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EISS

Eco-Innovation Support Services

The aim of the project is to collaboratively address a common innovation support challenge; namely to improve ecoinnovation support services in smaller manufacturing companies from traditional sectors in the peripheral regions, where innovation services offer is often weak.

The most important outcome is the development of a Design Option Paper by u*sing the Twinning Advanced methodology, that* will set the basis for building skills of the innovation agencies staff in managing eco-innovation support programmes as well as manufacturing SMEs in applying eco-innovative investments.

The Design Option Paper, will serve as a "guide" or a "handbook" to other innovation agencies to design and/or deliver similar, more enterprise-friendly programmes and services on innovation and energy efficiency.

KEPA BUSINESS & CULTURAL DEVELOPMENT CENTRE

FRIULI INNOVAZIONE Centro di Ricerca e di Trasferimento Tecnologico

norma Észak-Magyarországi Regionális Innovációs Ügynökség Nonprofit Kft.

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Design Options Paper

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DISCLAIMER

The contents of this document and the views expressed in this report are of the sole responsibility of the authors and the EISS project team. They under no circumstances can be regarded as reflecting the position of the European Union or of the Programme's management structures and in no way commit the involved organisations.

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EXECUTIVE SUMMARY

The topics of Eco-Innovation has become in recent years a priority in the European policies and strategies. More and more the eco-innovation theme has revealed its potential for the improvement of SMEs competitiveness, moving from some kind of "voluntary-basis" approach to a sensitive asset for those forward-looking SMEs willing to both improve their performance and seeking for new markets. Eco-innovation is thus not only a matter of sustainability but also of competitiveness. Being eco-innovative present the possibility for SMEs to be more competitive in specific market sector, improving efficiency or delivering new services and products. EISS project objective is to explore the opportunities linked to eco-innovation topic and in particular, the existing support programmes in order to improve SMEs environmental performance and energy efficiency as well as to transfer good practices into these programmes. Specific focus has been dedicated to smaller manufacturing companies from traditional sectors (e.g. automotive, mechanics, construction, chemicals, food & beverage, etc.), although the recommendations developed will be valid for all sectors and company sizes.

The project has been implemented by three Innovation agencies (KEPA - Greece, Friuli Innovazione - Italy, NORRIA - Hungary) holding a strong background regarding the delivery of services to support eco-innovation for SMEs. All the three partners have been successfully participating in several national and international level EU funded projects, dealing with the elaboration of mid/long-term strategies, specific policy recommendation papers concerning e.g. energy efficiency, green procurement, local actions on climate change impacts, bio waste in decentralized small-scale composting plants, funding schemes for innovation and sustainable development issues as well as designing and implementing regional level innovation support programmes for SMEs. The basic EISS concept is to tackle the challenges that European SMEs face due to lack of their both technological (products and processes), and non-technological (organizational, marketing, institutional) eco-innovation capacities concerning environmental performance and energy efficiency.

This Design Options Paper (DOP) is the result of a peer-review process realized by the three regional innovation agencies and partners in the EISS project about the following topic: how to improve quality and effectiveness of eco-innovation support services delivered to manufacturing SMEs from traditional sectors. The document has been developed through the Twinning Advanced Methodology (Twinning+), which has the potential of bringing many benefits to the participants by giving them the opportunity to share problems, exchange knowledge and understand different viewpoints. In this way,

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the DOP identifies and documents the existing options, guidelines and implementation alternatives that EISS partners have experienced and would recommend to other agencies interested in implementing the proposed best practice.

The present document is the result of extensive peer learning activities: at the begining in the document, an overview of the main eco-innovation support programmes active at EU level and specific support services delivered by EISS project partners have been reported. Next, partners have designed a "Service Delivery System" including all the steps to be undertaken in order to provide an effective support to SMEs in dealing with eco-innovation issues (activation, selection, delivery, monitoring) . A range of services to be potentially delivered to SMEs have been listed and analysed, together with a list of target groups to be addressed, along with selection and contracting procedures. In order to be as much as possible effective and evidence based, a pilot action has been delivered with the aim of testing an existing tool already developed by two EISS partner in a previous EU project (the 3EMT tool for energy efficiency monitoring developed in CEEM project, financed by Central Europe Territorial Cooperation Programme): the results issued by the pilot action have been included in the DOP, stressing criticalities and strengths. The document ends with a list of recommendations based on the findings of the peer-learning and with the perspective of sharing knowledge and tools with other innovation agencies interested in implementing the proposed best practices.

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TABLE OF CONTENTS

Disclaimer ... 3
Acknowledgement ... 3
Executive Summary ... 4
Table of Contents ... 6
Contact Details ... 8
Glossary of Terms ... 9
1. The eco-innovation support initiative – a challenge addressed ... 10
2. The concepts used in setting the challenge and the proposed approach ... 14
2.1. The concepts used in setting the challenge ... 14
2.2. Proposed approach to address the eco-innovation support initative ... 22
3. Overview of eco-innovation support measures as RefeREnce Points on european level ... 25
3.1. INNEON Network ... 26
3.2. ETV ... 28
3.3. MEI ... 30
3.4. Eco-Innovation support programmes in the Eu ... 30
3.5. National level good examples ... 32
4. Eco-innovation support services and programmes provided by EISS project partners ... 34
4.1. Eco-Energy Efficiency Management Tool (3EMT) and Eco-Points (FINN, NORRIA) ... 34
4.2. Green Enterprise 2010 (KEPA) ... 35
4.3. New innovative entrepreneurship (KEPA) ... 36
4.4. Incubation services (FINN) ... 37
4.5. Start-up mentoring programme (NORRIA) ... 38
4.6. Summary of the critical facts ... 39
5. The service delivery system ... 41
5.1. Target groups ... 41

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 680942.

5.2. Framework conditions and organisations 43
6. Design process 46
6.1. Activation stage 47
6.2. Identification stage and actual delivery within the agency 47
6.3. Eco-innovation service content and necessary resources 48
6.4. Follow-up stage: monitoring, evaluation and impact analysis 48
6.5. The Greek case – pilot action 49
Activation Stage 50
Identification stage and actual delivery within the agency 50
Eco-innovation service content and necessary resources 51
Follow-up stage: monitoring, evaluation and impact analysis 51
7. Conclusions-suggestions 52
8. List of Sources, Figures and useful links 53
8.1. Sources 53
8.2. Figures 54
8.3. Useful EU links 54

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 680942.

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GLOSSARY OF TERMS

Term	Definition
Circular Economy	Opposite of the linear economy, the circular economy exists when the value of products, materials and resources is maintained in the economy for as long as possible, while waste generation is minimised .
Design Options Paper (DOP)	The DOP is intended as a guide or tool for the innovation agencies, department or similar organisations for the development of an innovation support activity.
Eco-innovation	Eco-Innovation is any form of innovation resulting in or aiming at significant and demonstrable progress towards the goal of sustainable development, through reducing impacts on the environment, enhancing resilience to environmental pressures, or achieving a more efficient and responsible use of natural resources.
Energy efficiency	Energy efficiency is the provision of the same product/service, using less energy for it
Eco-innovation Action Plan (Eco-AP)	The European Commission's Eco-Innovation Action Plan is a set of targeted actions both on the demand and supply side, on research and industry and on policy and financial instruments, regarding eco-innovation.
Strategic Implementation Plan (SIP)	The Strategic Implementation Plan (SIP) is the EIP on Raw Materials action plan. It incorporates inputs from EU governments, industry, academia and NGOs, consulted at meetings of the EIP's Operational Group.
Innovation agencies	Any entity that is designing or delivering innovation support programmes to SMEs.
SMEs	Small and medium-sized enterprises (SMEs), as defined in the EU recommendation 2003/361. The main factors determining whether an enterprise is an SME are: staff headcount and either turnover or balance sheet total.

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1. THE ECO-INNOVATION SUPPORT INITIATIVE – A CHALLENGE ADDRESSED

This **Design Options Paper (DOP)** is the result of a peer-review process realized by the three regional innovation agencies and partners in the EISS project consortium (KEPA - Greece, Friuli Innovazione - Italy, NORRIA - Hungary). The peer learning activity was about how to improve quality and effectiveness of eco-innovation support services towards smaller manufacturing companies from traditional sectors (e.g. automotive, mechanics, construction, chemicals, food & beverage, etc.), although the recommendations developed are valid for all sectors and company sizes.

The DOP has been realized through the **Twinning Advanced (Twinning+) Methodology**, a methodology taking place between two or more entities, which can bring many benefits to the participants by giving them the opportunity to share problems, exchange knowledge and understand different viewpoints. The Twinning+ Methodology not only facilitates transferring good practices among agencies, but it provides opportunity to design and implement better practices about a common innovation support challenge.

In this way, the DOP identifies and documents the existing options, guidelines and implementation alternatives that EISS partners have experienced and would recommend the proposed best practice to other innovation agencies interested in implementing similar actions.

The present Design Options Paper was designed and structured during the peer-learning activities of the project implementation and in particular through a 4-days workshop which took place in Thessaloniki, 13th-16th June 2016. In this workshop the three project partners exchanged knowledge and expertise regarding how to improve SMEs environmental performance and energy efficiency, as well as how to transfer good practices into eco-innovation support programmes. Afterwards, through conference calls and on a remote basis, the partners developed the contents of the DOP, in order to realize a useful and practical guide for other organizations interested in the scheme of eco-innovation support services.

Eco-innovation is quite a new concept: in 2006, the "**DECISION No 1639/2006/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 October 2006 establishing a Competitiveness and Innovation Framework Programme (2007 to 2013)**" gave the first definition of eco-innovation: "*any form of innovation aiming at significant and demonstrable progress towards the goal of sustainable development,*

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through reducing impacts on the environment or achieving a more efficient and responsible use of natural resources, including energy."[1]

Later on, the **Eco-Innovation Observatory**, created in 2010, defined eco-innovation as "*the introduction of any new or significantly improved product (good or service), process, organisational change or marketing solution that reduces the use of natural resources (including materials, energy, water and land) and decreases the release of harmful substances across the whole life-cycle*".[2]

The eco-innovation support services to SMEs have been identified by the project partners as a crucial challenge. As a matter of fact, on the basis of their previous experiences in dealing with SMEs, partners have recognized that this topic has a high potential for the improvement of SMEs' competitiveness in their regions and in the whole European Union, boosting the local and international performance of SMEs and supporting them to reach the EU 2020 goals.

In the previous years, **the three partners have been successfully participating in several national and international level EU funded projects**, dealing with the elaboration of mid- and long-term strategies, specific policy recommendation papers concerning e.g. energy efficiency, green procurement, local actions on climate change impacts, bio-waste in decentralized small-scale composting plants, funding schemes for innovation and sustainable development issues as well as designing and implementing regional level innovation support programmes for SMEs.

This topic created yet another **important opportunity for the partners in the frame of a mutual/peer learning activity to share and compare their findings** and exploit their projects results, in order to create possible synergies. At the same time it enabled the partners to improve the overall and also individual innovation support schemes for their SMEs; both directly on the pilot territory and indirectly by providing a Design Option Paper for other European innovation agencies.

Indeed, in recent years **eco-innovation has become as a priority theme in the European policies and strategies**.

First of all, the document "**EUROPE 2020. A strategy for smart, sustainable and inclusive growth**" [COM(2010) 2020] is based on smarter, greener, more inclusive economy, enabled by greater innovation and by managing resources more efficiently.[3]

[1] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:310:0015:0040:en:PDF
[2] http://www.eco-innovation.eu/
[3] http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf

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In particular, the "Resource efficient Europe" Flagship aims "*to help decouple economic growth from the use of resources, support the shift towards a low carbon economy, increase the use of renewable energy sources, modernise our transport sector and promote energy efficiency*".

At the beginning of 2011, the European Commission published "**A resource-efficient Europe - Flagship initiative under the Europe 2020 Strategy**"[4] [COM (2011) 21]. In response to the global future pressures about natural resources', the document considers the resource efficiency's increase as the key to secure growth and jobs in Europe. Resource efficiency "*will bring major economic opportunities, improve productivity, drive down costs and boost competitiveness. It is necessary to develop new products and services and find new ways to reduce inputs, minimise waste, improve management of resource stocks, change consumption patterns, optimise production processes, management and business methods, and improve logistics. This will help stimulate technological innovation, boost employment in the fast developing 'green technology' sector, sustain EU trade, including by opening up new export markets, and benefit consumers through more sustainable products*".

In December 2011, "**Innovation for a sustainable Future - The Eco-innovation Action Plan (Eco-AP)**" [COM (2011) 899] was launched, followed in 2012 by the **Strategic Implementation Plan (SIP)**[5]. Eco-innovation should provide growth and jobs, and contribute to circular economy by optimising resource flow and use in both the society and economy.

EcoAP is not a financial instrument; it is funded through other European programmes, such as LIFE+, Horizon 2020 (e.g. SME instrument; Societal Challenge 5 Climate action, environment, resource efficiency and raw materials), COSME, European Structural and Investment Funds (ESIF) and the European Fund for Strategic Investments (EFSI).

The SIP has three objectives:

1. Increase the eco-innovation performance across the 28 EU Member States;
2. Increase the share of eco-innovation projects funded by the European Commission;
3. Reduce the barriers and enhance the drivers for uptake of eco-innovation by EU entrepreneurs;

and is divided into seven Actions:

[4] http://ec.europa.eu/resource-efficient-europe/pdf/resource_efficient_europe_en.pdf
[5] http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011DC0899&from=EN

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- Action 1 - Environment policy and legislation;
- Action 2 - Demonstration projects;
- Action 3 - Standards;
- Action 4 - Finance and support to SMEs;
- Action 5 - International cooperation;
- Action 6 - New Skills and green jobs;
- Action 7 - European Innovation Partnership.

In 2015, the European Commission published "**Closing the loop - An EU action plan for the Circular Economy**" [COM (2015) 614][6]. On 2 December 2015, the European Commission presented this new circular economy package. The package contains an action plan for the circular economy, mapping out a series of actions and four legislative proposals on waste, containing targets for landfill, reuse and recycling, to be met by 2030.

The circular economy is based on sharing, leasing, reuse, repair, refurbishment and recycling, in an (almost) closed loop, where products and the materials they contain are highly valued. Moving towards a more circular economy could deliver opportunities including: reduced pressures on the environment; enhanced security of supply of raw materials; increased competitiveness; innovation; growth and jobs. However, the shift also poses challenges such as: financing; key economic enablers; skills; consumer behaviour and business models; and multi-level governance.

In this context, the present DOP aims at giving guidelines to innovation agencies and other institutions in designing and implementing support programmes and services enhancing SMEs to exploit the full potential of eco-innovation.

[6] http://eur-lex.europa.eu/resource.html?uri=cellar:8a8ef5e8-99a0-11e5-b3b7-01aa75ed71a1.0012.02/DOC_1&format=PDF

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2. THE CONCEPTS USED IN SETTING THE CHALLENGE AND THE PROPOSED APPROACH

2.1. THE CONCEPTS USED IN SETTING THE CHALLENGE

The challenge was commonly identified by the three partner organisations during their communications, prior to the development of the EISS project. The three partners, coming from totally different environments, had already made some conclusions, which indicated that further actions should be taken in terms of enhancing their eco-innovation support service to the local businesses. Friuli Innovazione and NORRIA had also been project partners in a previous Central Europe cooperation project, called "Central Environmental and Energy Management as a kit for survival – CEEM" and had worked successfully together. That is one of the reasons why they have decided to continue their collaboration, exploiting their joint project results involving a new actor, who can effectively build on an already well established partnership and beneficiaries (local SMEs) can take advantage of the previous project results.

Prior to the project itself and the methodology set up, all these information have been exchanged, together with the profiles of the partners, and during the conversations partners identified the opportunity to cooperate in order to combine –from different points of view, forces and experiences. The different identities of the three involved organisations was a very significant element in the development of the DOP, as it ensured that the "eco-innovation support services" initiative will capture blueprints from different kind of stakeholders opinions that the partners collaborate with and/or serve.

Business and Cultural Development Centre (KEPA)

Business and Cultural Development Centre (KEPA) is a private company with headquarters in Thessaloniki. It was formed in March 1991 by the Federation of Industries of Northern Greece (FING) and Greek International Business Association (SEVE). Since 1993, KEPA is the Intermediate Management Authority of funding programmes for SMEs on behalf of the Ministry of Economy and Development, geographically responsible for the Regions of Central and Western Macedonia. KEPA manages ERDF- and ESF-financed, national and regional programmes supporting entrepreneurship and especially SMEs, through projects of established SMEs and start-ups. KEPA has significant experience, having managed up to now 72 programmes, assisting and auditing more than 16,400 projects with a total budget of more than € 2,1 billion. Therefore, KEPA has an extensive experience in evaluation, monitoring, financial management and all aspects of implementing competitiveness and innovation

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support programmes. For instance, KEPA successfully managed program «NEW INNOVATIVE ENTREPRENEURSHIP», with the goal of supporting "production of goods and services with high added value by integrating knowledge, quality and environmental sensitivity." This programme supported many areas of innovation: production, eco-innovation, marketing innovation, innovation management, technological and organisational innovation. Another important programme KEPA has managed was the "Green Enterprise", which had specific objectives as "Reducing energy and especially the environmental footprint of the manufacturing operations, the production and the marketing of "green" products and services; improving the environmental and social business profile and reduce the deficit of social acceptance for manufacturing activities; and their compliance with international environmental standards". The results and impact of both programmes has been analysed and possible improvements considered.

Friuli Innovazione Research and Technology Transfer Centre (FINN)

Friuli Innovazione is a Research and Technology Transfer Center, set-up in 1999 by the University of Udine and other local partners (industry associations, public administrations, research institutions, etc.). The mission of FINN is to support companies, in particular SMEs, to increase their competitiveness through the introduction of product, service and/or process innovation, and to support the creation of innovative businesses.

In 2004, FINN was appointed by the Autonomous Italian Region Friuli Venezia Giulia to manage the Science and Technology Park of Udine, which has hosted more than 60 tenants so far. Since 2005 it has ruled also the business incubator Techno Seed, which fosters and supports the creation of innovative start-ups.

FINN's main areas of intervention are:

- technology transfer: to promote and facilitate the collaboration between enterprises and the scientific and technological research network;

- business financing: to inform, educate and support enterprises to identify the most appropriate finance instruments for their research projects;

- business start-up: to support and assist the creation of high technology enterprises;

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- hosting service for enterprises willing to implement R&D activities at the Science and Technology Park.

FINN does not manage directly financial support programmes, but it develops and implements at regional and cross-border level shared strategies about innovation and technology transfer. FINN has huge experience in such activities (providing more than 160 networking activities with about 100 partners per year), in advising innovative companies in finding business financing (60 companies per year), in supporting start-ups (about 20 companies per year) and in hosting companies inside the Science and Technology Park. Moreover, in the last years, FINN has gained specific competences in supporting SMEs on innovation processes. In particular, it was involved in 2007 and 2012 in the test phases of the European project IMP^{3}rove (www.improve-innovation.eu), supporting SMEs entrepreneurs in the innovation management self-evaluation and improvement. Another important EU project that FINN implemented recently as lead partner was CEEM "Central environmental and energy management as a kit for survival" (2012-2014), funded by the Interreg Programme Central Europe. CEEM aimed at supporting environmentally friendly technologies in the industrial production of the Central Europe regions by offering to SMEs operational methods, good practices and an IT tool to self-assess their performance.

NORRIA North Hungarian Regional Innovation Agency (NORRIA)

NORRIA North Hungarian Regional Innovation Agency was established in 2005. In the first 3 years NORRIA was operating as an independent organisational unit of the Regional Development Agency and then became an independent non-profit corporation engaged in innovation based regional development, providing a wide range of innovation management services.

NORRIA's mission is to support the sustainable development of North Hungary in order to become a competitive, innovative and knowledge-based region.

What makes NORRIA different from other innovation support organisations is first and foremost active role in the development and continuous improvement of the regional innovation strategy. In line with the European Union's new innovation policy concept NORRIA has developed the Smart Specialization Strategy of North Hungary (RIS3) in order to boost regional innovation and economic growth focusing on the strengths of the region.

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NORRIA is a regional innovation agency which does not manage financial support programs, but provides a wide range of innovation management and knowledge intensive services to enterprises. Its service portfolio range from preparation and writing of project proposals, consultancy on grant application, project coordination and management to promotion of innovation and knowledge transfer between researchers and businesses, consultancy on intellectual property rights, analyses on regional innovation mechanisms and innovation-related training programmes.

Especially, NORRIA has experience in mentoring of start-up companies also in field of eco-innovation, as it was chosen as mentor in frame of the North Hungary Regional Operational Programme. Difficulties and advantages of the programme has been discussed in the context of the programme design and the experiences NORRIA gathered through it.

EISS project relates to the work programme topic "Peer learning of innovation agencies INNOSUP-5-2014". The "eco-innovation support service for SMEs" theme has been identified by the project partners on the basis of their previous experiences working with SMEs, it has a high potential for improvement at all involved partners' territories of action (but also in the whole Europe) in order to boost the local and international performance of SMEs and to support them to reach the EU 2020 goals. In the previous years, all three EISS partner agencies have been successfully participating in several national and international level EU funded projects, dealing with the elaboration of mid- and long-term strategies, specific policy recommendation papers concerning e.g. energy efficiency, green procurement, local actions on climate change impacts, bio waste in decentralized small-scale composting plants, funding schemes for innovation and sustainable development issues as well as designing and implementing regional level innovation support programmes for SMEs.

Using their different past experiences and their capacity regarding eco-innovation, the consortium was set up aiming to improve eco-innovation support services in smaller manufacturing companies from traditional sectors in the peripheral regions, where innovation support services offer is identified as weak. This way, SMEs will be helped to improve their environmental performance and energy efficiency, as well as other stakeholders and innovation agencies will have the opportunity to transfer good practices into their respective national/regional programmes.

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The basic EISS concept is to tackle the challenges that European SMEs face due to lack of their both technological (products and processes), and non-technological (organizational, marketing, institutional) eco-innovation capacities concerning environmental performance and energy efficiency.

EISS addresses this key issue for the economic development of industry in Europe involving three territories from different areas in Europe; one from Eastern (North Hungary, Hungary), one from Western (Friuli Venezia Giulia, Italy) and one from the Southeast (Central Macedonia, Greece). More specifically, the 3 participating –through the partnership– Regions present the following characteristics:

	North Hungary	Friuli Venezia Giulia	Central Macedonia
Area (km^2)	13,429	7,862	18,810
Inhabitants	1.2	1.2	1.9
GDP (million €)	6,850	35,200	28,100
GDP (% of the national GDP)	7.2	2.15	13.54
Number of companies	54,000	92,020	120,000
% of SMEs	99	99	99
Key economic sectors	chemicals, machinery, metal products, electronic components, food, construction	agrofood, maritime technologies, culture, creativity and tourism, smart health, smart manufacturing and related services (manufacturing & industry, furniture)	agrofood, construction materials, textile & clothing, tourism, ICT, energy-environmental technologies, logistics

The three participating regions have different innovation characteristics. To introduce the regions' innovation performance, the Regional Innovation Scoreboard was used. The

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Scoreboard classifies the regions into four groups: innovation leaders, strong innovators, moderate innovators, and modest innovators.

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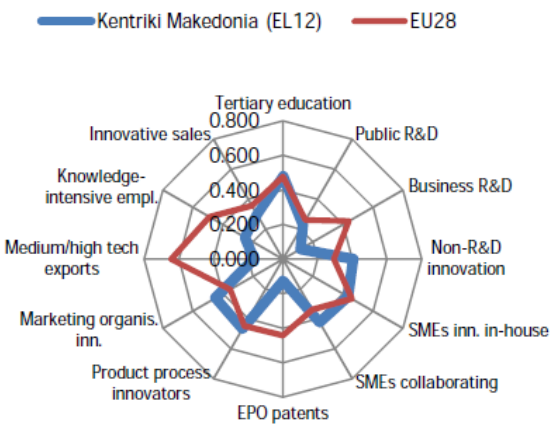
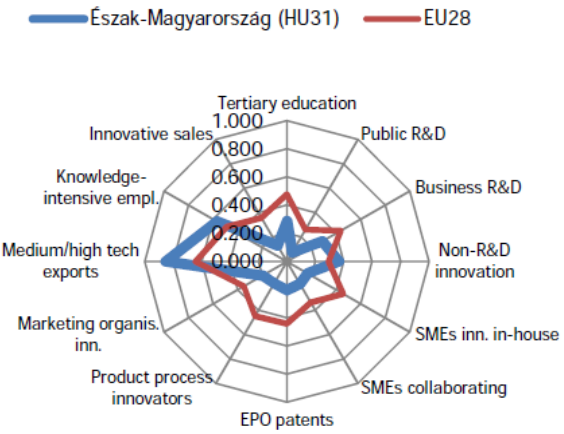


Central Macedonia is a Moderate Innovator. Relative strengths compared to the EU28 are in Non-R&D innovation expenditures, SMEs with marketing or organisational innovations, and Innovative SMEs collaborating with others.[7]

The Region is consisted of 7 regional units (Chalkidiki, Imathia, Kilkis, Pella, Pieria, Serres and Thessaloniki.) More than 120 000 companies are operating in the region, with more than 99% of them being SMEs. 4.22% of them are active at the primary sector, 19.37% the secondary sector (manufacturing), while the broadest sector is the tertiary sector with contribution of 76.67% to the regional economy. The region of Central Macedonia has also a significant exportation rate comparing to the national, representing the 17% of them and counting 4,67 billion €. The Regional Programme funding between 2014 and 2020 to SMEs either targeting energy efficiency and also cleaner production or taking consideration (indirect investment) of quality targets, sums up to 104,132,987.00€. Funds will be also be committed to the specific targets through EPANEK, the national programme of the Ministry of Development.



North Hungary is a Moderate Innovator. The radar graph shows that relative strengths compared to the EU28 are in Exports of medium and high tech products, Non-R&D innovation expenditures, and Employment in knowledge intensive industries.[8]

North Hungary region consists of 3 counties: Borsod-Abaúj-Zemplén, Heves and Nógrád. Research and development expenditures are lower than the country average, representing 0.6% of the GDP.

[7] Source: Regional Innovation Scoreboard 2016, Regional profiles - Greece
[8] Source: Regional Innovation Scoreboard 2016, Regional profiles - Hungary

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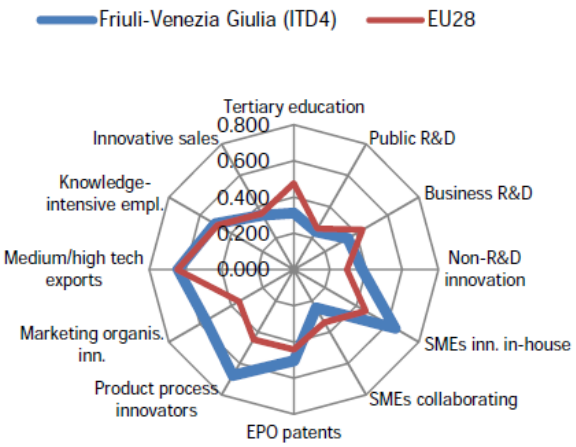
One priority of the region is to increase the ratio of R&D activities. 54,081 companies are operating in the North Hungary region, more than 99% of them are SMEs. Manufacturing (chemicals, machinery, metal products electronic components, food, construction, etc.) is the most significant economic sector in the region. From ERDF and CF will be available 85.55 billion HUF (~275 million €) to support financially activities targeting energy efficiency and also cleaner production and consumption between 2014 and 2020.

Friuli-Venezia Giulia is a Strong Innovator. The radar graph shows that relative strengths compared to the EU28 are in SMEs with marketing or organisational innovations, SMEs with product or process innovations, and SMEs innovating in-house.[9]



Friuli Venezia Giulia Autonomous Region is the most north-eastern Italian region. Thanks also to its geographical position the export represents the 31.9% of its GDP, higher than the national average (24,9%). In FVG there are about 87.000 enterprises – excluding the agriculture sector – of which 10.1% is manufacturing and 14.3% is construction industry. In general the 87.7% of the enterprises in Friuli Venezia Giulia have less than 10 employees. Eco-innovation of the industrial system is among the FVG priorities 2014-2020 (Smart Specialization Strategy) funded through the ERDF: e.g. the activity 5.1) will invest 36 million € to improve energy efficiency. Also the Regional Energy Plan (2015) aims at addressing the regional economy towards clean technologies and encouraging companies to create new jobs through green jobs, promoting new skills related to new professional figures. Furthermore, in 2016 FVG Region will implement a financial measure (300,000 Euro from national funds) supporting SMEs in realizing energy audits and implementing energy management systems in compliance with standard ISO 50001. As concerns research and innovation, in FVG R&D investments are a bit higher than the country average.

In conclusion EISS project is implemented by three innovation agencies which differ from many points of view, although they all share a unique mission, which is to empower the

[9] Source: Regional Innovation Scoreboard 2016, Regional profiles - Italy

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 680942.

competitiveness of their territories by means of helping companies – and especially SMEs – in the innovation process.

The main characteristics where EISS partners differ are about:

- dimension (KEPA is a big enough structure; NORRIA and Friuli Innovazione have around 10 people staff);
- juridical status (KEPA is a non porfit private organization, Friuli Innovazione and NORRIA are non profit public equivalent bodies.
- services offered (KEPA manages ERDF, national and regional innovation programmes; NORRIA offers consultancy services to companies both for free (e.g. information days about funding opportunities, awareness raising activities related to R&D&I, information service about intellectual property rights…etc.) and under payment (e.g. proposal writing, project management…etc.); Friuli Innovazione does not manage any public programme for innovation but takes part into calls for proposals directly to design new services to be offered for free to the local companies.

2.2. PROPOSED APPROACH TO ADDRESS THE ECO-INNOVATION SUPPORT INITATIVE

According to the Horizon 2020 topic "Peer learning of innovation agencies"[10] under which the EISS - Eco Innovation Support Services project was financed, traditional methodologies for mutual policy learning and exchange of "good practices" among innovation agencies are not effective in enhancing existing/establishing new innovation support programmes for the benefit of SMEs. During the PRO-INNO Europe "INNO-Partnering Forum" (IPF, 2009-2012), new permanent learning mechanisms for SMEs innovation support agencies were defined, based on clear methodologies, agencies' needs (i.e. demand driven) and horizontal flow of information among participants.

One of these mechanisms is the Twinning+ Methodology, combining elements of traditional peer reviews and twinning in small learning groups of interested agencies.

The traditional **Twinning Methodology** is a methodology taking place between two or more entities about a whole range of issues, which can bring many benefits to the participants by giving the opportunity to share problems, exchange views and understand different viewpoints. Twinning works better when it takes place between equals

[10] http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/innosup-05-2016-2017.html

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 680942.

participants who collaborate in order to transfer good practices. This is done by designing a process in which peer-reviewing is used to identify, access and analyse good practices within a certain theme. The results of the peer-review process is the **Design Options Paper (DOP)**, whose goal is to guide an implementing agency in making use of the good practices in designing the addressed programme/initiative.

But, first experiences about DOP suggested that it is not possible to just identify a good practice and transfer it, because contexts may differ greatly and there is a need for comprehensive analysis which give the basis for design options, adapting schemes to the specific national, regional, institutional environment. Moreover, the actual knowledge transfer is not a one way process, but an interactive process where all participants contribute and tune the leanings collected in the design options paper.

For these reasons a **Twinning Advanced (Twinning+) Methodology** has been recently developed. It is not limited to transferring good practices among agencies, but it provides opportunity to design and implement better practices about a common innovation support challenge.

By using their collective experience and knowledge, the identified challenge is addressed in a better way, developing and testing a new approach. The result of the effort is documented in the DOP that identifies and documents guidelines and implementation alternatives that the partners have experienced and would recommend to other agencies interested in implementing the proposed better practice. This methodology facilitates the establishment of project-based cooperation not for sharing experience, but for developing better approaches, addressing all elements of the "Service delivery system" of innovation support (see here below).

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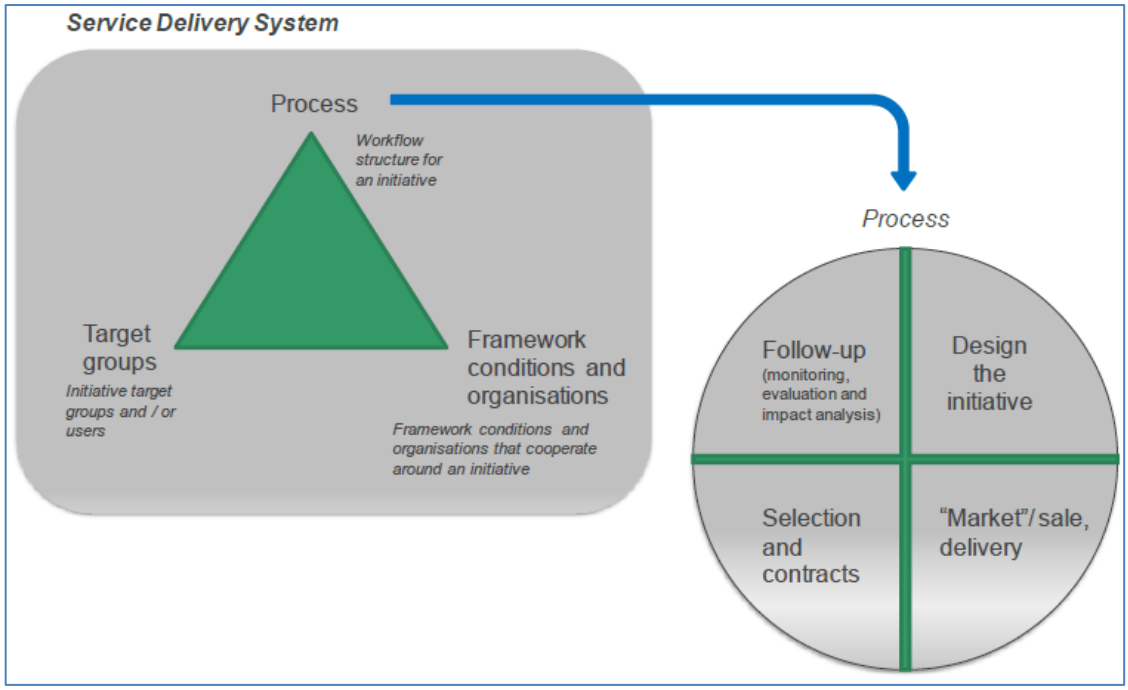

Source: EASME, Paper Twinning Advanced (Twinning+) Methodology[11]

Thus, the DOP is intended as a guide or tool for innovation agencies or similar organisations for the development of an innovation support activity. It identifies and explores options to address the specific challenge, and shows which options have been precluded in the design phase.

The DOP should as well serve as guide and source of inspiration for other agencies that later on become interested in the topic and did not participate in the initial Twinning+ project.

On this basis, the **EISS - Eco Innovation Support Services project** implemented the Twinning+ methodology, on the topic of support programmes for SMEs about eco-innovation.

[11] https://ec.europa.eu/easme/sites/easme-site/files/Paper-Twinning-advanced-methodology.pdf

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3. OVERVIEW OF ECO-INNOVATION SUPPORT MEASURES AS REFERENCE POINTS ON EUROPEAN LEVEL

Eco-innovation is a rapidly growing market not just in the EU, but globally.

According to the OECD Background Paper on "The Future of Eco-Innovation: The Role of Business Models in Green Transformation", public policy, particularly innovation policies support, targeting both supply and demand sides, can have significant direct and indirect influences on eco-innovation (*based on business models*). [12]

Supply-side policy measures are usually relevant in **promoting** eco-innovation.

A few examples:

- Funding and support measures for R&D (especially for product and technology-based innovations),
- Instruments supporting testing and demonstration (except for ICT solutions),
- Measures supporting early-stage business development (except for ESCO and waste regeneration)
- Regulatory instruments,
- Market-based instruments,
- Environmental and carbon taxes and regulations on harmful substances and activities,
- Carbon trading schemes, that create incentives for the development of clean energy and waste related eco-innovations.

Demand-side policy instruments are acquiring importance in **creating markets and a business case for eco-innovations:**

- performance standards,
- green labels and certificates
- green public procurement,
- consumer subsidies.

Eco-innovation also benefits from measures supporting networking and partnerships, although these seem to be more relevant in cases of ICT-based projects and promoting sustainable mobility.

An overall support mechanism for eco-innovation has been set in place on EU-level for the past few years already, in the forms of dedicated programmes, services and funding instruments.

[12] http://www.oecd.org/innovation/inno/49537036.pdf

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EU Member States also have several different innovation initiatives and policy measures in line with EU rules and regulations.

In the following section, those most relevant cases on European level –focusing especially on supply-side support– are highlighted, which derive from the project partners' experiences and connections, identified at the peer-learning workshop.

3.1. INNEON NETWORK

The INNEON network for eco-innovation investment aims to extend public and private funding sources available for eco-innovation and social innovation in Europe, and provide a unique forum dedicated to the interaction between a select cohort of innovators and relevant investors.

Innovators and investors can join a dedicated network providing access to pan European markets, live networking events and more, to improve the quality of deals and allow for efficient matching of entrepreneurs and investors. INNEON is a catalyst accelerating the commercialization of eco-innovation and social innovation bringing economic, environmental and social benefits for the investors and entrepreneurs and beyond that for Europe at large.

Services offered

A range of carefully selected, publicly available self-help tools for turning an innovative idea into a successful business venture. INNEON main services at a glance:

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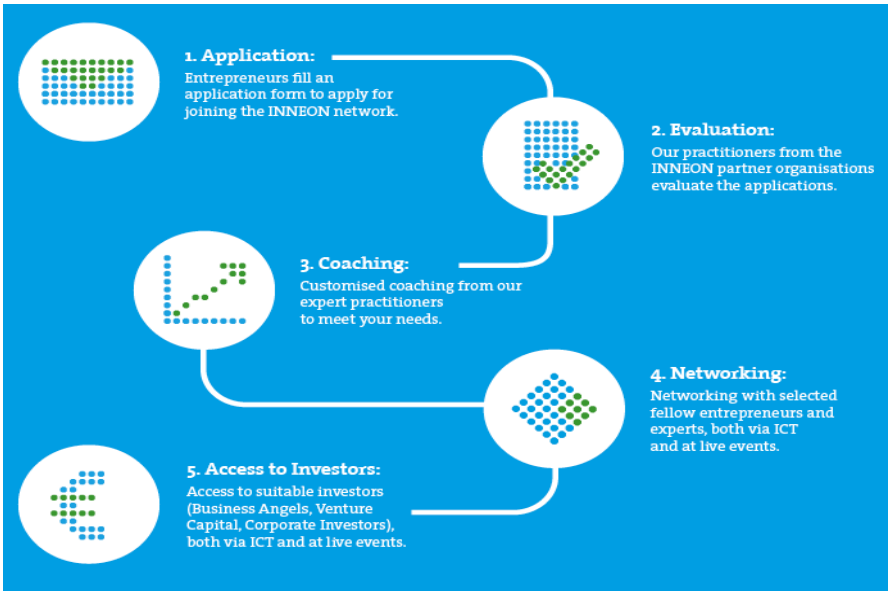

Source: www.inneon.eu

Advantages and disadvantages / difficulties

+ It is a well-designed platform, a Pan European forum dedicated to support and coach selected entrepreneurs and SMEs to reach stage of "investor readiness".

+ It targets both investors and entrepreneurs, to provide matchmaking.

+ Easy and clear steps provided to follow on-line to qualify as innovator.

+ Features Success Stories.

+ Services are planned to be expanded to regional level.

- No regional contact points/services at the moment.

Potential roles and options of innovation agencies

- Join the network.
- Promoting the network to interested investors, innovators (entrepreneurs).

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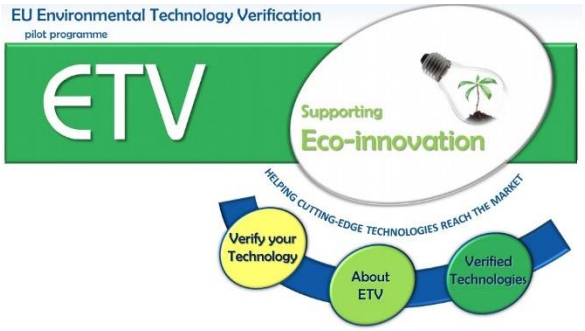
3.2. ETV



Environmental Technology Verification (ETV) is **a new tool to help innovative environmental technologies reach the market.** Claims about the performance of innovative environmental technologies can be verified by qualified third parties called "Verification Bodies". The "Statement of Verification" delivered at the end of the ETV process can be used as evidence that the claims made about the innovation are both credible and scientifically sound. With proof of performance credibly assured, innovations can expect an easier market access and/or a larger market share and the technological risk is reduced for technology purchasers. ETV can be integrated into the Horizon 2020 proposals to help measure technology readiness levels, however it is up to the project leaders to decide if ETV I relevant for their particular projects.

Services offered

The EU ETV Pilot Programme, launched by the Joint Research Centre, is intended for use in a business-to business context, an independent validation of environmental performance will help building purchaser's trust thus accelerating its market penetration.

Verification under the EU ETV Pilot Programme is neither a pass or fail system nor a certification against a set of predefined criteria or standards giving e.g. a CE-marking. Instead, it is a dynamic process involving the proposer as much as the entities responsible for the verification tasks aiming at:

- an independent proof of verifiable performance parameters
- a way to validate innovative technological features which satisfy specific user needs
- a tool to demonstrate an added value for the environment

Verification under ETV is concerned with the technical design of a technology, not with the production series of industrial products.

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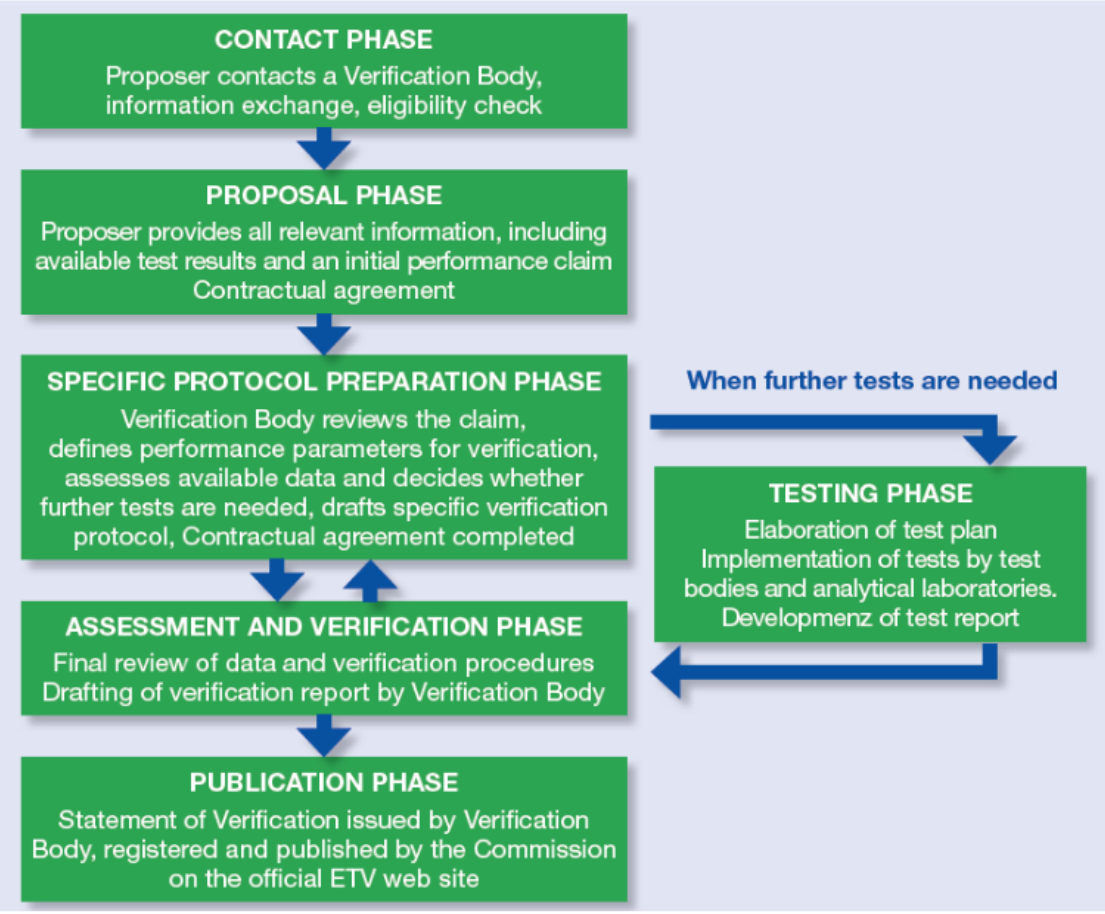
The verification process at a glance



Source: http://iet.jrc.ec.europa.eu/etv/

Advantages and disadvantages /difficulties

-

Potential roles and options of innovation agencies

- Promoting the tool by providing information on the verification opportunity and process

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3.3. MEI

A project called MEI (Measuring Eco-Innovation) was funded by the European Commission in 2008, aiming to develop a classification of eco-innovation.

Four main fields were identified:

- Environmental technologies
- Organizational innovation for the environment
- Product and service innovation offering environmental benefits
- Green system innovations

3.4. ECO-INNOVATION SUPPORT PROGRAMMES IN THE EU

European innovation support policy is primarily focused on the promotion of international cooperation in R&D.

Innovation agencies and other actors that promote and support eco-innovation are generally rely on and provide their services based on the actual framework setting, such as available programme financing.

Concerning eco-innovation promotion, the most relevant EU funded international cooperation programmes between 2014 and 2020 are the Horizon 2020, LIFE+, COSME and European Structural and Investment Funds.

There are several information sources available already on these programmes, therefore only their main characteristics are summarized here as follows:

HORIZON 2020

- **Innovation actions - € ~190M overall (2014-2015)**
  - EU funding rate – 70% (except non-profit, which are still funded 100%)
  - plans or designs for new products, processes or services
  - prototyping, testing, demonstrating, piloting, large-scale product, market replication
  - 'demonstration or pilot': validate the technical and economic viability of a new or improved technology, product, process, service or solution in an operational environment

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  - 'market replication': support the first application in the market of an already demonstrated innovation (not yet deployed in the market due to market failures/barriers to uptake)
- **SME instrument - € ~550K-2.5M per project**
  - Single or groups of innovative SMEs with international ambitions to bring innovative business ideas to market
  - Provide support from business idea conception and planning (phase I) over business plan execution and demonstration (phase II) to commercialisation (phase III).
  - Phase I (proof-of-concept): explore the feasibility and commercial potential of a new idea to develop an innovation project (€ 50,000 grant)
  - Phase II (develop & demonstrate): develop business idea into market-ready product, service or process (€ 0,5M to 2,5M grant)
  - Phase III (go-to-market): additional EU support to enter the market (no grants)
- **Industrial Leadership Pillar, Societal Challenges**

LIFE+

  - WP 2014-17: **thematic priorities for resource efficiency, green and circular economy**
  - implementation of **Roadmap for a Resource-Efficient Europe**
  - implementing the **circular economy** through actions spanning the value chain or ensuring the use of secondary resources/scrap materials/wastes in other industries or value chains
  - new business models for resource efficiency (resource efficiency practices in SMEs)
  - promoting the implementation of the European environmental footprint methodology
  - linking regulatory, financial or reputational incentives to environmental performance by using EMAS or other environmental management instruments
  - promoting **Green Public Procurement**
  - **a budget for the next funding period, 2014–2020, of €3.4 billion**

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This document intends to highlight also a few successful national initiatives and support programmes as a source of inspiration for those types of agencies and organizations, who can design and/or implement such programmes.

3.5. NATIONAL LEVEL GOOD EXAMPLES

SLOVENIA: CALL TO SUPPORT INNOVATION IN THE FIELD OF ENERGY

- Call is published in support of projects that aim to:
  - reduce the cost of energy supply,
  - to promote energy services,
  - to improve the reliability and economy of operation of energy systems,
  - to support development methodologies and devices based on innovative, laboratory or pilot tried and tested solutions.
- The call is intended for small and medium-sized enterprises, but also universities and research organizations are eligible to participate but they need to have spin-off companies already established.
- The aim is to develop a laboratory of ideas with a view to successful penetration of innovative product or service on the market is not supported development activities to phase laboratory test product (TRL 5 or more)

BADEN-WÜRTTENBERG: ERDF PROGRAMME "Innovation und Energiewende" (2014-2020)

- The state of Baden-Württemberg makes funds available from ERDF and complementary national budget programmes to implement the structural policy of the European Union.
- Supported subjects are research, technological development and innovation and reduction of CO^2 emissions.
- Promoting the development of industrial research infrastructure and transfer of technology to enhance innovation capacities and business start-ups
- Programme "Systematic Climate Protection"
- Climate System with - investments and awareness
  - municipalities and counties in Baden-Württemberg are involved in climate change. With the new program "climate protection system"
  - to make a contribution to climate protection on a systematic basis.

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- Attractive funding conditions should enable municipalities to implement ambitious measures the local climate.

AUSTRIA/FFG: NEW ENERGIES 2020, The Research and Technology Programme of the Climate and Energy Fund

- **Program objectives:**
- Given the global sharply rising demand for energy, the climate issue and the increasing risks regarding the security of energy supply our energy system is facing necessary and drastic changes. For this reason, a research and technology program was named "NEW ENERGIES 2020 'initiated by the Climate and Energy Fund in of 2008.
- This program builds on the results of the strategy process E2050
- The program is based on three **basic orientations** :
  - Efficient use of energy
  - Renewable energy
  - Intelligent Energy Systems
- Funding instrument: single or cooperation project - industrial research, experimental development
- Target group: SMEs, large companies, universities, centers of excellence, research institutions, individual researchers, start-ups

SWEDEN: TESTBEDS IN ENVIRONMENTAL TECHNOLOGY

- Companies and other organizations in the area of environmental technology are the targeted beneficiaries
- The project will have the potential to establish a new, or significantly improving an existing national test infrastructure
- Test bed Project (planning and / or realization)
- Companies, universities, colleges, research institutes, public organizations, economic associations and foundations
- Projects relating to planning or realization granted with a maximum of 1 m €

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4. ECO-INNOVATION SUPPORT SERVICES AND PROGRAMMES PROVIDED BY EISS PROJECT PARTNERS

Project partners have provided wide range of support programmes and services related to eco-innovation. During the peer learning workshop the following practices were identified:

4.1. ECO-ENERGY EFFICIENCY MANAGEMENT TOOL (3EMT) AND ECO-POINTS (FINN, NORRIA)

Description of the programme / service:

In frame of "CEEM – Central Environmental and Energy Management as a kit for survival" project financed by the Central Europe Programme 2007-2013, an online tool and the related service portfolio were developed. 3EMT is a new, simple, web-based tool for companies created to step up their green habits. SMEs self-assess their eco-energy performance and get a free benchmark on Central Europe basis. During the pilot action more than 500 SMEs from 5 countries tested the system.

Two of the EISS project partners – Friuli Innovazione and NORRIA – have already collaborated in CEEM project which was the starting point of EISS project. One of the main objectives of EISS project is to make the online tool available also for Greek companies and to further develop National Eco Points into Eco-Innovation Support Service Points (EISS Points).

Role of the innovation agencies:

EISS Points (Eco Points) are established within innovation agencies' premises. EISS Points serve as a "one-stop-shop" for companies in field of eco-innovation (environmentally friendly products and services, clean production, energy efficiency measures, suitable funding instruments, capital providers and required conditions to enable in-house capacity building, IPR, etc.)

Advantages and disadvantages / difficulties:

+ Based on the feedbacks of companies participated in the pilot action, the 3EMTool is user-friendly, has a good and clear structure, can complete quickly (only 30-45 minutes), it is easy to collect the necessary data.
+ The 3EMTool is designed in a way that its application could be extended to other geographical areas.

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 680942.

- During the CEEM pilot action companies had the opportunity to get support from a professional eco-energy expert. Experts identified intervention points and barriers and suggested solutions for improving energy efficiency. According to the pilot companies, expert consultancy is a real value. After the projects' end it would be necessary to find financial resources for expert consultancy services.
- CEEM project reflected that SMEs commitment to eco-innovation was moderate in the pilot countries, therefore it is necessary to engage companies towards environmental and energy efficiency issues. Performing a self-assessment with 3EMTool raises awareness of companies on energy and environmental issues and could be an entry point of future eco-innovation initiatives.

4.2. GREEN ENTERPRISE 2010 (KEPA)

Description of the programme / service:

The programme was part of the Operational Programme "Competitiveness and Entrepreneurship 2007-2013" (OPCE II) of hte National Strategic Reference Framework 2007-2013 (NSRF). The programme budget was 30 million € (for whole Greece), co-funded by the EU's European Regional Development Fund.

The programme aimed at creating conditions to integrate environmental considerations in business and to make interventions in the process of the production chain. In particular, specific objectives were: reducing energy use and especially the environmental footprint of manufacturing operations, boosting the production and marketing of "green" products and services, improving the environmental and social business profile and reduce the deficit of social acceptance for manufacturing activity, increasing manufacturing sectors' compliance with international environmental standards.

The programme was available for small and micro enterprises (up to 50 employees and 10 million € turnover) which have been operating for at least three years. It financed projects through grants with a total budget between 30,000 and 200,000 €. The grant was 30 – 45% of the total project size.

Role of the innovation agency:

KEPA was responsible for the management of the programme in the regions of Central and Western Macedonia.

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Advantages and disadvantages / difficulties:

+ The results are considered satisfactory. In Central and Western Macedonia, all six supported companies have been certified according to the standard ISO 14001:2004; they have reduced energy consumption and have modernized/streamlined their waste management systems with positive impact on their financials.
– Many enterprises were not aware of the green entrepreneurship concept and its benefits. Therefore SMEs were reluctant to participate in the programme due to lack of experience in environmental management and adequate preparation.
– Restrictions to company size
– Low grant rate
– Short publication time
– Problems with providing loans from the banking system to cover private contribution

4.3. NEW INNOVATIVE ENTREPRENEURSHIP (KEPA)

Description of the programme / service:

The programme was part of the Operational Programme "Competitiveness and Entrepreneurship 2007-2013" (OPCE II) of the National Strategic Reference Framework 2007-2013 (NSRF). The budget for the public expenditure amounted to 30 million € and was co-funded by the European Union and specifically from the European Regional Development Fund (ERDF).

The programme aimed at encouraging and supporting innovative entrepreneurship as a strong and sufficient condition for production of goods and services with high added value by integrating knowledge, quality and environmental sensitivity.

The programme supported all types of innovative activities – including eco-innovation – of newly established SMEs (operate less than 5 years). The programme supported projects with a budget of € 30,000 investment up to €300,000 for the manufacturing sectors or from € 20,000 to € 200,000 for projects operating in all other eligible sectors of economic activity. The rate of the grant for the investment was set at 60% of the total investment budget.

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Role of the innovation agency:

KEPA was responsible for the management of the programme in the regions of Central and Western Macedonia.

Advantages and disadvantages:

+ It was the first dedicated programme that targeted to promote innovative entrepreneurship. Due to the fact that it was in-line with the current trends of the economy and that there were no such programme previously, it become a very successful one.
+ Due to the selection procedure that included an interview with the about-to-become entrepreneurs, the ministry has come close to the entrepreneurial world and the pool of ideas of the people.
+ High funding rate (60%)
+ Great range of eligible activities, which enabled potential entrepreneurs to prepare integrated business plans.
– There should be more flexibility to the outcomes of the implementation of the projects, as it is not easy to pre-define all factors and outcomes in an innovative business plan.
– Lack of experience regarding innovation management from technical advisors/consultants and entrepreneurs.
0 Initially there was very short implementation period available to the funded projects. The problem was soon identified and solved by granting an implementation deadline extension.
0 The programme was quite demanding regarding documents, procedures, etc. In some cases these demands were justifiable, but there was space to shorten some others and make things a little bit easier for the entrepreneurs.

4.4. INCUBATION SERVICES (FINN)

The Techno Seed incubator, managed by Friuli Innovazione, supports innovative, high-technology business ideas through training, consulting, networking and incubation services to creating start-ups. The incubator undertakes:

- guidance and training;
- business plan development;
- technological feasibility studies;

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- assistance with enterprise creation formalities;
- assistance with fund raising and access to innovative forms of finance;
- networking, searching for partners and alliances;
- mentoring.

Some figures about the incubator results (2004-2016): 500 business ideas received; 150 business ideas developed; 42 start-ups created; 17 graduates (enterprises no longer start-ups - more than 4 years-old).

Role of the innovation agency:

The incubator's activities are implemented in two subsequent phases:

1) pre-incubation: Techno Seed offers a structured path with numerous services such as: high qualified training for the development of entrepreneurial skills of the business team; tutoring; advanced counselling; networking to increase the interpersonal skills towards stakeholders;
2) incubation (maximum of four years): once the start-up is created, Techno Seed provides all the necessary support to expand the business and make it successful.

Advantages and disadvantages:

+ Controlled business ideas implementation
+ Possibility to support business idea with a very wide range of services
+ Very favourable conditions (most of the services are for free)
+ Further development opportunities (e.g. cross-border network and opportunities)
− Financial support to the incubator is not regular (it is project-based)
− Lack of additional resources (e.g. financial support by banks)

4.5. START-UP MENTORING PROGRAMME (NORRIA)

Description of the programme / service:

In frame of the North Hungary Regional Operational Programme call "Development of the region's innovation potential by creating innovative start-up companies" NORRIA conducted project mentoring of 32 start-up companies in the region. In Hungary never has been a similar programme before, it was launched as a pilot. The programme focused on wide range of innovations, including eco-innovation.

The grant was available both for newly established companies (operating less than 1 year) and individuals. The project size was 9 million HUF (~30,000 EUR). A marketable

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innovation (new products, new services, new processes…etc.) should be the main output of the project.

Role of the innovation agency:

As an accredited organisation, NORRIA was responsible for mentoring start-up companies (conducting the operative tasks of project management, solving challenges and issues for the whole project life cycle concerning entrepreneurship, protection of intellectual property rights, funding opportunities…etc.) and preparing business plans.

Advantages and disadvantages / difficulties:

+ Controlled project implementation: Pre-defined activities such as project mentoring and business planning provided by accredited organisations helped SMEs to implement the project effectively and successfully
+ Mentors provided continuous support to SMEs
+ Very favourable funding conditions (100% funding rate) and wide range of eligible costs (including costs related to starting of a business)
+ Further development opportunities (in line with the prepared business plan)
– Excessive administrative burdens
– Uncertain legal background
– Small amount of financial support
– Lack of additional resources: the grant amount was fairly low to cover all R&D&I activities therefore companies needed additional own resources which is very difficult for a new company
– In some cases innovation content was questionable
– Contradictions in administrative procedures

4.6. SUMMARY OF THE CRITICAL FACTS

EISS project partners analysed all the programmes and services listed above and identified the key success and failure factors. The conclusions are the following:

- Eco-innovation services have to be designed in a "user-friendly, easy-to-understand way". Bureaucracy, too complicated forms and procedures should be avoided. The benefits of the provided service should be clear for the SMEs.
- Personal, tailor-made consultancy is an added value of an eco-innovation service.
- The target group must be clearly defined: in case of the above mentioned eco-innovation services the main target group are companies (especially SMEs). No restriction based on their size or sector should be applied.

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- The service should address the real challenges and needs of target groups.
- Free of charge pre-assessment of companies could be an entry point.
- Funding sources for the eco-innovation service must be also allocated.
- Follow-up and continuous evaluation of the provided service at two levels: the service itself and the impact. Based on the feedbacks of users and experts the service should be improved.
- Service promotion is very important to reach the target group. Therefore the most appropriate tools and channels should be selected.
- Awareness raising of target groups related to eco-innovation.
- Regional or local information points could help to reach SMEs easier.

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5. THE SERVICE DELIVERY SYSTEM

5.1. TARGET GROUPS

Target groups refer to those parties at which innovation agencies aims their initiative, the intended recipients of the eco-innovation support.

Before launching a new eco-innovation support service, the following analysis of target group should be done:

Firstly it should be analysed **how wide is target for eco-innovation support services**, is it national, regional or even narrower target audience. **How many real eco-innovative potential** is available within the companies encompassed by target audience? Furthermore, the question **what business support services do the target SMEs really need** in order to initiate eco-innovation activities should be considered at beginning. Do they need specific, targeted or general (business development or environmental management or any other) support? Sometimes eco-innovation activities will be also undertaken **in the absence of support**. Important question is also about the process of **adoption of new eco-friendly technologies and obstacles** in this process. The **regulatory framework** should also be taken into account, because it may stimulate eco-innovations and reducing of energy consumption processes.

We recommend that prior to design of eco-innovation support service, an analysis of target companies should be performed, and then the future services should be adjusted to this analysis.

Special part of the target group analysis is the consideration of the **potential barriers** for pursuing eco-innovation within target group, both internal and external.

Among **Internal barriers** could be, for example, a traditional mind-set among producers and lack of knowledge on environmental or sustainability issues – they are sometimes unconsciously locked into conventional business models. They could also lack of insufficient reference cases on new models and approaches, in order to have a successful role-model for eco-innovation. An internal barrier could be also a lack of knowledge on new possibilities among management or lack of horizontally connections among different functions in a firm. They could also face, by implementation of eco-innovation, increased development and production cost.

External barriers could be e.g. lack of market-pull forces due to the lack of (smart) regulations, then lack of capital for initial investment often due to the fact that eco-innovative projects are perceived to be too risky. Sometimes it is about difficulty of new

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business models in fitting in the existing systems, or insufficient coordination between „environmental" and „innovation" support programmes, on regional or national level. Lack of consciousness on eco-innovation benefits and importance among the policy makers are considered among the most prominent external barrier by peer-learning group. Additionally, a bureaucracy which complicates the implementation of eco-innovation projects is often also a big obstacle.

Case study: Service delivery system in case of Eco-Energy Efficiency Management Tool (3EMT)

The main target group of the service are small and medium sized enterprises (SMEs), a specific focus are dedicated to manufacturing companies from traditional sectors (e.g. automotive, mechanics, construction, chemicals, food & beverage, etc.), although the 3EMT can be used by all sectors and company sizes.

Currently, the Tool is available in 6 countries in national languages, but the system can be further enlarged in order to involve new countries. Pilot action results show, that an average 5 to 15% savings in costs and energy use can be achieved. Furthermore, the Tool raises companies' awareness on environmental issues and encourage them to operate in more environmentally-friendly way. Eco-Innovation Support Service Points (EISS points) help SMEs in eco-innovation related issues. There are many initiatives and strategies (e.g. Eco-Innovation Action Plan) which encourages adaptation of eco-friendly technologies at European level.

The most important barriers and challenges that SMEs have indicated to face, are shown on the figure below:

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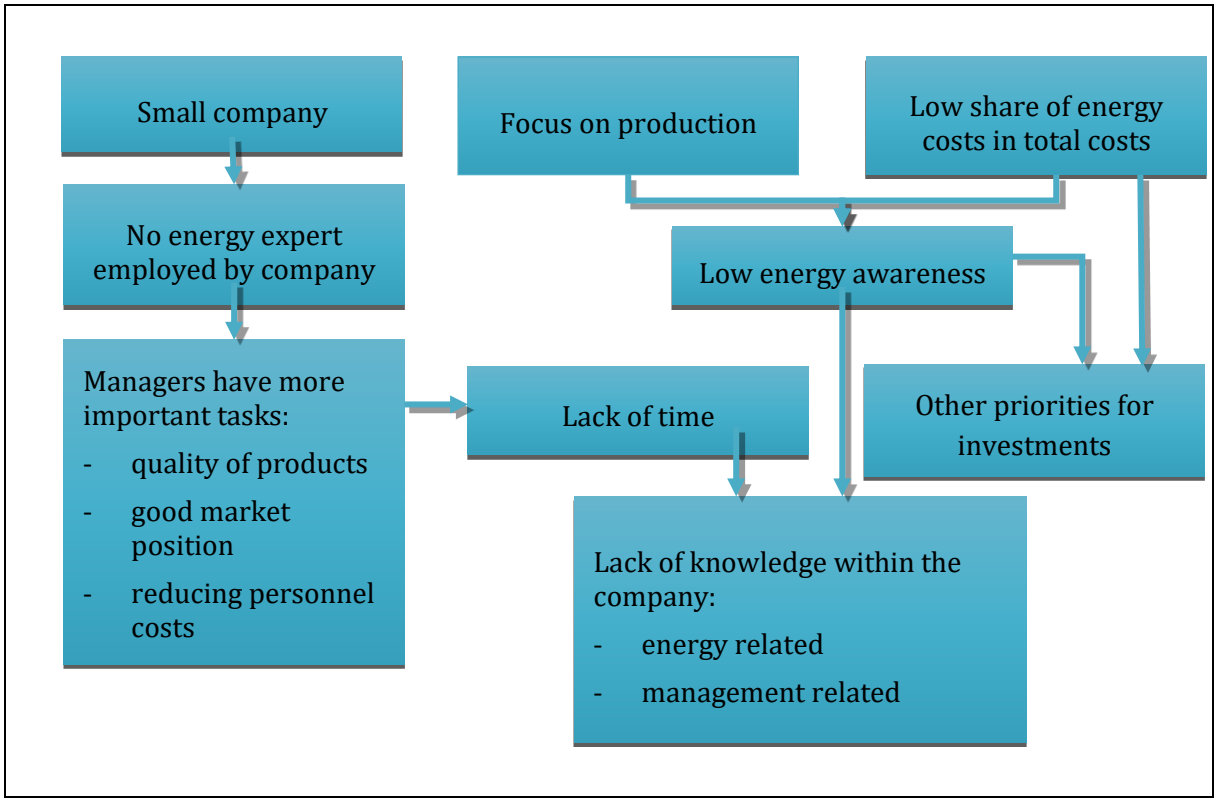

Based on partners' experiences with the eco-innovation support services, the most important target group can be small and medium sized enterprises.

Furthermore, policy makers are very important, indirect target group of the eco-innovation support services. They can develop and/or influence public policies at local, regional, national or EU level. A supporting policy environment is very important in case of eco-innovation issues.

5.2. FRAMEWORK CONDITIONS AND ORGANISATIONS

When considering the second pillar of the DOP, a policy framework has to be considered, with special attention on a regional eco-innovation perspective.

By defining a new eco-innovation support service, first framework condition is an **existing regional/national strategy/policy in eco-innovation**. The elements of this policy framework could be both in innovation strategy framework (probably RIS3) and in environmental strategy framework. Who are the actors in the innovation system should be undoubtedly taken into account (Government, national/regional agency…).

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Important part of the framework condition analysis is also to see **which financial instruments are already available for an eco-innovation support** for the target group. Among many of possible instrument and other existing initiatives, support services and programmes could be, for example:

- Innovation vouchers for startups
- Grants for energy efficiency
- Specific eco-innovation support programmes
- Programmes for R&D and innovation projects
- Tax incentives for private investments
- Business angels interested in eco-innovation
- Advisory services for innovation
- Advisory services for environmental improvements

Existing financial instruments and other initiatives (innovation, environmental or eco-innovation) should be considered as leverage for using of envisaged eco-innovation support service, if possible.

Furthermore, an **institutional framework to initiate and maintain an eco-innovation support service** should be analysed in detail. That includes: locating and finding supporters for the upcoming initiative within the regional innovation system, in public and private sector. The possible cooperation with other stakeholders, especially with thematic clusters, training centres for entrepreneurs, innovation networks and incubators have to be taken into consideration. At least, the stake stakeholders should be prepared for the new eco-innovation initiative. Several additional questions should be reconsidered: who will support the initiative in budget discussions with policy makers (lobbying)? What are identified and potential conflicts of interest and how to handle them? Establishing and maintaining an active network of eco-innovation consultants is a favourable institutional framework. A level of awareness on environmental topics, both among decision makers and potential beneficiaries is also a part of institutional framework. In this sense, presenting success stories from international practice is also something which can be helpful in creating the network of supporters for new eco-innovation initiative. One possibility to make a good analysis of institutional framework is to make risk analysis, and propose activities for risks mitigation.

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Example – Framework conditions for energy efficiency and eco-innovation in Hungary

National and regional policy framework related to eco-innovation:

- Hungarian Energy Strategy 2030: the document sets sectoral targets for 2030. According to the Strategy, the most efficiency ways of maintaining or even reducing the level of energy consumption are the minimisation of losses and the non-consumption of energy.
- National Energy Efficiency Action Plans: provide comprehensive benchmarking on energy efficiency, including measurable objectives and indicators to monitor progress, taking into account the relative starting positions and national circumstances. An annual review mechanism should feed into the Europe 2020 objective for energy efficiency.
- National Environmental Technology Innovation Strategy 2011-2020: explores the fundamental linkages between innovation and green economy and provides a framework for the implementation of EU2020 Strategy.

Financial instruments:

Main funding sources of energy efficiency and eco-innovation measures are the following operational programmes:

- Economic Development and Innovation Operational Programme (GINOP)
- Competitive Central Hungary Operational Programme (VEKOP)
- Rural Development Operational Programme (VP)
- Environment and Energy Efficiency Operational Programme (KEHOP)

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6. DESIGN PROCESS

First step of the delivery process of the new eco-innovation support initiative is designing. The design should be guided by the **rationale and goals of a new eco-innovation support service**, i.e. to increase environmental awareness among local SME's, to explore competitiveness potential of eco-innovation. Wider goals could include: providing environmental benefits to the region or overcoming a market failure in reduction of the environmental impact of economic growth. Some more specific goals of the eco-innovation initiative could be e.g. to reduce the failure rate of possible existing eco innovation financing programme, or providing financial benefits to the SME's by reducing energy costs. Some broader, long term objectives could include: providing the policy advice for starting eco-innovation support initiative, providing examples input to policy makers for design the programs for eco- innovation. Some of the good example could be the value-cycle calculation.

A part of the initiative design is deciding what **roles the agency has in delivering the eco-innovation support services**. The agency may be designer of the content of the services or only an implementing body. Also, the agency can be the active provider of the advisory services or merely the broker between SME's and consultants, actually a provider of the platform offered for the services. Would the agency be the main promoter of the eco-innovation support services, would it be providing a platform?

Thirdly, it should be designed in detail **what type of business support service** is the most appropriate for eco-innovation. In that segment it should be decided, for instance, should it be provided as free advisory services for specific eco-innovation related topic? Many possibilities of specific eco-innovation advisory services are possible:

- Consultancy for business model innovation for increasing resource and energy efficiency
- Advisory on market opportunities for "green" products
- Training for start-up entrepreneurs in clean-tech, energy efficiency or business model innovation
- Networking support for green entrepreneurs in specific region
- Promotion of green technical and business skills
- Education for demonstration and validation of environmental technologies for sales and export
- Accreditation and environmental standards support, eco-certification,
- Energy consumption optimization support, energy audit
- Environmental regulation advisory

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- General internationalization support services in clean-tech or environmental technology sectors
- IPR support services
- Project preparation support for various grant schemes
- Technology transfer.

6.1. ACTIVATION STAGE

First stage of delivery is **activation** of the new support service. It should be decided how to activate a new eco-innovation support service after design is finished. The plan for launching the initiative and reaching the main target group should be developed, that means – name, marketing and communication plan (website, events, advertising…), outreach to the targeted SME's and using of network of supporters.

6.2. IDENTIFICATION STAGE AND ACTUAL DELIVERY WITHIN THE AGENCY

Second stage of delivery is the identification stage; **the needs of SMEs are identified and transformed into a concrete action.**

Innovation agencies should decide how the **actual delivery within the agency** should look like? The agency should see what necessary internal expertise in providing business services exists or is needed, should it establish or use existing network of specific external experts. Also, important is to establish an internal organization which is necessary for successful delivery.

When deciding on issues of how to prepare service provision and how to **define target groups**, there should be decided - how is defined the range of potential beneficiaries? What types of companies will be the potential beneficiary of the service? It should be decided if the selection criteria of the services beneficiaries will be exclusive or non-exclusive, wide and open. The selection criteria should for sure take into account the state aid rules for beneficiaries, but also their willingness to follow up after the delivery of services (interviews, report, data access…) in order to measure the impact. The criteria should on large depends on the type of services (general v. tailored)

Decision on how to **define the selection criteria** for supporting projects should also be decided on. Generally, innovation objective of the eco-innovation should fit into the definition: "potentially contributing to sustainable development". But detailed selection criteria should include following more specific characteristics of the eco-innovation

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activity, e.g. reduced materials consumption, total energy savings, reduced emissions, waste minimisation during the production process, increased use of renewable resources both in production materials and energy, enhanced re-use of materials through recycling, increased lifetime of products and processes delivered. There may be also social criteria, i.e. workers' health and safety, awareness raising, social benefits included in the selection criteria for eco-innovation support services

Within the delivery of the eco-innovation support services also should be taken into account the **contracting issues**, which should take into account state aid issues, reporting obligations for monitoring and non-disclosure and IPR issues of the companies. There should be considered the signing of the non-disclosure agreements with beneficiaries, but also the building of the trust, so the agency can guarantee the confidentiality of company data.

6.3. ECO-INNOVATION SERVICE CONTENT AND NECESSARY RESOURCES

Third stage of delivery is specifying which the contents of eco-innovation support services are: e.g. what activities the services consist of. These can be standing eco-points, or tailored advisory in specific consultant-days, tailored IT application service, education (workshops, seminars…), specific trainings, free platform (space, IT database, virtual network….). One of the main decisions is to decide between the options: should the eco-innovation support service provide only basic services or should be focused to more tailored services.

Fourth stage of process is to decide what the **size of the necessary budget and resources are,** to establish the initiative. It depends on the structure of the services, but it could contain some of the following: external consultancy (man-days), IT system platform, fully dedicated staff (salaries), extra space (for offices or classrooms or similar), some travel and other operating costs and marketing costs.

6.4. FOLLOW-UP STAGE: MONITORING, EVALUATION AND IMPACT ANALYSIS

Fourth part of the delivery process of the eco-innovation support services is the setting up the best and functional monitoring **and evaluation arrangement**. The collecting of data for efficient ex-post impact analysis should be ensured and they should be presented in an understandable way.

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Within the M&E framework, the **right outcomes** of the initiative should be chosen. Outcomes could be more general as e.g. increased awareness of eco-innovation opportunities, increased eco-innovation production, export, revenues or increased CO2 savings. But they could also include more specific indicators, e.g. increased energy-efficiency in consumption, number of new products, number of energy managers employed, number of energy Efficiency tools implemented, number of certification for energy efficiency (EMAS, ISO:50001 certification increased), number of new "bio" or "green" labelled products.

Monitoring report template should be also developed for the beneficiaries. The best monitoring arrangement should be decided depending on the type of the service offered. One should find a way of obliging the client companies to report back to the agency, and it should include either periodical contact / site visit, or online monitoring of the indicators, or permission to showcase best practices for promotions, etc.

A functional impact-analysis framework of the whole programme (support service) should also possibly include periodical questionnaires about quality of provided services, external ex-post evaluation by experts or even randomized control trial.

6.5. THE GREEK CASE – PILOT ACTION

As previously mentioned, CEEM project has been identified as a good practice, prior to the initiation of the project and as so, it was agreed by the 3 partners that it would be of added value to build on the previous experience and transfer the 3EMT Tool to Greece. This **type of business support service** through the technology transfer, also gave answers to an unsolved need as there was not any such available tool before, providing the necessary **rationale and goals of this new eco-innovation support service.**

KEPA had the **role** of translating and transferring the 3EMT Tool, while after these initial stages, the tool became available to more than 30 SMEs in order for them to use it.

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ACTIVATION STAGE

During the pilot phase of the EISS project, many channels of communication were used for the activation of the Greek SMEs towards the tool, namely:

1) Targeted invitation for participation to previously funded SMEs
2) Publication in KEPA's website
3) Publication in regional-level websites
4) Publication in country-level websites, dedicated to environmental issues
5) Facebook, LinkedIn

KEPA reported that it was quite difficult to convince Greek SMEs to participate and make use of the tool. This is mainly due to the fact of the current situation in the country. It was reported that even SMEs that recognized the tool as a useful one to report their energy efficiency, they were not very willing to participate as they would not have the needed funds to make changes in their premises and/or operations. The majority of participants were either well-established SMEs with enough capacity to make some changes according to the outputs of the self-assessment report, or newly created SMEs with young entrepreneurs who seemed not to be so much "psychologically affected" by the economic situation of the country.

IDENTIFICATION STAGE AND ACTUAL DELIVERY WITHIN THE AGENCY

As beforementioned, the second stage of delivery is the identification stage; **the needs of SMEs are identified and transformed into a concrete action.** In the case of the Greek pilot action, the experience of KEPA, its concrete management structure and the expertise of its staff in different sectors, allowed the use of internal sources for the provision of the service. The **target group** of the action was predefined, both from the nature of the organisations implementing it and the requirements of the tool itself. These elements were taken into consideration when drafting the project and designing the activities, in order to be in line with the local SME ecosystem's needs. The main target group of the service were small and medium sized enterprises (SMEs), with specific focus on manufacturing companies from traditional sectors, even though the tool attracted also many companies of the 3rd sector, which is the most developed in Greece nowadays. Besides, **the selection criteria** were quite open, targeting at attracting SMEs from the

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traditional sectors. During the procedure of the implementation of the pilot and afterwards that the tool will remain at the disposal of the Greek SMEs, all information given are disclosed and confidential.

ECO-INNOVATION SERVICE CONTENT AND NECESSARY RESOURCES

The **content of the service** was the provision of the tool in Greek, combined with the advices to the Greek SMEs regarding its use, its added value on designing interventions and in financing opportunities to overcome lack-of-resources barriers.

The necessary budget was covered by the project for the implementation period of the project, but due to its significance for the Greek SMEs; KEPA is dedicated to continue offering the services –pro bono–, also after its end.

FOLLOW-UP STAGE: MONITORING, EVALUATION AND IMPACT ANALYSIS

As during the implementation of the project there was not sufficient time for both delivering the 3EMT Tool in Greek, attracting SMEs and monitoring how many of them they have planned to make changes towards "greening" their profile, KEPA will monitor the impact of the action afterwards. The important facts available till the end date of the pilot are that the majority of the SMEs stated in the questionnaires **included in the tool that they were** very satisfied with the structure of the tool, the understanding of the tool and the easiness to access to the necessary figures to complete it.

Another good sign regarding the effect of the pilot in the local SME ecosystem is that the days after the end of the project activities, there is a continuing subscription of SMEs in the 3EMT Tool, which indicates the significance of it.

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7. CONCLUSIONS-SUGGESTIONS

Eco-innovation is a hot issue in EU level, both in policy level, consumer awareness and way-of-making choices in products and services and entrepreneurial level. The recent years we see that SMEs, either for efficiency and sustainability or for corporate social responsibility (CSR) reasons, they have been more eager to "turn page" and become more eco-friendly and eco-innovative. SMEs seem to face difficulties in understanding their connection to EU, national and regional level policies despite the fact that they understand that the issue affects their operation.

Through the implementation of the EISS project and the tested pilot in its framework, great lessons were learned on the above and the significance of the provision of a self-assessment tool as the proposed 3EMT Tool has been more than proven. The specific tool is a useful weapon in two ways:

- First of all, it both during the EISS project pilot application in Greece and the previous application of it in Italy, Slovenia, Austria, Hungary and Czech Republic (while also widely available in English), SMEs reported that the tool is of great importance as it shows them their position (benchmark) regarding energy efficiency in comparison to local and EU level competitors and in comparison with the whole market.
- Secondly, the tool (and any similar initiative) could be of high added value to similar innovation agencies, public authorities that design support programmes and policymakers. The tool can provide stats and data regarding the need of designing a support action / programme, while also provides a well-established reasoning for the design of long-term strategies regarding the issue.

We suggest other innovation agencies to adopt the action, as its transferability has been also proven, through its easy and low-cost replication in another country.

EISS partners have transferred knowledge and different points of view towards a common interest issue, thanks to the Twinning Advanced (Twinning+) Methodology. As though, they are keen on investing in their partnership and further build on the outcomes with more peer-learning activities, as they have strengthened all partners involved, proving the methodology's value in collaborative work and exchange of experience between organisations that share expertise in different ways.

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8. LIST OF SOURCES, FIGURES AND USEFUL LINKS

8.1. SOURCES

1. Official Journal of the European Union, DECISION No 1639/2006/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 October 2006 establishing a Competitiveness and Innovation Framework Programme, 2006
2. Eco-Innovation Observatory
3. COMMUNICATION FROM THE COMMISSION, EUROPE 2020 - A European strategy for smart, sustainable and inclusive growth, 2010
4. Energy Union and Climate Priority
5. COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS, Innovation for a sustainable Future - The Eco-innovation Action Plan (Eco-AP), 2011
6. COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS, Closing the loop - An EU action plan for the Circular Economy, 2015
7. Peer learning of innovation agencies – Participant Portal, EC
8. TWINNING ADVANCED (Twinning+), Executive Agency for SMEs
9. OECD/European Commission/Nordic Innovation Joint Workshop, THE FUTURE OF ECO-INNOVATION: The Role of Business Models in Green Transformation, OECD Background Paper, 2012
10. Network for Eco-Innovation Investment
11. EU Environmental Technology Verification
12. Call for proposals for LIFE Action Grants
13. Call to support innovation in the field of energy, Slovenia
14. BADEN-WÜRTTENBERG: ERDF PROGRAMME "Innovation und Energiewende"

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8.2. FIGURES

1. Source: Regional Innovation Scoreboard 2016, Regional profiles - Greece
2. Source: Source: Regional Innovation Scoreboard 2016, Regional profiles – Italy
3. Source: Regional Innovation Scoreboard 2016, Regional profiles - Hungary

8.3. USEFUL EU LINKS

Eco-Innovation Action Plan - EcoAP
http://ec.europa.eu/environment/ecoap/index_en.htm
Eco-Innovation Observatory
http://www.eco-innovation.eu/
Horizon 2020
http://ec.europa.eu/programmes/horizon2020/
Participant Portal
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/index.html
Life+
http://ec.europa.eu/environment/life/
COSME
http://ec.europa.eu/enterprise/initiatives/cosme/index_en.htm
European Structural and Investments Funds
http://ec.europa.eu/regional_policy/thefunds/index_en.cfm
EIB-EIF
http://www.eib.org/products/innovfin/index.htm
http://www.eif.org