instrument	<p>For the subsidy may apply all legal entities registered under the Bulgarian Commercial Law in case they realize their project in the country alone or in partnership with other entities registered by the trade Law, Universities, Bulgarian Academy of Science, scientific organizations and teams.</p> <p>The Bulgarian government wants to stimulate SMEs and universities to participate in research and development projects. Therefore an additional subsidy percentage (10%) is available when a SME or university is participating in the consortium. In case of a SME, this top-up percentage only counts for the SME's costs. In case of cooperation with a university the whole consortium gets a top-up of 10%.</p>
Target Sector of Instrument	NIF has no priority areas for funding. The Fund finances innovative projects from all sectors of the economy with the exception of agriculture, forestry, fishing industry, aimed at achieving a new and significant scientific or technological achievement resulting in additional benefits to society - a contribution to the environment (energy saving and non-renewable resources, reduce emissions, etc.), increase the safety of working environment and job quality, labor safety and improving the health status of population, etc.
Expected Effects/Results, Ex-ante Indicators	<p>The Evaluation Committee ranks the projects based scoring the projects on the following selection criteria:</p> <ul style="list-style-type: none"> • Innovativeness • Economic perspective <p>Both criteria are equally important, but eco and environmental protection is a additional benefit.</p>
Overall Budget	The overall budget of the NIF for the period 2009 – 2013 is 133.000.000 Euro
Duration	On 15 March 2005 the Fund started functioning as it opened a call for proposals. Duration of NIF – 2005 to 2013
Type of Evaluation (If Available)	Current and subsequent monitoring of the implementation of approved projects are implemented by the Bulgarian Small and Medium Enterprises Promotion Agency that performs spot checks of beneficiaries prepared by the technical and financial reports.
Indicators Used	<p>Projects that apply for a grant is assessed on the following criteria:</p> <ol style="list-style-type: none"> a) Whether the project is aimed at reaching a new and significant scientific or technological achievement b) Additional benefits to society - a contribution to environmental protection (conservation of energy and non-renewable resources, reduce emissions, etc.) increase the safety of working environment and job quality, labor safety and increase state tightly population, etc. c) How the project objectives are to develop the new products and services that can find marketing d) New development leads to a change in production technology, product quality, which will be produced as a result of the project, a reduction of resources, materials, energy and others.
Transferability Potential	-
Website / Link	http://www.sme.government.bg/en/

III.I.III. Czech Republic (Central Bohemia) – SBToolCZ

RECOMMEND Partner: Ekoport o.s.
Author: Luboš Nobilis, Jan Jareš
Telephone: +420 602 563 348
Email: info@ekoport.cz

x	Eco-innovation	(fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)
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Name of policy instrument	SBToolCZ
Instrument's Overview (Nature, Main Goals)	<p>SbtoolCZ is Czech certification tool for complex evaluating of construction quality level in accordance to sustainable construction principles (environmental, social and economical aspects)</p> <p>This tool offers following to developers, architects, engineers and clients:</p> <ul style="list-style-type: none"> - marketing tool – certification of buildings' quality corresponding with sustainable constructions' principles - evaluation of the building in order to analyse environmental impacts including possible optimalization of this impact - inspiration for finding new innovative solutions, which minimize environmental impacts - technical assessment of the building - involvement of social impact factor of the building - supporting tool in order to lower operational costs and improving user comfort - location quality assessment <p>Main targets of SBToolCZ methodology:</p> <ul style="list-style-type: none"> - elimination of environmental impacts of the building - support to improving energy efficiency of the building in accordance to EU directive 2010/31/EU (EPBD II), - improvement of interior environment in the building - providing credible certificate - stimulation of sustainable construction's demand
Type of Funding	<p>SBToolCZ is not a financial instrument. Methodology used by SBToolCZ is accesible for free. Assessment of the building can be performed by anyone, certification is being provided by authorized auditors.</p> <p>The price for certification is estimated between 200 – 2000 EUR according to the character of the project (used materials, scale, Cena certifikace je odhadována na 200 – 2000 euro, podle charakteru (velikosti, složitosti, etc.)</p>
Instrument's Design Background and Rationale (Context / Drivers)	<p>SBToolCZ methodology comes out from international system called SBTool which has been developed by International Initiative for a Sustainable Built Environment (iiSBE).</p> <p>SBTool is being used in many countries worldwide and certification based on SBTool is performed in Spain, Italy and Portugal.</p> <p>Engineers has a tool which helps to improve quality of their plans and proposals - on the other side, developers can achieve competitive certification and finally investor receives quality standard assurance and operational costs guarantee. Not mentioning national interest in environmental impacts' elimination.</p> <p>Origin of SBToolCZ has been co-financed by the contribution of Ministry of Education (project no.1M0579) and its development is now financed without any public resources.</p>

Administering Agency	Faculty of Civil Engineering, Czech Technical University in Prague and National platform for SBToolCZ
Target Group of Instrument	Developers, investors, engineers, architects, facility managements, real estates specialists, public bodies.
Target Sector of Instrument	Primary energy savings, construction materials, water consumption savings, waste utilization, support to renewables, quality interior environment, support to flexibility and adaptability, etc.
Expected Effects/Results, Ex-ante Indicators	<p>One the the main goals of SBToolCZ is to motivate sustainable construction's sector and stimulate its demand.</p> <p>In period of 2012 – 2015 SBToolCZ will further develop with following steps:</p> <ul style="list-style-type: none"> - Implementation of scheme for evaluation operational phases for civil housing and administrative buildings - Implementation of other schemes for evaluation and certification schools, hotels, business centers, industrial buildings - Preparation of „Box of good examples“ in accordance to SBToolsCZ methodology
Overall Budget	n/a Tool will be operated without need of public resources.
Duration	Development since 2005
Type of Evaluation (If Available)	Brought on the market with certification in 2010.
Indicators Used	<p>Number of already certified buildings</p> <ul style="list-style-type: none"> - 2010: 1 - 2011: 1 - 2012: 30 (estimation according to processes already started)
Transferability Potential	Tool is primarily assigned to the Czech Republic conditions. Transferability is possible after modifications.
Website / Link	www.sbtool.cz

III.I.IV. Czech Republic (Central Bohemia) – Innovation Vouchers

RECOMMEND Partner: Ekoport o.s.
Author: Luboš Nobilis, Jan Jareš
Telephone: +420 602 563 348
Email: info@ekoport.cz

Name of policy instrument	Innovation vouchers
Instrument's Overview (Nature, Main Goals)	Innovation voucher = financial instrument for support to cooperation between industry and R&D. Cooperation is defined as purchase of external services delivered by university to industry partner in order to improve its innovation potential. This tool is designed for general innovations including eco-innovations.
Type of Funding	De-minis financial support. Financial contribution - 75 % of the eligible costs maximum. Entrepreneurs located in perspective region can receive innovation voucher between 60 – 149.000 CZK for purchasing external services.
Instrument's Design Background and Rationale (Context / Drivers)	This financial support is aimed at entrepreneurs performing new or innovated product (or service) launch and thans to this innovation are able to strength its competitiveness on current and new markets. The goal of this tool is to try and test cooperation with R&D sector in order to integrate this approach on regular basis.
Administering Agency	<ol style="list-style-type: none"> 1. Region's authority (South Moravia, Zlín, Karlovy Vary, Liberec and Hradec Králové) – implements system, opens calls, evaluates project's proposals, co-finances programme, etc. 2. R&D institutions – universities, educational institutes, and other organizations which have signed memorandum on cooperation 3. Regional council – contact point, collecting of submitted proposals, administration, payment claims evaluation, monitoring, etc.
Target Group of Instrument	Entrepreneurs according to the Act no 513/1990 Sb. meeting following conditions: <ul style="list-style-type: none"> - location of the company in perspective region - results of projects aimed to the region - new cooperation with selected R&D site -

Target Sector of Instrument	<p>Outputs of the cooperation must have impact to the following CZ NACE:</p> <ul style="list-style-type: none"> - section C, 10 – 33, excluding below mentioned a) – d) - section D, 35 - section E, 36 - 39 - section F, 41 - 43 - section G, 45 – 47 - section H, 49 – 53 - section J, 58 – 63 - section M, 69 – 75 - section N, 82 - section S, 95 <p>Excluded branches:</p> <ul style="list-style-type: none"> a) section C, 19.1 b) section C, 30.11 c) manufacturing of products listed in Annex I ES d) steel and synthetic fibers industry
Expected Effects/Results, Ex-ante Indicators	<p>Entrepreneur can use innovation voucher on specific services purchased from R&D institution which should help to verify or easy concrete innovation activity.</p> <p>Innovation activity is defined as entrepreneur's effort to create new or innovated products in order to strenght its competitiveness or gaining new markets.</p> <p>Expected type of services from R&D institution:</p> <ul style="list-style-type: none"> - analysis; expert's report; measurement protocol; prototype proposal; functional sample; operational manual; graphic design draft; model; technical blueprint; design study; marketing strategy; innovation / technology audit
Overall Budget	<p>Average call's budget in each region Planned allocation for one call: 4 000 000 CZK</p> <ul style="list-style-type: none"> - ERDF: 3 000 000 CZK - regional co-finance: 1 000 000 CZK
Duration	<p>Typical duration 8 – 10 months.</p>
Type of Evaluation (If Available)	<p>Within implementation – initiation of cooperation between entrepreneur and R&D institution. After implementation – profit and utilization of expected output</p>
Indicators Used	<p>Interest in the tool – demand is 40 % higher than allocation. Expected result are typically being fulfilled on 100 %.</p>
Transferability Potential	<p>It is universal tool without need for schematic modification in case of transfer. Origin of the tool was inspired by system of voucher in general.</p>
Website / Link	<ul style="list-style-type: none"> - http://objevtesmer.cz/index (Zlín region), - http://www.inovacnivouchery.cz/ (South Moravia region), - http://regionalni-rozvoj.kraj-lbc.cz/page3741/ROK-2011/28-regionalni-inovacni-program (Liberec region), - http://www.karp-kv.cz/cz/Stranky/Inovacni_vouchery.aspx (Karlovy Vary region kraj), - http://www.kr-kralovehradecky.cz/cz/rozvoj-kraje/rif/vyhlaseni-verejne-souteze--inovacni-vouchery-2011---48280/ (Hradec Králové region)

III.I.V. Estonia (Tartu) – Green Investment Scheme

RECOMMEND Partner: Tartu Regional Energy Agency
Author: Not provided
Telephone: Not provided
Email: Not provided

	Eco-management	(enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
X	Eco-innovation	(fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	The green investment scheme « Support for Renovation of small private buildings »
Instrument's Overview (Nature, Main Goals)	The objective of the assistance is supporting the reconstruction and renovation of small private buildings for achieving indoor climate and energy efficiency and improving the energy-performance label grade. It also supports costs related to the building design documentation and owner supervision of the renovation works of the building. Further more – this scheme supports purchase and installation of appliances of renewable energy. Such as solar panels and wind generators.
Type of Funding	The financing of grants for reconstruction, purchasing and installation of green energy appliances of small private buildings is done by KredEx, together with a Ministry of Economic Affairs and Communications The renovation project must be in accordance with the results of the energy audit and the renovated building must have energy-performance label grade D (grant 25% of renovation costs) or energy-performance label grade C (grant 40% of renovation costs). The grants for costs related to the building design documentation and owner supervision of the renovation works is up to 50% of the costs. The purchasing and installation of renewable energy appliances is supported in the amount of 60% or 70% from the costs.
Instrument's Design Background and Rationale (Context / Drivers)	Most buildings in Estonia are energy inefficient. According to the information from the Ministry of the Environment of Finland, Estonia uses two to three times more energy than the Nordic countries even though the average temperature is higher. Based on the EU directive on energy efficiency for buildings, Estonia has the obligation to develop and implement measures to make the use of energy more efficient in existing buildings.
Administering Agency	The scheme is financed by the Ministry of Economic Affairs and Communications and administered by the KredEx.
Target Group of Instrument	The support is aimed at small private building owners.
Target Sector of Instrument	The target of the instrument is energy efficiency sector and also the sector of sustainable construction, because this instrument helps to prolong the life-span of small buildings.
Expected Effects/Results, Ex-ante Indicators	The minimum grant is 1000 EUR and the maximum grant is 30 000 EUR. The limit of financing of support is a percentage of the cost of the project, depending on the level of complexity of the reconstruction of the small private building. The rates of support for project are 25% or 40% of the cost of the project. In order to get 25% support of the expenses related to renovation works of the project the applicant must carry out energy audit where priority renovation works have been pointed out. When these works are completed the renovated small private building must have energy-performance label grade D (<190kWh/(m ² y). The indoor climate of the building must correspond to demands of standard EVS-EN 15251 3-rd level. In order to get 40% support of the expenses related to renovation works of the project the applicant must carry out energy audit where priority renovation works have been pointed out. When these works are completed the renovated small private building must have energy-performance label grade C (<150kWh/(m ² y).

	<p>The indoor climate of the building must correspond to demands of standard EVS-EN 15251 2-nd level.</p> <p>If the applicant decides to purchase and install green energy appliances such as solar panels or wind generator then the support for purchase and installation costs are as follows: 60% of purchasing and installation costs are covered if the purchased green energy appliance produces energy for heating. 70 % of purchasing and installation costs are covered if the purchased green energy appliance produces electricity.</p>
Overall Budget	The overall budget for renovation grants is 3 000 000 EUR and for purchasing and installation green energy appliances is 1 000 000 EU
Duration	This scheme was launched 04.2012 and will be closed 30.11.2013. By the date 01.11.2014 all renovation and installation works must be finished.
Type of Evaluation (If Available)	<p>The applicant must collect data from the energy consumption after the renovation during the one year period and make new energy-performance label grade calculations based on this numbers. This report must be presented to Kredex 12-18 month after the renovation works are finished.</p> <p>If green energy appliances were installed the applicant must submit annually the annual report on energy production on the appropriate form. This report must be submitted during the period of 5 years after the renovation.</p>
Indicators Used	Too early to bring out any indicators because the support scheme has just started.
Transferability Potential	This scheme is very easily transferable to other countries/regions but as always needs some adjustments to comply with national/regional standards. At last but not least it needs good will from the politicians because the financing is coming from the national budget.
Website / Link	http://www.kredex.ee/eramaja/

Name of policy instrument	The green investment scheme « Support for Renovation of apartment buildings »
Instrument's Overview (Nature, Main Goals)	The objective of the assistance is supporting the reconstruction and renovation of apartment buildings for achieving indoor climate and energy efficiency and improving the energy-performance label grade as well as using renewable energy in the existing apartment buildings by supporting the investment made for the reconstruction.
Type of Funding	<p>In order to simplify the financing of reconstruction of apartment buildings, KredEx, together with a German development bank KfW Bankengruppe and Ministry of Economic Affairs and Communications, has developed a long-term renovation loan with preferential interest (fixed interest for 10 years and not more than 4,4%), to be issued by banks.</p> <p>Besides the renovation loan grant for reconstruction of apartment buildings is also part of the investment scheme. The renovation project must be in accordance with the results of the energy audit and leading to at least 20% of energy savings. The limit of financing of support is a percentage of the cost of the project, depending on the level of complexity of the reconstruction of the apartment building. The rates of support for project are 15%, 25% or 35% of the cost of the project.</p> <p>The support is funded from trade in assigned amount units under article 17 of Kyoto Protocol to the United Nations Framework Convention on Climate Change.</p>
Instrument's Design Background and Rationale (Context / Drivers)	Most buildings in Estonia are energy inefficient. According to the information from the Ministry of the Environment of Finland, Estonia uses two to three times more energy than the Nordic countries even though the average temperature is higher. Based on the EU directive on energy efficiency for buildings, Estonia has the obligation to develop and implement measures to make the use of energy more efficient in existing buildings.

Administering Agency	The scheme is financed by the Ministry of Economic Affairs and Communications and administered by the KredEx.
Target Group of Instrument	The support is aimed at apartment associations, building associations and communities of apartment owners.
Target Sector of Instrument	The target of the instrument is energy efficiency sector and also the sector of sustainable construction, because this instrument helps to prolong the life-span of apartment buildings.
Expected Effects/Results, Ex-ante Indicators	<p>The minimum loan amount is 7340 EUR. The limit of financing of support is a percentage of the cost of the project, depending on the level of complexity of the reconstruction of the apartment building. The rates of support for project are 15%, 25% or 35% of the cost of the project.</p> <p>In order to get 15% support of the expenses related to renovation works of the project the applicant must carry out energy audit where priority renovation works have been pointed out. When these works are completed the renovated apartment building must achieve energy sustainability for at least 20% if apartment building is up to 2000 m² and for at least 30% if apartment building is over 3000 m². As a result on the renovation works the indoor climate of the apartment building must correspond to demands of standard EVS-EN 15251 and the building must have energy-performance label grade E (250kWh/(m²y).</p> <p>In order to get 25% support of the expenses related to renovation works of the project the applicant must carry out energy audit where priority renovation works have been pointed out. When these works are completed the renovated apartment building must achieve energy sustainability for at least 40%. As a result on the renovation works the indoor climate of the apartment building must correspond to demands of standard EVS-EN 15251 and the building must have energy-performance label grade D (200kWh/(m²y).</p> <p>In order to get 35% support of the expenses related to renovation works of the project the applicant must carry out energy audit where priority renovation works have been pointed out. When these works are completed the renovated apartment building must achieve energy sustainability for at least 50%. As a result on the renovation works the indoor climate of the apartment building must correspond to demands of standard EVS-EN 15251 and the building must have energy-performance label grade C(150kWh/(m²y)</p>
Overall Budget	Andmed täna Kredex`ist
Duration	This scheme was launched 08.2010 and will be closed 30.11.2012. By the date 01.11.2013 all renovation works must be finished.
Type of Evaluation (If Available)	The applicant must submit annually the annual report on energy use on the appropriate form. This report must be submitted until the renovation loan is paid back or at least 10 years after the renovation.
Indicators Used	<p>Applications to date – 367 (15% - 217, 25% - 113 and 35% - 37)</p> <p>YES applications – 338 (15% - 194, 25% - 107 and 35% - 37)</p> <p>Total EUR applied – 8 745 637 EUR</p> <p>Total pay out EUR – 4 753 769 EUR</p>
Transferability Potential	This scheme is very easily transferable to other countries/regions but as always needs some adjustments to comply with national/regional standards. At last but not least it needs good will from the politicians because the financing is coming from the national budget.
Website / Link	http://kredex.ee/renovation-loan-for-apartment-buildings/

III.I.VI. Italy (Ascoli Piceno) – ITACA Protocol

RECOMMEND Partner: Province of Ascoli Piceno

Author: Lorella Bovara

Telephone: +39 0735 782 004

Email: lorella.bovara@provincia.ap.it

x	Eco-management (enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
	Eco-innovation (fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	ITACA PROTOCOL
Instrument's Overview (Nature, Main Goals)	<p>The ITACA Institute (Institute for Innovation and Transparency in procurement and for environmental compatibility), a central government body that coordinates the Regions' activities in public procurements, drew up a "Protocol for the evaluation of environmental sustainability" to be adopted by the Regions in their building regulations. The ITACA protocol is a tool for the evaluation of energy and environmental quality of a building and it is based on the SBMethod (Sustainable Building Method), derived from Green Building Challenge of 1996.</p> <p>This Protocol has already been adopted by many regions, including Marche Region. In particular, the Marche Region has adopted it as an energy and environmental certification tool (in compliance with the European Directive of Energy certification of buildings). The protocol is composed by 70 criteria of evaluation, one for each environmental compatibility requirement. The value zero represents the minimum acceptable performance determined in reference to the Italian technical rules and the legislation in force or to the constructive standard procedure. In the resulting scale the number 3 represents the best available constructive practice and number 5 the excellence.</p> <p>Given the complexity of the method, two simplified Itaca protocols have been draw up consisting of 28 and 12 sheets on the requirements considered essential and indispensable for evaluating the eco-sustainability of buildings. These simplified procols will make it easier to apply the criteria for building bio-compatible also for small interventions.</p> <p>The ITACA protocol aims to encourage the construction of buildings adopting solutions more respectful of environmental values and can be recognised as a tool to support action for Eco-innovation activities in the specific area of Sustainable Building. Thanks to the adoption of the protocol a shared and clear method of assessment for constructions sustainability has been uniquely defined in the Marche Region. The private sector also uses the "Itaca protocol – Marche Region" to promote and finance interventions characterized by high performance in energy consumption. Currently in the Marche Region there are same financial incentives that permit to obtain benefits if a building is realized in compliance with the Itaca protocol.</p>
Type of Funding	No direct funding provided
Instrument's Design Background and Rationale (Context / Drivers)	<p>The Itaca protocol has been drawn up, updated and contextualized in the involved Italian regions, following the directions of the European Directive 91/2002 concerning energy efficiency in buildings (implemented by the Legislative Decree 192/05 as amended by the Legislative Decree 311/06) and the international scenario regarding sustainable development.</p> <p>In Italy various laws have been enacted, legislative decrees (D. Lgs. March 16, 1999, Leg. May 23, 2000, n. 164, Leg. December 29, 2003), ministerial directives and ministerial decrees (DM .24 April 2001, DM 20 July 2004), in order to educate the business world to adopt good practices for reducing emissions of pollutants that contribute to the formation of greenhouse gases, and to encourage technological solutions that can reduce energy consumption and increase energy efficiency.</p> <p>In this context, it was necessary to initiate a comparison between the Italian regions to allow the formulation of a shared set of rules that could define the thresholds and requirements necessary for the preparation of green building projects and eco-sustainable building. It is on</p>

	<p>such a basis that a shared working protocol (Protocol ITACA) has been developed. The activity is carried out through committees and working groups, the cooperation of regional technicians, and representatives of local governments and stakeholders' organizations.</p> <p>Due to its innovative and strategic value, the Ministry of Economic Development has identified the protocol as a possible reference within the national guidelines for energy certification. In this framework Marche Region has adopted the protocol as an energy and environmental certification tool. Finally, the adoption of the Itaca Protocol by the private sector, specially by SMEs, allows to achieve a competitive positioning in terms of highly innovative technologies and of environmental protection and sustainability.</p>
Administering Agency	Itaca Institute and its Associates Italian regions.
Target Group of Instrument	Households, private and public actors involved in the process of creation of a sustainable building in all its phases.
Target Sector of Instrument	Construction, sustainable buildings and energy efficiency
Expected Effects/Results, Ex-ante Indicators	<p>The expected results can be identified as follow :</p> <ul style="list-style-type: none"> - Sustainable land use in urban construction and building interventions; - Preservation of historical and typological characteristics connected with the tradition of the buildings ; - Contribution to energy saving and use of renewable sources ; - Research and application of sustainable building technologies in environmental, economic and social development; - Use of materials certified for quality and eco-compatibility; - Design solutions to meet different demands for quality of living; - Ensure the aspects of "Safety" and "Security" of the buildings; - Implement the Home Automation Development of a new quality of living ; - Promote vocational training, participatory planning and recruitment choices in building activity. <p>The ultimate goal is therefore to draw up a set of rules and requirements that could reduce energy consumption below a predefined threshold.</p>
Overall Budget	N/A
Duration	The Itaca protocol has been adopted by the Conference of Presidents of Regions and Autonomous Provinces on 15 January 2004 as the result of a working group formed in December 2001. The ITACA protocol – MARCHE is regularly updated.
Type of Evaluation (If Available)	The Itaca protocol comes from the evaluation methodology Green Building Challenge which is the result of an international research in which Italy took part. The Itaca protocol adopted by Marche Region is systematically evolving in order to ensure the contextualization to the local territory.
Indicators Used	The whole Itaca protocol is made up of 70 assessment sheets, each one referring to a requirement where satisfactory evaluation is necessary. They are grouped in the so-called "Areas of assessment": environmental quality of outdoor spaces; consumption of resources, environmental loads, internal quality, quality of service, quality of management; transport.
Transferability Potential	The protocol has a high level of transferability as it is an internationally recognized system and it makes possible contextualization of the assessment tool to the territory where it is applied. Finally, it can be adapted to any application need and intended use of the building and it can be updated in order to fit to changes in the existing regulatory an legislative framework.
Website / Link	http://www.itaca.org/ http://www.ambiente.regione.marche.it/Energia/EdiliziasostenibileITACA/ProtocolloITACAMarche.aspx

III.I.VII. Poland (Kujawsko-Pomorskie) – Regional Operational Programme

RECOMMEND Partner: Kujawsko-Pomorskie Voivodeship
Author: Agnieszka Józwiak
Telephone: +48 56 62 18 698
Email: a.jozwiak@kujawsko-pomorskie.pl

x	Eco-management	(enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
x	Eco-innovation	(fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	Regional Operational Programme for Kujawsko-Pomorskie Voivodeship 2007-2013 – 5.3 Action: Support for entrepreneurship in adapting to the requirements of environment protection regulations.
Instrument's Overview (Nature, Main Goals)	<p>The aim of 5.3 Action is to adapt existing entrepreneurship to the requirements of environment protection regulations and other national and EU requirements.</p> <p>Implementation of this action will limit undesirable influence of entrepreneurship to environment, energy-consumption and material-consumption of production processes and also reduce amount of waste production.</p> <p>Support is given solely to the projects, which don't concern basic production processes (services) of particular entrepreneurship related to environment protection and waste processing, sorting and utilizing.</p> <p>Types of projects:</p> <ol style="list-style-type: none"> 1.Application of new organizational and technological solutions in production and services leading to limitation of impact upon environment and improvement of productivity and effectiveness. 2.Construction, extension or reconstruction of installations and devices conducive to raw materials and energy saving and emission of harmful substances limitation. 3. Application of effective systems for environmental management. 4. Implementation of pollution prevention technologies.
Type of Funding	<p>5.3 Action is to grant non-returnable subsidy intended for SMEs running their businesses in Kujawsko-Pomorskie region.</p> <p>Co-financing rates: Up to 60% for SMEs Up to 50% for big entrepreneurship. Maximum value of project: less than 8 mln PLN. (€1.9mln)</p>
Instrument's Design Background and Rationale (Context / Drivers)	<p>Implementation of organizational and technological solutions leading to reduction of negative impact upon the environment in business activities or effective systems of environmental management is very expensive.</p> <p>In order to encourage regional entrepreneurs to take such actions,5.3 Action in Regional Operational Programme has been programmed.</p> <p>The 5.3 Action has been programmed with reference to the provisions of European Strategic Guidelines, National Strategic Frames of References and Development Strategy for Kujawsko-Pomorskie Voivodeship (2007-2020).</p>
Administering Agency	Regional Operational Programme Managing Authority for Kujawsko – Pomorskie Voivodeship – Management Board of Kujawsko-Pomorskie Voivodeship

Target Group of Instrument	5.3 action is dedicated to SMEs which run their businesses in Kujawsko-Pomorskie Region.
Target Sector of Instrument	There is no target sector. Any entrepreneurship based in the region can participate in the programme.
Expected Effects/Results, Ex-ante Indicators	It is expected that by the year 2013, minimum 30 SMEs will take part in the programme and, in consequence of their activities, the amount of waste, industrial sewage which need treatment, water consumption and emission of air polluting substances such as sulphur dioxide, nitric oxide, carbon dioxide, dust will decrease.
Overall Budget	3.239.638 euro (EFRR)
Duration	2007-2013
Type of Evaluation (If Available)	On-going evaluation is carried out.
Indicators Used	<ul style="list-style-type: none"> + Number of projects amending entrepreneurships to environmental protection requirements + Number of entrepreneurships which made change in production concerning air protection + Number of entrepreneurships which made change in production concerning waste management + Number of entrepreneurships which made change in production concerning water and sewage management + Number of certificates gained + Number of implemented environmental management systems + Change in emission of main air pollutions: sulphur dioxide, nitric oxide, carbon dioxide, dust – ton/year + Change in waste production – ton/year + Change in water consumption – m3/year + Change in industrial sewage production – m3/year
Transferability Potential	Instrument is highly transferable but needs embedding into national / regional context and requires defining other than EU financial resources.
Website / Link	www.mojregion.eu

III.I.VIII. United Kingdom (East of England) –EnviroCluster

RECOMMEND Partner: UK CEED
Author: Gareth Jones & Emanuela Vanacore
Telephone: +44 (0)1733-311644
Email: g.jones@ukceed.org / e.vanacore@ukceed.org

	Eco-management	(enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
X	Eco-innovation	(fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	EnviroCluster
Instrument's Overview (Nature, Main Goals)	<p>Established in 2002, EnviroCluster is an active community of environmental and cleantech organisations, based around the city of Peterborough (Greater Peterborough) and the East of England region of the UK. The cluster consists of around 350 businesses, public authorities, investors and academic institutions supporting eco-innovation. The cluster is enabling its constituent members to grow and become competitive in global cleantech and environmental markets. The cluster is helping businesses and organisations develop new products and services that have a positive environmental impact or help with resource management.</p> <p>EnviroCluster is supporting cleantech growth in the city by providing innovation and incubation support, promoting skills development, inward investment, sharing of knowledge and opportunities and helping members of the cluster internationalise into new global markets.</p> <p>Key results:</p> <ul style="list-style-type: none"> - EnviroCluster is leading a cluster network under the EC funded “Eco-Innovation Cluster Partnership (EcoCluP)” project. The network connects 2,500 eco-innovative and cleantech businesses across Europe and helps facilitate collaboration between the clusters themselves; - Commercial services: tailor-made one-to-one business support, coaching and mentoring from a qualified Business Advisor. - The Peterborough Eco Innovation Centre was opened in 2008 to act as a regional hub for eco-innovation activities and to incubate cleantech businesses.
Type of Funding	EnviroCluster does not provide any direct funding to its members but signposts to relevant funds and grants.
Instrument's Design Background and Rationale (Context / Drivers)	<p>EnviroCluster was launched following a mapping exercise conducted by UK CEED in 2001 that showed that Peterborough had a significant concentration of cleantech companies and actors which could be more effective if a cluster organisation was developed. This cluster was launched in 2002 after it was funded by the East of England Development Agency (EEDA). Historically, the formation of industrial communities (or clusters), in a specific geographical location and industrial sector, joining forces to optimise the use of resources and the workforce according to their individual strengths has resulted from spontaneous trends of the normal market mechanism. Furthermore, over the years an array of “voluntaristic” forces coming from businesses, academic institutions, and various public actors at a local scale have frequently come together without any direct external support with the goal of implementing new business strategies and models. Today’s most common definition of clusters is: <i>“Geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other identities important to competition”</i> (Porter, 1990).</p> <p>Inspiration: in Austria, ECO World Styria is the world’s leading cleantech cluster; in France the <i>Pôles de compétitivité</i> are strongly supported by the Government. The European Commission communication COM(2008) 652 final/2.</p>

Administering Agency	EnviroCluster is an initiative of the UK Centre for Economic & Environmental Development (UK CEED), a national charity supporting eco-innovation and the cleantech sector whilst also promoting the economic benefits of sound environmental practice.
Target Group of Instrument	The targets of the instrument which are eligible to apply are companies, local authorities, and higher education institutions that are based in the Greater Peterborough area and the surrounding East of England region in the UK.
Target Sector of Instrument	<p>EnviroCluster supports companies in the following five cleantech sub-sectors:</p> <ol style="list-style-type: none"> 1. Energy 2. Materials and Design 3. Pollution Prevention 4. Waste and Recycling 5. Water and Wastewater treatment. <p>In addition to the sub-sectors listed above, EnviroCluster recognises two horizontal sub-sectors which cross-cut across the other sub-sectors:</p> <ol style="list-style-type: none"> 1. Smart tech and ICT 2. Environmental Services.
Expected Effects/Results, Ex-ante Indicators	Indicators have not been specified ex-ante.
Overall Budget	About € 211,000 per year (€ 164,000 from Peterborough City Council + € 47,000 from EEDA and Anglian Water).
Duration	Launch date: 2002 EnviroCluster is an ongoing project. There is no envisioned end date.
Type of Evaluation (If Available)	No ongoing evaluation. However, an evaluation process will be implemented under the new Business Plan which is envisaged to be applied in the second semester of 2012 on a quarterly basis.
Indicators Used	<p>Not currently applicable.</p> <p>However, an evaluation assessment will be provided with the future Business Plan by using a mix of quantitative and qualitative indicators. Specifically:</p> <ul style="list-style-type: none"> - Performance indicators (e.g. Within one year, the cluster management team must have been in direct contact with at least 20% of the cluster participants;) - Member feedbacks (by surveys, specific feedback workshops, specific tools for assessing customer satisfaction) <p>Reference: draft guidelines set by the European Commission for EFQM certification scheme for clusters</p>
Transferability Potential	Instrument is highly transferable but needs embedding into national / regional context. Public funding is required to map the cluster components and if this positive, a gestation period of up to 1 year is needed to establish the cluster and to start engaging with the cluster participants.
Website / Link	www.envirocluster.co.uk

III.I.IX. United Kingdom (East of England) – Investors in the Environment

RECOMMEND Partner: Opportunity Peterborough
Author: Binal Cadieu
Telephone: 01733 317977
Email: binal.cadieu@opportunitypeterborough.co.uk

	environmental performance - EMAS, ISO 14001)
X	Eco-innovation (fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	Investors in Environment (IiE)
Instrument's Overview (Nature, Main Goals)	<p>Investors in the Environment is a not for profit environmental accreditation scheme. It is designed to help businesses save money and reduce their impact on the environment. All the help and support is provided to get businesses started and ensure they gain recognition for their green efforts.</p> <p>By going through the Investors in the Environment criteria businesses will complete an Environmental Management System (EMS) and have evidence to show they have all relevant parts in place. Investors in the Environment is ultimately green help , support and promotion for all businesses. The scheme is supported and endorsed by a number of key organisations: The Environment Capital Partnership, the Environment Agency, Peterborough City Council, Opportunity Peterborough, Peterborough Environment City Trust, Greater Peterborough Partnership, Chamber of Commerce, Lark Energy and Viridor Waste Contractors. There are a number of other businesses and organisations supporting this as well as 600+ businesses that have pledged their support to this campaign to date and over 100 who have gone through and achieved an accreditation.</p> <p>Unlike ISO14001, the international standard which can be difficult for businesses to achieve and has an all or nothing approach, Investors in the Environment prides itself on being applicable to all businesses and them being able to achieve all levels. Even a small business with 5 employees can achieve the top Green Accreditation level.</p> <p>The scheme also helps promote businesses through regular networking events and media exposure. For example if a company is demonstrating they are doing something green, Investors in the Environment will promote this not only through their website but also press releases which will be distributed to local media. Initially this scheme was aimed at SME market due to these businesses needing the support, but the scheme has attracted a number of large businesses too like IKEA, Thomas Cook and Mars Petcare who can easily achieve the accreditation but are interested in the promotion and putting back into their local community.</p>
Type of Funding	No direct funding provided
Instrument's Design Background and Rationale (Context / Drivers)	IiE has evolved from a scheme called Business Investors which was a programme around supporting businesses. However feedback showed that businesses wanted something where they could gain an accreditation which would fill in the gap left by ISO4001 and also something which would support and help promote businesses. ISO 4001 is too technical and expensive for many businesses to achieve.
Administering Agency	Peterborough Environment City Trust (PECT)
Target Group of Instrument	Any business or organisation of any size in Greater Peterborough. There are three levels of accreditation which will suit every business whether they are just at the beginning of their green journey or if they already have an EMS in place. Each level is designed to provide the business with a manageable route to greater efficiency, cost savings and a more environmentally friendly outlook

Target Sector of Instrument	The accreditation is aimed at any business who wants to become green and contribute to Peterborough's aim of becoming Home of the Environment Capital. Recently accredited businesses include the local shopping centre, a solicitors firm and a couple of printing companies. This shows the diverse range of companies who have signed up to the scheme.
Expected Effects/Results, Ex-ante Indicators	<p>There are currently 4 different levels to liE depending on what the business is able to achieve:</p> <p>Free pledge: Businesses can pledge their support to be greener. These businesses receive a monthly email which include tips and services on how the business can save money by being more energy efficient and reducing waste as well as keeping up to date with legislation.</p> <p>The 3 official accreditation levels:</p> <p>Bronze: For the basic level of accreditation, the business has to identify targets for improved efficiencies for resources e.g energy and water, input resource readings quarterly and report progress annually.</p> <p>Silver: This level is for businesses looking at their environmental impacts to achieve even higher cost savings by creating more change, The requirements are the same as bronze with the additional –showing actually targets achieved within the workplace; adoption of a travel plan plus 2 other criteria that works best for the business.</p> <p>Green. This is the highest level of accreditation. As part of the process to achieving Green accreditation an external audit undertaken by liE will be a requirement and your business will need to have demonstrated a minimum 2% improvement in resource efficiency over an agreed baseline figure. Other essential criteria include: having a recycling system in place, adopting a work travel plan, taking a Carbon footprint test and setting targets for Carbon reduction and choosing 3 additional essential criteria actions that work best for you.</p> <p>Initially this scheme was aimed at SME market due to these businesses needing the support, but any company can pledge or gain accreditation and the scheme has attracted a number of large businesses too like IKEA, Thomas Cook and Mars Petcare who can easily achieve the accreditation but are interested in the promotion and exposure this will give them.</p>
Overall Budget	<p>To start the scheme was £12,500 revenue (£3,800 was capital) which was made through initial 'LPSA funding', which is a public sector grant administered by the local strategic partnership. Now it's a self sustainable scheme as companies pay a small fee to get the accreditation. It is also not for profit.</p> <p>Accreditation for companies costs: Bronze: £150 -£600 + VAT Silver: £200 - £700 + VAT Green: £300 - £800 + VAT depending on staff numbers</p>
Duration	The project is ongoing. There is no planned end date
Type of Evaluation (If Available)	<p><i>Businesses get audited annually when on green level accreditation. Some businesses that have proven their green achiever award might only need a bi-annual audit.</i></p> <p><i>Businesses not only put a pack together to exemplifying their environmental management system, they are asked for evidence on a number of the criteria too.</i></p>
Indicators Used	N/A
Transferability Potential	Easy to transfer to other parts of the country and worldwide. The scheme has actually just franchised into Yorkshire who have bought all the branding etc and Peterborough Environment City Trust are looking to expand this into other geographical areas.
Website / Link	http://www.iie.uk.com/what-is-investors-in-the-environment

III.II. International Good Practices

III.II.I. Denmark (Copenhagen) – Copenhagen Cleantech Cluster

	Eco-management (enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
X	Eco-innovation (fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	Copenhagen Cleantech Cluster (CCC)
Instrument's Overview (Nature, Main Goals)	<p>The CCC is operated by Copenhagen Capacity (CopCap), the official agency for investment and development of trade and industry in Greater Copenhagen and Zealand. The cluster aims to attract foreign cleantech investment and companies but also to strengthen the existing parts of the cluster and foster a more closely connected value chain in order to compete globally.</p> <p>The cluster has three main goals;</p> <ol style="list-style-type: none"> 1. To get more international and Danish cleantech companies to locate and grow in Copenhagen and Zealand; 2. To get existing cleantech companies to grow more than would otherwise have been possible; 3. To foster the establishment of more new cleantech companies. <p>The partners within the cluster are representative of the whole value chain, with universities and research centres, industry, government institutions and NGOs as members.</p>
Type of Funding	The CCC does not provide funding to its member organisations.
Instrument's Design Background and Rationale (Context / Drivers)	<p>Based on previous experience and successes in attracting business and developing the region's Life Science cluster (Medicon Valley), CopCap sought to build on Denmark's substantial, existing cleantech leadership.</p> <p>The competitiveness of the cleantech industry depends on companies' ability to be innovative and productive. Analyses have shown that companies in networks and clusters are more likely to be successful compared to those outside a cluster. The presence of several companies within the same industry at the same place creates a number of spill-over effects, for example in terms of knowledge sharing, use of research-based knowledge as well as access to highly skilled labour.</p>
Administering Agency	The CCC is an initiative of CopCap, administered with the Confederation of Danish Industry, Scion DTU and the University of Copenhagen, amongst others.
Target Group of Instrument	The cluster includes research institutions, universities, financial institutions, business organisations and business incubation environments.
Target Sector of Instrument	<p>Main focus: Renewable energies, energy efficiency, eco-design, waste collection and recycling.</p> <p>Other areas: sustainable construction/construction materials, sustainable transport, water treatment.</p>

Expected Effects/Results, Ex-ante Indicators	<p>The CCC has set the following targets to be achieved by 2014:</p> <ul style="list-style-type: none"> • Creation of 1,000 new jobs; • Attraction of 25 foreign companies to the cluster; • Creation of 30 new research and innovation collaborations between companies and research institutions, for example, start-ups or joint research applications & projects; • Establishment of collaborations with 15 international cleantech clusters; • Creation of a unifying and self-supporting organisation with a minimum of 200 members; • Securing the growth and momentum of 25 entrepreneurs; • Hosting a minimum of 200 events.
Overall Budget	<p>DKK 150m (€20.17m) for the period 2009-2014. DKK30m (€4.03m) per annum. Financial support comes from the Capital Region of Denmark, Region Zealand and EU Structural Funds, as well as from the members and partners of the cluster.</p>
Duration	<p>The CCC was formed in 2009. There is no envisioned end date.</p>
Type of Evaluation (If Available)	<p>The cluster frequently produces performance reports, including an annual monitoring report compiled from questionnaires.</p>
Indicators Used	<p>The monitoring report examines a number of indicators, such as the number of companies involved in cleantech; employment growth; growth in turnover; growth in labour productivity; the number of new patents created by the cleantech industry; the establishment of partnerships between research institutions and the industry; counts of new entries/entrepreneurial companies; share of new spin-off companies; and collaboration between CCC members.</p> <p>Reports can be found here: http://www.cphcleantech.com/reports</p>
Transferability Potential	<p>Instrument is transferable. Public funding is required and if this is achieved, up to a year may be needed to establish the cluster.</p>
Website / Link	<p>http://www.cphcleantech.com/</p>

III.II.II. Finland – EffTech

	Eco-management (enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
X	Eco-innovation (fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	Intelligent, Resource-Efficient Production Technologies (EffTech), 2008-2013
Instrument's Overview (Nature, Main Goals)	<p>EffTech is a five year programme to develop energy and resource-efficient production technologies and meet sustainability goals for the Finnish forestry industry, by funding and supporting research and consortia projects.</p> <p>The programme is administered by Forestcluster Ltd, a Strategic Centre for Science, Technology and Innovation (SHOK), run by the forest industry, machinery and chemical suppliers and research institutes.</p> <p>The project is delivered through three work packages, each of which is divided into further projects:</p> <ul style="list-style-type: none"> • Raw Material Availability – e.g., promoting product oriented, profitable and environmentally friendly value chains; • Modelling and Measurements – e.g., new concurrent design concepts for material and information flows in production systems; • Processes and Processing – e.g., development of new resource efficient nano material based paper production technologies. <p>The programme consists of a joint research program which is open for all partners and industrial consortia.</p>
Type of Funding	Grants. Programme funding comes from the Finnish Funding Agency for Technology and Innovation (Tekes), as well as Forestcluster shareholders.
Instrument's Design Background and Rationale (Context / Drivers)	Forestry is monumentally important to the Finnish economy, with forestry products making up 20% of the country's exports. However, markets and competition are changing. Although demand for forestry products is growing in Asia, competition is coming from Latin America, where raw materials are cheaper. Further, computers and e-readers are a challenge to the paper industry. Also, environmental costs of unsustainable deforestation are now understood better, highlighting the need for change.
Administering Agency	<u>Launching and Funding Agency:</u> Finnish Funding Agency for Technology and Innovation (Tekes) <u>Administering Agency:</u> Forestcluster Ltd
Target Group of Instrument	Forest industry, machinery and chemical suppliers, higher education institutions, research institutions.
Target Sector of Instrument	Industrial production, resource efficiency, forestry
Expected Effects/Results, Ex-ante Indicators	<p>EffTech research aims to;</p> <ul style="list-style-type: none"> • Ensure raw material availability in a sustainable way and improve the profitability of forestry; • Utilise modelling and simulation in order to increase the speed of development of new process concepts and support production of demanding products; • Develop new resource efficient paper production processes that are profitable, sustainable and that enable a range of new products.

Overall Budget	€7,800,000 for 2009-2010; €45m total (five years)
Duration	2008-2013
Type of Evaluation (If Available)	Ex-ante and Ongoing. In order to receive funding, the members of the cluster working together, submit a work plan demonstrating how each company involved will fit by outlining their role in the project. Working plans are assessed by how well equipped they are to deliver results set out in the working programmes.
Indicators Used	Due to the variety of research projects, there is no one set of indicators used for assessment. However, EffTech uses carbon footprinting and Life Cycle Assessment (KCL-ECO), as well as MOTTI Stand Simulator (a stand-level analysis tool and decision support system for forest management) to verify environmental performance and resource efficiency.
Transferability Potential	Instrument is transferable, but should be connected to an industry relevant to the country, and will require the creation of suitable work programmes. It also requires the identification of suitable industrial partners.
Website / Link	http://www.forestcluster.fi/

III.II.III. Germany – REMake Green Innovation Vouchers

	Eco-management (enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
X	Eco-innovation (fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	REMake Green Innovation Vouchers
Instrument's Overview (Nature, Main Goals)	<p>A two-stage (Auditing and Implementation) voucher scheme set up to give easy access to public funding for manufacturing SMEs with ambitions to grow along future greening processes.</p> <p>Qualified consultants would generate the voucher after the SME completed an online self assessment tool which gave them a first impression of material consumption. Afterwards, the consultation could begin work in the enterprise, leading the project to a successful end. Subsidies were paid to the consultants after an evaluation of the final project reports by DEMEA and the SMEs only paid the residual costs to the external consultant.</p> <p>Following the REMake trial, Germany has based its material efficiency programme entirely on a voucher scheme, enlarged to include measures on raw materials and recycling aimed at improving resource efficiency in SMEs in production processes and product design.</p>
Type of Funding	Grant covering part of the costs of the external expert (67% up to €15,000; 50% up to €30,000). The SME was responsible for paying the remainder of the costs directly to the consultant.
Instrument's Design Background and Rationale (Context / Drivers)	<p>The policy rationale behind vouchers is that SMEs typically have many innovative ideas but often lack the necessary technical and / or business expertise to make them a market success. Innovation vouchers represent a handy entry-level innovation support funding scheme as essentially very small grants that aim to encourage the innovation activities of SMEs.</p> <p>There is a high potential in the manufacturing industry to reduce material costs. In 2009, the manufacturing industry in Germany spent €625bn on materials compared to €35bn on energy. The industry is therefore best suited for a public support programme involving the identification of potential material savings.</p>
Administering Agency	German Material Efficiency Agency (DEMEA)
Target Group of Instrument	SMEs [fewer than 250 employees and turnover of less than €50m] looking to cut down on resource inputs and become more resource efficient.
Target Sector of Instrument	Manufacturing SMEs – Recycling; Material/Resource Efficiency.
Expected Effects/Results, Ex-ante Indicators	<p>Consultants were charged with checking all pre-requirements (e.g. eligibility, project aims) before the project started, before helping the company to fill in a Self-Assessment Tool on the DEMEA website. This consisted of 13 questions that allowed the company to assess its material efficiency. After completion, the consultant could generate and print out a voucher and begin work in the company immediately.</p> <p>Criteria included size of company, project aims, product improvement, production and rejects, machine utilisation, storage, transport, packaging and staff organisation.</p>

Overall Budget	€800,000 over two years.
Duration	A trial ran from 1 September 2010 to 31 March 2011. New approach launched 1 April 2011.
Type of Evaluation (If Available)	Ex-post, but responsibility was given to the consultant to ensure evaluation of project during delivery.
Indicators Used	The consultant would submit a final report to DEMEA, to evaluate the project in line with ex-ante specifications. DEMEA would then pay the consultant as long as the project met the specified criteria set out at the Ex-Ante Indicators stage, following self-assessment.
Transferability Potential	Instrument is highly transferable but needs embedding into national / regional context. The value of the vouchers must be adapted to national purchasing power.
Website / Link	http://www.demea.de/foerderung/VerMat

III.II.IV. Netherlands – Long Term Agreements

Eco-management	(enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
Eco-innovation	(fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	Long Term Agreements
Instrument's Overview (Nature, Main Goals)	<p>Long Term Agreements (LTAs) have been running in the Netherlands since 1990. They are designed to stimulate energy efficiency measures in companies. LTAs are voluntary agreements, negotiated between industry and public authorities.</p> <p>Although they are voluntary (they are not legislative tools), they are formed as contracts and can include sanctions for non-compliance. Targets are set for industry, alongside a timetable for them to be achieved by. It is usually the responsibility of the public authority to facilitate the process and introduce no further stringent policy instruments.</p> <p>LTA plans will normally contain a sector description, a reference situation, technological survey, R&D overview, market introduction projects, draft energy conservation plan, monitoring methodology and energy management, knowledge transfer, assistance to the companies. LTA measures come in three forms: process efficiency (PE), chain efficiency (CE) and generation and purchase of sustainable energy (SE)</p>
Type of Funding	<p>Mixed incentives, including: tax abatement if investments in clean or energy efficient technologies are realised; financial assistance within the framework of the LTA, including various subsidy schemes (increasing if measure is more successful than expected); support to carry out an inventory of energy consumption and identification of cost effective energy efficient investments; co-ordination of regulatory measures aimed at energy efficiency in industry, including requirements to obtain permits and energy taxes; consistency in and protection from new regulations aimed at improving energy efficiency.</p> <p>Government provides financial incentives, such as an Energy Investment Allowance, tax relief for investments in environmentally friendly machinery, green investment funds and Regulatory Tax Relief.</p>
Instrument's Design Background and Rationale (Context / Drivers)	<p>The National Environmental Policy Plan of 1990 emerged from discussions on CO₂ emissions, climate change and energy security. A target of returning to 1989 levels of emissions was established in 1995, followed then by a further 3% reduction per year to 2000. Before 1990, environmental policy was mainly based in direct regulation. In order to find a way to meet new targets, the government switched to trying to stimulate, rather than regulate, industry sectors.</p> <p>By setting targets instead of measures, the instrument avoids being overly prescriptive and allows industry to find the best way to act. Minimising regulation can help industry to remain competitive whilst also achieving aims. Industry is largely responsive to voluntary measures and sees LTA involvement as a way to influence or avoid further regulation.</p> <p>The primary motive for taking part in an LTA comes from the industry itself. Energy conservation is a reduction of costs and as such changes competitiveness. Energy efficiency creates new or additional business for suppliers of the energy efficient technologies, leading to economic growth. Social pressure also plays a part, as companies can get positive publicity for involvement, giving a PR boost.</p> <p>Support for participants has been a major reason for industry participation. Support through SenterNovem included development of various tools to assist in and simplify fulfilment of obligations by companies.</p>
Administering Agency	The Netherlands Agency for Sustainability and Innovation (SenterNovem), now a part of Agentschap NL (NL Agency)

Target Group of Instrument	LTAs target Medium sized companies. Some small companies take part also. Larger companies have a slightly different LTA: the LEE (Long Term Agreement on Energy Efficiency for ETS companies).
Target Sector of Instrument	LTAs are focused on energy efficiency.
Expected Effects/Results, Ex-ante Indicators	Return to 1989 emissions by 1995, followed by 3% reduction per year to 2000. Companies are expected to meet the criteria of the Energy management System (EMS) or ISO 14001
Overall Budget	Budget is not available
Duration	The programme began in 1990, and there is no envisioned end date.
Type of Evaluation (If Available)	An annual report is written up by the administering agency outlining savings made by the industry. Data for the report is derived from mandatory reports of industry itself. Each company must provide, on a yearly basis, data on energy consumption, production and measures implemented. Initially, companies were assisted by external experts, who could identify the savings of certain measures implemented, provide background for specific problems and explain in more detail any corrections that were needed. Information is delivered via a specially developed web application.
Indicators Used	Depends on LTA, as each is different. Usually to do with how well a company has met the targets set out in their LTA.
Transferability Potential	LTAs can be transferred, but will need to adapt to national business environment. There is a learning curve to finding what acts as a motivator, and what acts as a de-motivator for industry. LTAs may also be dependent on national policy culture; the Netherlands is highly consensus oriented.
Website / Link	http://www.agentschapnl.nl/en

III.II.V. Norway – GreenConServe Service Innovation Voucher

	Eco-management (enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
X	Eco-innovation (fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	GreenConServe Service Innovation Voucher Norway
Instrument's Overview (Nature, Main Goals)	<p>The Norwegian Innovation Agency “Innovation Norway” issues innovation vouchers to support the transformation of the construction sector into a greener, value-adding service industry. Vouchers are very small grants in the form of credit note that the construction service SMEs can exchange against technical and business expertise, in support of their innovation projects. The goal is to support the service industry for sustainable construction, improving the productivity and carbon footprint of the sector. They are available to SMEs to acquire business development and technical consulting knowledge from external experts.</p> <p>In order to qualify for grants, the SME must prove the project is transformative, scalable and sustainable.</p>
Type of Funding	<p>Grant covering 50% of the costs of the external expert, the remaining 50% must be met by the SME through in-kind contributions.</p> <p>The voucher scheme is a two step voucher, where SMEs need to use both technical and business support to get their innovation project off the ground. The first half is worth up to 7,500 Euros and should be used for technical consulting, while the second half is worth the same amount and must be used to acquire business development expertise. Together the two step voucher is worth up to 15,000 Euros.</p> <p>Initially the grants were limited to €15,000 per voucher as inspired by a French voucher scheme. Half-way through the pilot the amount was increased to €30,000 in recognition of high prices in Norway. The voucher value should cover 20 expert days’ cost.</p>
Instrument's Design Background and Rationale (Context / Drivers)	<p>Voucher schemes: The targeted call for applications was launched in Norway in the second half of 2010, and is open throughout the first half of 2012. The scheme is coordinated by Innovation Norway (IN) in collaboration with the Norwegian Defence Estate Agency (NDEA), a large public procurer in the country. To be eligible, SMEs have to employ less than 250 people and be registered as a limited company (Aksjeselskap).</p> <p>IN uses the innovation vouchers in combination with another type of policy incentive Public Procurement. In GreenConServe, Innovation Norway collaborated with NDEA, which is the largest public procurer of building works in Norway. NDEA has published an invitation to tender for the construction and equipment of a modern gas-mixing building complex in Bergen. The tender specifications are so demanding that it was expected that no SMEs in the market could meet the demands. NDEA has requested the use of digital building information models and a high degree of efficiency during the construction process and over the life-cycle of the building. It is expected that the successful bidder will use a GreenConServe innovation voucher from IN to acquire the missing skills needed to complete the job and to develop further business opportunities.</p> <p>Service innovation: IN saw the success of voucher schemes in other countries and got interested in trans-national learning. IN sought to introduce a pilot scheme to Norway with focus on service innovation since service innovation needs faster support instruments than technology innovation, and IN had no service-innovation-specific support schemes yet.</p> <p>Sector focus: The construction sector in Norway has great potential for improved productivity. Having previously invested heavily in BIM (building information models) and BuildingSmart development, IN wanted to see a faster roll-out of and greater use of modern ICT in the construction sector to revolutionise the construction sector and enable its greening.</p>

Administering Agency	Innovation Norway (Norwegian National Innovation Agency)
Target Group of Instrument	Service companies defined as SMEs according to EU definitions (less than 250 employees) are eligible to apply.
Target Sector of Instrument	Companies involved in the construction value chain
Expected Effects/Results, Ex-ante Indicators	Companies that have received vouchers must report the outcome of the project and provide financial statements when the project is finished. Project report and financial statement are then approved by GreenConServe, in relation to ex-ante conditions: <i>Innovation level (service must be new); revenue and value creation above industry average; international potential; 50% private co-funding; project is transformative, scalable and sustainable.</i>
Overall Budget	€225,000 for the pilot
Duration	Second half of 2010 to first half of 2012
Type of Evaluation (If Available)	It takes 15 to 30 days from the electronic application being received by IN for a decision to be taken. Normally, SMEs suggest the expert that they would like to work with, and these experts in turn are accepted or rejected based on strict guidelines set by the innovation agency. IN used the opportunity to develop a list of experts that could be called on in the future. Projects are monitored throughout by a designated manager from IN, and it usually takes about a year from issuing a voucher for the company to finish the project and submit a report and financial statements detailing the outcomes. Payments are made after the report has been submitted. IN designates a client manager who is in charge of following proposals (On-going evaluation), but who also evaluates after the project whether it has met ex-ante targets. SMEs must fill in feedback forms upon completion of voucher support.
Indicators Used	SME satisfaction with services of external evaluation (qualitative, based on feedback forms) Expected sales in new service in next 5 year period. Indicator cannot be measured at present and will be measured by IN in due time.
Transferability Potential	Instrument is highly transferable but needs embedding into national / regional context. The value of the vouchers must be adapted to national purchasing power.
Website / Link	http://www.innovasjon Norge.no/Contact-us/

III.II.VI. United Kingdom (Wales) – Welsh Recycled Content Grant Scheme

X	Eco-management	(enabling organisations to assess, manage and continuously improve their environmental performance - EMAS, ISO 14001)
	Eco-innovation	(fostering of innovations that reduce the use of natural resources and decrease the release of harmful substances across the whole life-cycle - EIO)

Name of policy instrument	Welsh Recycled Content Grant Scheme
Instrument's Overview (Nature, Main Goals)	<p>The grant scheme, funded through the Welsh government, offered capital support to assist manufacturing SMEs to incorporate, or increase, use of Welsh recycle as an input material for manufacturing products, processes or packaging.</p> <p>The Welsh economy has a significant manufacturing sector, with a high proportion of SMEs. WRAP (Waste and Resource Action Programme) believed that much of the recycle from Wales was leaving the region for refining and incorporation into new products elsewhere, instead of providing a feedstock for Welsh business.</p> <p>Support included grant funding of up to 30% (to a maximum of £50,000) for Welsh SMEs in Non-Convergence regions (6 of 22 local authorities) looking to incorporate or increase their use of recycle in manufacturing. Grants were available for capital expenditure and some initial promotional costs to raise awareness of the increased level of recycle incorporated.</p>
Type of Funding	<p>Grant, covering 30% of match funding, up to a total of £50,000 (excluding VAT), to offset the costs of capital investment. Another scheme – ARID (Accelerating Reprocessing Infrastructure Development) – offers 40% match funding to SMEs within the Convergence regions (the remaining 16 local authorities), with its 'Recycled Content Fund.'</p> <p>Funding was provided by the Welsh Government and European Regional Development Fund.</p>
Instrument's Design Background and Rationale (Context / Drivers)	In Wales, 99.2% of businesses are SMEs and over 94% are micro sized businesses. In order to help Wales meet policy targets of a 70% recycling rate by 2025 and zero waste to landfill by 2050, WRAP recognised the need to offer expert support to manufacturers in order to increase their levels of recycling and resource efficiency and develop the market for high quality recycled materials.
Administering Agency	WRAP Cymru
Target Group of Instrument	SMEs looking to introduce recycle into manufacturing for the first time, or increase percentage of recycle used. SMEs by EU definition have fewer than 250 employees and turnover of less than €50m (£44.2m).
Target Sector of Instrument	Manufacturing SMEs – Recycling; Material/Resource Efficiency.

Expected Effects/Results, Ex-ante Indicators	<p>Funding was available to cover a variety of costs, including new production plants and equipment, new packaging plants and equipment, adaptation of current equipment and machinery to facilitate increased recycle use, new or upgraded testing equipment associated with increased recycle use, and new or upgraded handling and storage plant associated with increased recycle use.</p> <p>Due to this variety, unique milestones were established for each grant recipient, depending on application. Applications were judged on the criteria of:</p> <ul style="list-style-type: none"> • Value for money - based on landfill diversion and CO2 emission reduction (directly related to the project) per £ of support; • Project viability & sustainability – incorporating financial assessment, access to match funding, marketing plans, access to input materials, materials pricing, local competition etc.; • Ability to delivery before the end of March 2012; • Amount of primary resource avoided (tonnes) and CO2 equivalent avoided as a result; • Increase in business turnover; • Added value including, but not limited to, addressing priority materials (paper/card and wood), transferability, contribution to closed loop economy and job creation). •
Overall Budget	<p>The budget for the instrument in 2011-2012 was £150,000 (€182,000). The above mentioned ARID scheme will have an annual budget of £182,000 (€220,600).</p>
Duration	<p>1st July 2011 - 31st March 2012</p>
Type of Evaluation (If Available)	<p>Ongoing and Ex-ante, judged by site visits by WRAP Project Monitor and submission of reports and receipts.</p>
Indicators Used	<p>Reduced usage of primary materials, CO2 emissions avoided, waste recycled, jobs created, increased turnover as added value. In addition, WRAP commissions rigorous external evaluation of all projects.</p> <p>Ongoing assessment made throughout project of whether milestones have been met before relevant funding is paid. This is done through site visits by WRAP project monitor and through submission of reports and payment receipts for materials and works completed.</p> <p>For ex-ante assessment, a designated individual in the organisation is charged with liaising with WRAP Cymru on a quarterly basis, for a period of three years from final grant payment with the following data: tonnage of recycled material used (broken down by material type); company turnover; creation and safeguarding of jobs.</p>
Transferability Potential	<p>Instrument is highly transferable but needs embedding into national / regional context. Funding must be adapted to national purchasing power.</p>
Website / Link	<p>http://www.wrapcymru.org.uk/</p>