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***Mediterranean organization structure and strengthening  
of innovation capacities for sustainable development  
no. 1G-MED08-289***

***Strategic and Operational Plan  
In Coastal - Karst Region***

***Med Programme***

***Priority-Measure 1-2***

***Axe 1: Strengthening innovation capacities***

***Objective 1.2: Strengthening strategic cooperation between economic development  
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**Part 1:  
IDENTIFICATION SHEET**

## 1. IDENTIFICATION SHEET

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Abstract (for dissemination)	The study deals with the strategic and operational plan in Coastal-Karst Region of Slovenia. The Strategic and operational plans aims are listed. The synthesis of the social, economic, productive, innovation situation is defined. Main stakeholders, tools and difficulties for innovation and eco-innovation are listed. The analysis of the coherence among intervention needs and possible strategic lines and operational objectives are listed. The good practices and pilot projects are described.



## **Part 2: EXECUTIVE SUMMARY**

## 2. EXECUTIVE SUMMARY

“Eco-Innovation” is characterized by growing market demand despite the current economic crisis. Eco-Innovation offers therefore unique opportunities to accelerating economic growth by creating considerable resource-input costs for users (both companies, public organizations, private households) without negatively affecting outputs.

This sector represents therefore a strategic priority to accelerate company growth and business creation in the Coastal-Karst Region.

However, because of market failures, which are particularly important in the region during this difficult economic period, a number of coordinated instruments and measures must be considered, starting from their implementation on a Pilot basis, in order to reach self sustainable entrepreneurial growth in this sector.

This Strategic and Operational plan for the Coastal-Karst region covers therefore objectives, methodology and key concepts to accelerate growth under the present circumstances. The Strategy is aimed at launching **Demonstrator - Flagship Projects** that implement the following methodological approaches: **The “Lead Users” Approach<sup>1</sup>** has been adopted for the purpose of identifying strong market opportunities **that are available in the region and are thus very close to SMEs**. Today, public procurement of goods and services amounts to a considerable part (estimated to be between 15%-20%) of final consumption. Preference to eco-innovative goods, infrastructures, and services, could give the manufacturing sector a powerful incentive to increase resource productivity.

**The methodology offers a structured roadmap** at identifying and bringing to broader markets new products or services related to Eco-Innovation. Lead users in the Coastal-Karst region include larger firms and organizations (including the Port of Koper, public services such as Municipal services, hospitals, etc.) that are experiencing needs that are ahead of the current market. **Open innovation** is a paradigm that assumes that SMEs nowadays cannot afford to rely entirely on their own competencies, but should instead collaborate with other companies.

On the basis of the context and territory analysis which has been carried out based on the participative process, the following sectors / candidates for eco-innovation have been identified as priorities for eco-innovation in the Coastal-Karst region:

1. ECO-INNOVATION FOR MARITIME LOGISTICS AND TRANSPORT
2. ICT BASED ECO-INNOVATION
3. “INNOVATIVE BUILDING” ECO-INNOVATION FOR HOUSING, BUILDING AND CONSTRUCTION
4. TECHNOLOGY INCUBATOR SUPPORTING ECO-INNOVATION
5. GUARANTEE SCHEME SUPPORTING ECO-INNOVATION

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<sup>1</sup> Lead User Project Handbook - A practical guide for lead user project teams - Joan Churchill, Eric von Hippel, Mary Sonnack - Creative Commons 2009. Downloadable <http://mit.edu/evhippel/www/index.html>

All projects are aimed to activate both demand and supply of eco-innovative products and services. To implement them, the role of the RDC Koper is to highlight the opportunities for business, especially as related to Lead Users, to contribute at organizing collaborative (“Open Innovation”) local supply through the aggregation of complementary competencies (SMEs, University, contractors, artisans and skilled human resources) and in terms of training, qualification, technological transfer.

All projects leverage upon the specific competence of RDC Koper to provide financial means through its guarantee scheme. By targeting the scheme to SME within projects that activate demand, RDC Koper will gain important competencies at innovation financing in general. Accrued competencies may well lead, on their own, to increase available financial resources (e.g. in collaboration with the other Slovenian guarantee-scheme Agencies), and to greater development impact.

Due to the limited amount of funding available for RDC Koper under the MEDOSSIC project budget for implementation of Pilot Actions, all Pilot actions will be implemented within Projects already benefitting from available consistent funding, i.e.:

**PILOT ACTION 4: TECHNOLOGY INCUBATOR SUPPORTING ECO-INNOVATION**

**PILOT ACTION 5: GUARANTEE SCHEME SUPPORTING ECO-INNOVATION**

*Together, the above multiannual projects have a total investment target of up to 5.3 M€, thereby generating a potentially very significant impact on the regional entrepreneurial development strategy.*

*The MEDOSSIC Project has enabled to outline the entrepreneurial relevance and potential of Eco-Innovation, and to include it as a main priority for the overall strategy of both the Regional Technology Incubator of Slovenian Istra (RTI SI) and the Credit Guarantee Scheme for Innovative Companies. Vice-versa, the identification of regional development opportunities related to Eco-Innovation offers a strategic framework accelerating the implementation of both Projects.*

The SOP sets out goals that are expressed into measurable physical terms, so that developments can be managed. The end result being of creating a network of innovative SMEs in the Region which are competent, which operate according to highest environmental and productivity standards and which are able to seize the opportunities arising from renewable resources and sustainable development.

As new technical and societal developments tend to require several years for taking hold, eco-innovation must commence immediately. A single region cannot bring about the needed changes, but - taken together - the MEDOSSIC Partners - with their experience, economic power, and technical skills have a realistic chance to accelerate growth and a more promising future.

**Part 3:**  
**METHODOLOGY AND KEY CONCEPTS FOR STRATEGIC  
AND OPERATIONAL PLAN**

### 3. METHODOLOGY AND KEY CONCEPTS FOR STRATEGIC AND OPERATIONAL PLAN

#### 3.1 STRATEGIC AND OPERATIONAL PLAN'S AIMS

The Strategic and Operational Plan (SOP) is predisposed by each partner of MEDOSSIC project in the field of WC4 - Development of Strategic and Operational Plans for establishing pilot Structures in the regions.

The finality of the SOP, in brief, is to define the strategic lines and the operational modalities for establishing a reception office for potential innovators, entrepreneurs, and SMEs who wants to operate in the framework of innovation, in order to stimulate the eco-innovative process.

#### 3.2 METHODOLOGICAL APPROACH

The present Strategic and Operational Plan (SOP) has been preceded by a range of activities resulting in the realization of analysis, evaluations, reports and documents preparatory to the SOP itself. In particular, within phase WC3 of MEDOSSIC project have been predisposed the Existing Situation Analysis, reports on the identified national Good Practices and Investigational Institutional Settings, each for every partner territory of the project, as well as the Benchmarking, as synthesis document of analyses ref. WC3, and the Investigational Institutional Settings (WC4).

The Strategic and Operational Plan (SOP) is articulated as follows:

➔ **General framework of the existing situation:** Chapter 4 “Context and territory analysis”.

After the introductory part, there is the examination of the general framework of the existing situation, through an analysis of the context and of the territory, with an introductory part related to *elements of greatest relief in terms of social, economic and productive*, but also environmental and technological situation, underlined both in synthetic descriptive way, and through the SWOT analysis, structured in order to point out the main requirements for the area of reference.

The “Lead Users” Approach<sup>2</sup> has been adopted for the purpose of identifying strong market opportunities and developing concepts for new products or services related to Eco-Innovation. Within the regional development framework and purpose of MEDOSSIC, Lead users are firms and organizations (including public services such as Municipal services, hospitals, etc.) that are experiencing needs that are ahead of the current market(s)

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<sup>2</sup> Lead User Project Handbook - A practical guide for lead user project teams - Joan Churchill, Eric von Hippel, Mary Sonnack - Creative Commons 2009. Downloadable <http://mit.edu/evhippel/www/index.html>

offering. The regional entrepreneurial development process that is intended to be activated through MEDOSSIC can be summarized in the following steps:

- a) **Identify/discover innovative products and services** opportunities by interviewing users / suppliers and assess competitive offerings to identify **Partners** (e.g. existing suppliers, financial partners) and R&D incentives.
- b) **design and realize prototype products/systems/services through collaboration among various SMEs and stakeholders** . The new product or service prototypes should both: a) satisfy their leading edge needs and b) will be commercially attractive to firms.
- c) **validate** functionalities, and the existence of wider market opportunities, define and encourage implementation of a collaborative business model aimed at exploiting the wider market opportunities.
- d) **Launch and implement new company vehicles** to commercially exploit the new products/services on both the local and wider market(s).

Lead user research is done in the initial phases with direct input from "lead users."

→ **Participative process:** Chapter 5 "The participative process in the territorial context". The aim of the participative process is to accelerate the identification of new products and services related to Eco-Innovation and to encourage the broader long-term environmental sustainability of economic growth by pursuing greater efficiency and better use of alternative energy sources. The "integrated" involvement of various stakeholders offers the possibility to launch a "virtuous process" to improve the overall quality of life and attractiveness of the Coastal Karst region.

From the methodological point of view, the following approaches have been identified as particularly useful in the local context:

- On the *Demand Side*, develop the Lead Users approach (namely with reference to the Port of Koper, the Municipality, Larger Firms, acting as Lead Users)
- On the *Demand Side*, explore opportunities in the B&C (Building and Construction) sector
- On the *Supply Side*, explore the applications of ICT to eco-Innovation and of *the concepts of Open Innovation*<sup>3</sup> and of *Collaborative Entrepreneurship*<sup>4</sup>

The above integrated concept appears to be in line with the EC guideline to "**Promote innovation poles and knowledge-driven and industrial clusters**"<sup>5</sup>.

The modality with, in the different territorial partners of project contexts has been applied the participative process and how the different subjects participated in the

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<sup>3</sup> Henry Chesbrough - Open Business Models: How to Thrive in the New Innovation Landscape (2006)

<sup>4</sup> Raymond E. Miles, Grant Miles, and Charles Snow - Collaborative Entrepreneurship: How Communities of Networked Firms Use Continuous Innovation to Create Economic Wealth by (2005)

<sup>5</sup> Assessing Community innovation policies in the period 2005-2009 - SEC(2009) 1194 final

process, is described, with some anticipation on the modalities of collaboration which will be adopted for the definition of the most operational aspects of the plan.

→ **Integrated approach:** Several Project Opportunities have been identified during the participative process. Of these, only very few can be implemented under the MEDOSSIC. It has been therefore necessary to adopt an Integrated approach, whereby entrepreneurial development opportunities related to Eco-Innovation Project become priority Themes within a general strategy promoting SME and entrepreneurial innovation within the Coastal - Karst region. There are several benefits stemming from such “integrated approach”, and namely: synergies among different Pilot Actions, additionality and leverage of resources, competencies and actions, involvement of complementary stakeholders, etc. The end result is a stronger impact on the improvement of entrepreneurial dynamics, innovation and the overall quality of life of the Coastal-Karst region.

→ **SOP’s strategy and objectives: Chapter 6 “Strategic Lines”**

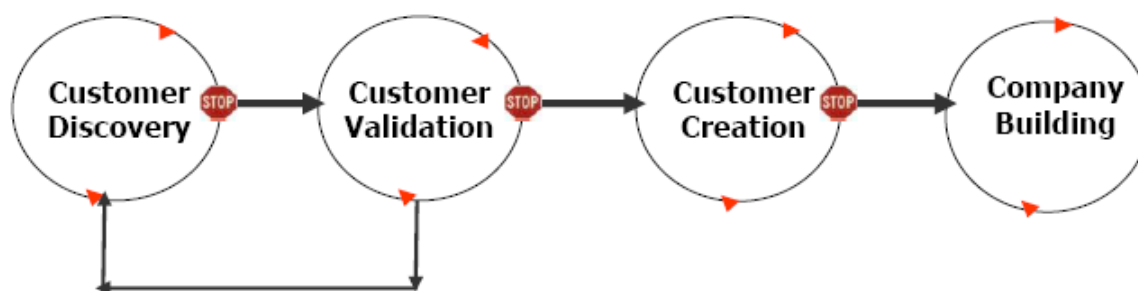
The results and the emerged needs and opportunities have been presented and discussed with the involvement of social and economic actors of the territory in order to stimulate the definition of a common vision and shared objectives in order to pursue the development of (eco)-innovation of the territory. Therefore, the section describes the global objective, the strategic lines and the operational objectives in accordance with the emerged needs and the existing resources.

→ **Operational Plan: Chapter 7 “Operational Plan” and Chapter 8 “Good practices”**

SOP ends with the definition of the operational plan for *the implementation of pilot projects*: it contains the description of *what, why, how and when* the partners will realize the pilot projects. The definition of single operational level is tightly related with the evaluation and monitoring indicators of the achieved results and with the selection of possible good practices that can be helpful for the implementation of the pilot projects themselves.

→ **The Customer Development Model (CDM):** CDM is the methodological approach suggested that could lead to the establishment of a “*Proof Of Concept Service*” to be established as a support activity of RDC-KP and/or of the new RTI SI. The Customer Development Model starts with the premise that companies fail due to a lack of customers - and that learning and discovering the initial customers and markets requires a separate and distinct process from product development. Before any of the traditional functions of selling and marketing can happen, the company has to prove that a market could exist, verify that someone would pay real money for the solutions the company envisions, and then go out and create the market. These testing, learning, and discovery activities are at the heart of what makes a startup attractive to investors.

The Customer Development Process<sup>9</sup>



→ **Leverage Private Investment** : by addressing both the Demand and Supply Side of Eco-Innovation - the SOP will support companies and entrepreneurship in entirely new ways. More, important, the SOP is designed to **leverage considerable financial resources from the private sector**. In practical terms, the final goal is to lead to an increase in investment, consumption of locally value added products and services related to Eco-Innovation.

### 3.3. DEFINITIONS OF KEY CONCEPTS

The SOP is based on the following **key concepts**:

- **Innovation**: an innovation is the implementation of a new or significantly improved product (good or service) or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relation. The minimum requirement for an innovation is that the product, process, marketing method or organizational method must be new (or significantly) to the firm.
- **Invention**: an important distinction is normally made between invention and innovation. Invention is the first occurrence of an idea for a new product or process, while innovation is the first attempt to carry it out into practice (Fagerberg 2004).
- **(Eco)innovation**. Definition: The creation of novel and competitively priced goods, processes, systems, services and procedures designed to satisfy human needs and provide a better quality of life for everyone with a lifecycle minimal use of natural resources (materials including energy and surface area) per unit output, and a minimal release of toxic substances” (The systematic panel on eco-innovation) 2008<sup>6</sup>.
- It should be highlighted that Eco-innovation is neither sector nor technology specific, limiting eco-innovation to 'environmental goods and services' is not a road for policy to continue to follow.
- **Lead User Definition**: Lead users are users of a product that currently experience needs still unknown to the public and who also benefit greatly if they obtain a solution to these needs. i.e. “Lead Users” are people or organizations that are attempting to solve a particularly extreme or demanding version of a problem. (Von Hippel 1986).
- **Lead User Method Definition**: Lead User Method is a market research approach that may be used by companies seeking to develop breakthrough products. The methodology is based upon developing a prototype service and product, validating it and then taking advantage of the references thus acquired to go on broad markets. (see customer development process, below).

<sup>6</sup> Sectoral Innovation Watch in Europe - Eco Innovation Final Report, Europe - Innova 2008

- **Open Innovation.** Definition: Open innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology” (Chesborough, 2003). The central idea behind open innovation is that in a world of widely distributed knowledge, companies cannot afford to rely entirely on their own research, but should instead collaborate with, and buy or license processes or inventions (i.e. patents) from other companies

Furthermore, when exploring eco-innovation, the following classification is provided:

#### **ENVIRONMENTAL TECHNOLOGIES:**

- pollution control technologies including waste water treatment technologies
- cleaning technologies to treat the pollution released into the environment;
- cleaner process technologies: less polluting new manufacturing processes and/or more resource efficient than relevant alternatives;
- waste management equipment;
- environmental monitoring and instrumentation;
- green energy technologies;
- waste supply;
- noise and vibration control.

#### **ORGANIZATIONAL INNOVATION FOR THE ENVIRONMENT:**

- pollution prevention schemes;
- environmental management and auditing systems: formal systems of environmental management involving measurement, reporting and responsibilities for dealing with issues of material use, energy, water and waste;
- chain management: cooperation among companies so as to close material loops and to avoid environmental damages across the value chain (from cradle to grave).

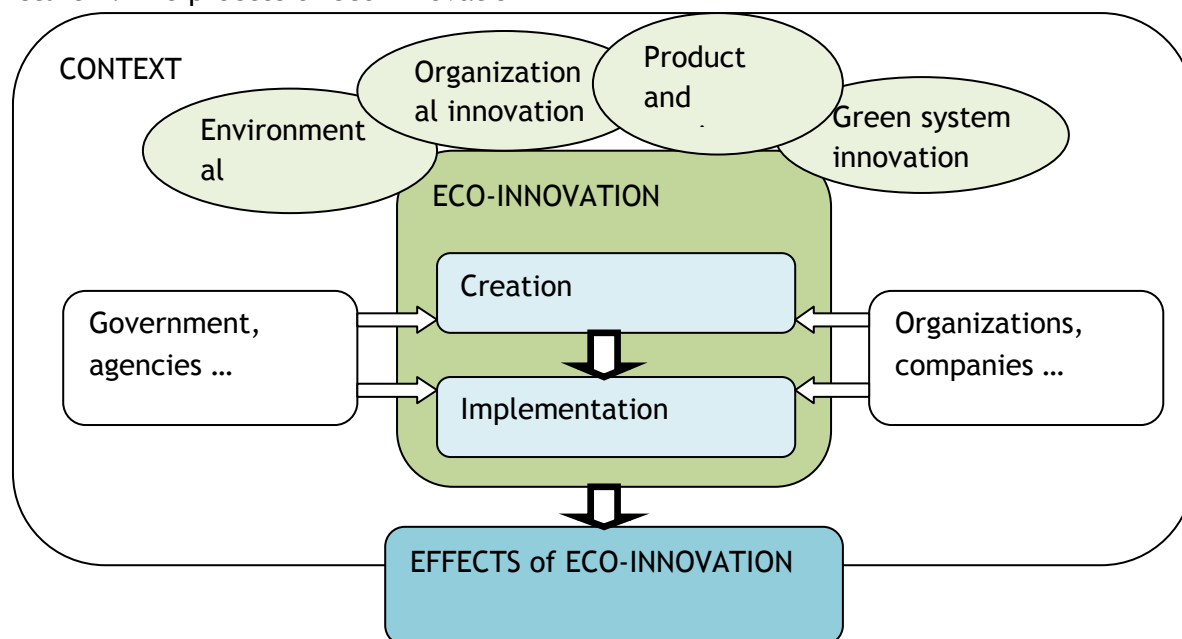
#### **PRODUCT AND SERVICE INNOVATION OFFERING ENVIRONMENTAL BENEFITS:**

- new or environmentally improved products (goods) including eco-houses and buildings;
- green financial products (such as eco-lease or climate mortgages);
- environmental services: solid and hazardous waste management, water and waste water management, environmental consulting, testing and engineering, other testing and analytical services;
- less polluting and less resource intensive services (car sharing is an example).

#### **GREEN SYSTEM INNOVATIONS:**

- alternative systems of production and consumption which are more environmentally friendly than existing systems (biological agriculture and renewable-based energy systems are examples).

Picture 1: The process of eco-innovation



- **Stakeholders** where stakeholders are people, corporate bodies and organizations deriving from the public sector, companies and private sector, from the civil society that, through their resources, competences, role or actions, influence or are influenced by the process of eco-innovation
- **Partnership and participative procedure (or participated planning):** the tool of the involvement of the stakeholders and the creation of partnership of various nature is based on the conviction that development is not a subject of governments and administrations but of the community, operators and civil society in general, and on the principle that, governments and administrations must play the role of facilitators and animators in the development process, as well as of agree plans and collaborate with the territory. Therefore, the participative procedure foresees an involvement of all the actors that can directly or indirectly be involved in eco-innovation, according to a *bottom up approach* in order to share the priorities of intervention and define the lines of action with all the decision makers, actors as well as last recipients of impacts of eco-innovation, thus stakeholders.
- **SWOT analysis.** It is a tool of strategic planning used to evaluate the points of *strength* (Strengths), *weakness* (Weaknesses), the opportunities (Opportunities) and threats (Threats) of a project or “in an enterprise or in every other situation where an organization or an individual must take a decision to reach an objective”. The finality of the SWOT analysis is therefore to identify existing points of strength and weakness , opportunities and threats in the territory and sector context or in key phenomena/contexts, in order to synthetically and clearly analyze and individuate the initial situation.

## **Part 4: CONTEXT AND TERRITORY ANALYSIS**

## 4. CONTEXT AND TERRITORY ANALYSIS

### 4.1 SYNTHESIS OF THE SOCIAL, ECONOMIC, PRODUCTIVE, ENVIRONMENTAL AND TECHNOLOGY & INNOVATION SITUATION

The Coastal Karst Region area is 1.044 sqkm. The population is 107.000, with a rate of growth which is the highest in Slovenia. Regional GDP is 1.600 Mio Eur (5 % of national GDP). 80% of the population and 90% of the region's jobs are concentrated in the narrow coastal belt. 29,8 % of aged 15 and over have a Upper secondary technical or general education.

**Tourism.** Natural features enable the development of tourism, transport and special agricultural crops. The share of gross value added in hotels and restaurants, spa and tourism is higher than in other regions. The region boasts 25% of all tourist overnights in the country; almost a half by domestic tourists. As regards foreign tourists, Italians, Austrians and Germans predominate. Transports Around three quarters of gross value added are generated by services. 16% of gross value added was created by transport, with the Port of Koper having the highest share. Agriculture is not a significant activity.

**Entrepreneurship.** The Coastal-Karst Region has high entrepreneurial culture (1 enterprise per 15 residents); The share of innovative companies among active enterprises is 30 %, well above the national average. Companies also fund R&D with own sources (73,6%, Slovenia: 58,3%).

**Building and construction (B&C) activities** are intensive there are 8 dwellings per 1,000 population, mainly new constructions.

**Knowledge Economy and Eco-Innovation.** Slovenian innovation performance is just below the EU27 average but the rate of improvement is above average, particularly in the area of increase in private R&D investment. A key challenge of the Slovenian Innovation System is the low rate of commercialization of research (Slovenia ranks 21st in the EU25). The University of Primorska is an important asset to help the region face future challenges of global competitiveness. The UP operates a technology transfer office and one incubator. However, not enough has been done to support the restructuring of the economy into knowledge-intensive sectors.

**Reference (Eco)innovaton Policies and Initiatives.** The (National) Slovenian Eco-Fund encourages the development of environmental protection by providing loans or guarantees for environmental investments and other forms of assistance. The Fund provides loans for eco-investments made by both private citizens and entrepreneurs.

**Investment in Innovative SMEs.** A number of Risk Capital funds are going to be launched at the national level in order to accelerate the growth of high potential companies. The

funds (typical size 10MEur) will be co-financed by private investors (50%), (eco)innovation will be a main investment theme.

**The Regional Development Plan.** The current RDP of South Primorska sets the following two priorities: Knowledge and technology for the development of the economy, and Infrastructure for sustainable development. Both priorities have potential for ecoinnovative interventions. The RDP promotes the integration of development centres, experts, development agencies, investors and banks in close operation with universities. Structural funds support investments in innovative equipment and counselling for the improvement of competitiveness and innovation of economy on the regional level.

The region is preparing to launch educational programmes, a technology incubator (RTI SI) and projects fostering collaboration among companies, users, educational institutions and trade associations (Chamber of Commerce and Industry of Slovenia, Chamber of Craft and Small Business of Slovenia) and the RDC Koper - Regional Development Agency. IN PRIME (Innovation breakthrough of the Primorska region), started in 2002, is considered a national best practice.

**Regional Innovation and Entrepreneurship Support Infrastructure.** Public funding has been set aside to set up a »Regional technology incubator of Slovenian Istria« (RTI SI). The project is managed by the RDC Koper. The building would be located in the business zone Srmin, and is planned to host both innovative firmas and a business incubator. Eco-Innovation has been selected as a main theme for the RTI SI. RDC Koper also operates, since several years a “SME guarantee scheme” providing credit guarantees to investments made existing and new entrepreneurs. Guarantees are linked to a Guarantee Fund (1.5M€), which has been set up and which is annually replenished with the contributions of the Municipalities Koper, Izola, Piran, Sežana, Hrpelje-Kozina, Ilirska Bistrica. Guarantees are accepted by local banks, first of all by Banka Koper.

**Eco-Innovation investments by Municipalities.** Waste management is a major area of concern for the coastal Municipalities which goal is to reach a 45% share of separate collection. The question of the final destination of the remaining waste has to be resolved. Innovative technologies for thermal treatment, Waste to Energy and BioGas are being considered. However, the political process has proved to be inefficient.

**Eco-Innovation investments by the Port of Koper.** The activities of the Port of Koper have a major effect on the environment. The Port therefore continuously seeks innovative solutions related to environmental protection. The Port has also helped introduce and develop new eco-innovation products and services some of which have demonstrated international market potential (Harpha-Sea, Robotina, TOC).

**Eco-Innovation investments by larger Companies.** CIMOS is a major regional company. A successful global automotive supplier, CIMOS develops and sells parts for engine, brakes, exchange system and body. The company has also an Energy division, manufacturing turbines, and is very active in eco-innovation. CIMOS has a very strong R&D center, active in numerical modelling, informatics and prototype and testing.

**Kraški Zidar** is a leading B&C company which is active in the construction waste management facilities, and is investing in new ventures aimed at developing this market.

**Energy Agency. GOLEA -Local Energy Agency of Nova Gorica** (co-funded by “Intelligent Energy Europe”) supports eco-innovations in the region. Municipalities from the Coastal-Karst region do not adhere, as yet, to GOLEA.

**Cross-border cooperation programme Slovenia - Italy** (Objective 3), SEE, IPA Adriatic initiative etc. help networking among innovation activities in whole eligible area and particularly between Slovenia and Friuli Venezia Giulia and Veneto Regions in Italy.

## 4.2 SWOT ANALYSIS

**Table 1 - SWOT of the SOCIAL SYSTEM**

SWOT analysis of the social, demographic conditions of territorial area and intervention needs' indication.

SWOT SOCIAL SYSTEM	
<b>strengths</b> <ul style="list-style-type: none"> <li>• Presence of various educational institutions, including university</li> <li>• Presence of social institutions offering efficient new services (health, education, employment)</li> <li>• Availability of large uncontaminated land</li> <li>• New support facilities and social programs that complement the educational system and allow to respond rapidly to the social and educational needs of the population.</li> <li>• Low unemployment rate due to good business dynamics.</li> <li>• lower rates of poverty</li> </ul>	<b>weaknesses</b> <ul style="list-style-type: none"> <li>• Population is aging, need to develop services and services for the elderly</li> <li>• Low concern for weak population groups</li> <li>• Contort political processes prevents joint action/investment by different Municipalities, eg in Waste Management</li> <li>• Weak preventive health action</li> <li>• Poor maintenance of residential housing in the city centers ("inner city problem")</li> <li>• The educational system is not adapted to the needs of companies. Similarly, the support for employment should not be directed solely to subsidize.</li> <li>• Limited qualified empolymnt offer</li> <li>• Low involvement of young people in policies and actions intended to them.</li> </ul>
<b>opportunities</b> <ul style="list-style-type: none"> <li>• Take advantage of the ageing population to develop know-how related to social services (teleassistance, telemedicine,)</li> <li>• Introduce new educational and study programs, scholarships and internships for the young</li> <li>• Ecourage entrepreneurship for the young</li> <li>• Encourage the formation and growth of young innovative companies</li> <li>• Development of E-Accessibility, E-learning and distance learning, allowing the work at home in particularly for women</li> <li>• Develop the potential for innovative edco-friendly tourism and agriculture and especially for nature-friendly farming</li> </ul>	<b>threats</b> <ul style="list-style-type: none"> <li>• Inadequately dynamic growth of new, fast growing and high added value firms would deepen problems of young and educated in matters of employment.</li> <li>• Not adapting public services to the needs of the region's population would lead to the private offering of these, causing social unevenness,</li> <li>• The lack of high-quality public services in rural areas and business and employment opportunities in rural areas would lead to rural decline and to the abandoning of the countryside.</li> </ul>
<b>NEEDS/ INTERVENTIONS NECESSITIES</b>	
<b>1.1 - Integrate the economy with educational and research institutions</b> <b>1.2 - Encourage entrepreneurial culture for the young and women</b> <b>1.3 - Encourage availability of e-public services also in rural areas</b> <b>1.4 - Encourage work at home</b>	

**Table 2 SWOT of the ECONOMIC AND PRODUCTIVE SYSTEM**

SWOT analysis of the economic and productive conditions of territorial area and intervention needs' indication.

SWOT ECONOMIC AND PRODUCTIVE SYSTEM	
<b>strengths</b> <ul style="list-style-type: none"> <li>• Favourable geographical location, climate and good overall quality of life</li> <li>• Good levels of infrastructure (transport, energy, telecommunications)</li> <li>• Wealth of touristic and cultural attractions</li> <li>• Presence of Keystone Companies and Organizations (Port, CIMOS, Kraski Zidar, etc.) which are highly sensitive to Eco-Innovation and have strong needs which are only partially met by existing national and international offer</li> <li>• Possibility to use diverse sources of sustainable energy (solar, wind, biomass)</li> <li>• Availability of a business support infrastructure and of entrepreneurial support institutions</li> <li>• Presence of University and various educational institutions</li> <li>• Large land potential for agriculture and especially for nature-friendly farming</li> </ul>	<b>weaknesses</b> <ul style="list-style-type: none"> <li>• Successful new generation entrepreneurs are not known and are not yet role models for the young</li> <li>• Lack of funds, investment capital and entrepreneurial mentors for new entrepreneurs or companies with high growth potential</li> <li>• Uneven and inadequate development of social tourism and ICT infrastructure</li> <li>• Slow technological development and lack of investment in innovation</li> <li>• Municipalities are not investing enough in eco-innovation and innovative facilities (e.g. high tech waste management, efficient housing, etc.)</li> <li>• Insufficient cooperation between industry and education institutions and institutions for research and development</li> <li>• Uncoordinated planning of tourism and rural development</li> </ul>
<b>opportunities</b> <ul style="list-style-type: none"> <li>• Development of V. European transport corridor</li> <li>• Implement projects connecting entrepreneurs, lead users, providers of finance for investment, educational bodies, etc, in order to develop large market opportunities related to Eco-Innovation</li> <li>• Encourage the development of innovative private investment in innovative companies</li> <li>• Cross-border cooperation with Italy in all fields</li> <li>• tourism development and rural development of renewable energy</li> </ul>	<b>threats</b> <ul style="list-style-type: none"> <li>• Inadequate value added in the manufacturing and service sectors - slow growth in all fields</li> <li>• Retarded construction of transport infrastructure (V Corridor)</li> <li>• Competition from the neighbouring port of Rijeka would pose threat to the economic viability of the logistics sector</li> </ul>
<b>NEEDS/ INTERVENTIONS NECESSITIES</b>	
<p>2.1 Establish the technology incubator (RTI SI) as the CORE of the entrepreneurial innovation ECOSYSTEM</p> <p>2.2 ADAPT financial instruments (guarantees) to accelerate EcoInnovation investment</p> <p>2.3 Stimulate private financial investment in innovative companies</p> <p>2.4 Promote and engage successful new generation entrepreneurs as role models</p> <p>2.5 Accelerate construction of the V<sup>th</sup> corridor</p>	

**Table 3 SWOT of the TERRITORIAL AND ENVIRONMENTAL SYSTEM**

SWOT analysis of the territorial and environmental conditions of territorial area and intervention needs' indication.

SWOT TERRITORIAL AND ENVIRONMENTAL SYSTEM	
<b>strengths</b> <ul style="list-style-type: none"> <li>• Favourable geographical location enjoying good climate, good quality of life</li> <li>• Preserved nature with a great diversity of habitat types and species</li> <li>• Possibility to use diverse sources of sustainable energy (solar, wind, biomass)</li> </ul>	<b>weaknesses</b> <ul style="list-style-type: none"> <li>• Excessive restrictions on land development to protect natural and cultural heritage hampers the adoption wind and solar technologies (e.g. permissions for solar and wind farms and solar installations)</li> <li>• Weak Eco-Innovation policy in the region</li> <li>• Municipalities have considerable difficulties in undertaking joint investments and joint actions / local policy measures to support eco-innovation investments</li> <li>• Tourist activity, poses pressures on the environment, especially at the seaside where is the highest concentration of hotels</li> </ul>
<b>opportunities</b> <ul style="list-style-type: none"> <li>• Development of renewable energies</li> <li>• Development of new waste treatment technologies</li> <li>• The regional public sector can use numerous instruments to work towards eco-innovation such as market-oriented schemes; public procurement; regulatory and normative frameworks; incentives for eco-innovation business process; awareness raising and demonstration measures; strategic planning and foresight.</li> <li>•</li> </ul>	<b>threats</b> <ul style="list-style-type: none"> <li>• Inaction leading to slower growth and weakened competitiveness</li> <li>• Setting up LNG terminals in Italy</li> <li>• Inappropriate land development</li> <li>• Disregard the needs of local people in planning and implementing environmental policies</li> </ul>
<b>NEEDS/ INTERVENTIONS NECESSITIES</b>	
<p>3.1 Implement regional policy for systemic eco-innovation and entrepreneurship promotion</p> <p>3.2 Set up the technology park RTI SI as a key node of the eco-innovation ecosystem</p> <p>3.4 Include SMEs into programmes for eco-innovation R&amp;D and commercialisation</p> <p>3.5 Activate Public and Large Company procurement as a lever for eco-innovation</p> <p>3.6 “Eco-capacity” build up programme - from policy to technicians</p>	

**Table 4 SWOT of the Innovation & Eco innovation**

SWOT analysis of the Innovation & Eco innovation in local/regional context and intervention needs' indication

SWOT Innovation & Eco innovation	
strengths	weaknesses
<ul style="list-style-type: none"> <li>• Good level of functioning of the regional system of waste collection and processing</li> <li>• High environmental awareness and activities being introduced by Port Koper,</li> <li>• Increasing environmental awareness and activities in the construction sector - collection of construction waste material)</li> <li>• Availability of all the key elements of a regional "Innovation Eco-System": large companies (Port, CIMOS), small dynamic firms, education insititutions, financial organizations, entrepreneurial support agency and organizations</li> <li>• Presence of the University of Primorska</li> <li>• Presence of Inkubator Sežana, as a successful organization fostering creation and growth of innovative SMEs</li> </ul>	<ul style="list-style-type: none"> <li>• The public sector is not adequately aware of the developmental contribution of investments in Eco-Innovation</li> <li>• SMEs lack information about their resource efficiency potentials</li> <li>• The structure of regional education system (mainly humanistically oriented) will not change in the near future</li> <li>• Lack of Technology Park to facilitate networking, access to finance, alignment of education to SME needs</li> <li>• Inadequate SME access to EU programmes</li> <li>• Lack of financial resources and measures to support creation and rapid growth of SMEs operating in Eco-Innovation.</li> <li>• Lack of spontaneous private investment initiatives in Eco-Innovation</li> <li>• The regional education system is mainly humanistically oriented and will not change in the near future.</li> </ul>
opportunities	threats
<ul style="list-style-type: none"> <li>• Develop breakthrough innovations related to the sea, port and transport (marine research, water protection, environmental technologies, new transport and tourism).</li> <li>• Unlocking SME growth potential through adequate initiatives supporting global marketing of innovations and access to risk capital and EU programmes.</li> <li>• Support Start-ups which have the potential to be created as a systematically sustainable or regenerative business.</li> <li>• Attract entrepreneurs and investors from other regions in neighbouring Italy.</li> <li>• Facilitate SME access to EU Programmes (FP7) which have been until now in the background.</li> </ul>	<ul style="list-style-type: none"> <li>• Young talents leaving the region and developing their entrepreneurial, managerial and technical potential elsewhere</li> <li>• Mis-alignment between educational offer by the University and the needs in the economy</li> </ul>
<b>NEEDS/ INTERVENTIONS NECESSITIES</b>	
4.1 CAPACITY BUILDING - demonstration and raising awareness programmes	
4.2 UNLOCK SME POTENTIAL: ensure conditions to accelerate SME growth	
4.3 NETWORK local initiatives at the regional, nationa, crossborder and EU levels	
4.4 RENOVATE BUILDINGS with Intelligent / Energy Management souldtions ( ICT - based)	

**Table 5 SWOT of Eco innovation in candidate sector or with reference to selected eco-innovation technology and requirements/intervention modalities.**

**5.1 CANDIDATE SECTOR: Eco-PORT SERVICES AND LOGISTICS  
(THE PORT AS LEAD USER FOR ECO-INNOVATION)**

SWOT Innovation & Eco innovation	
strengths	weaknesses
<ul style="list-style-type: none"> <li>• The Port of Koper is one of the most important in the Adriatic, and is highly sensitive to Eco-Innovation (EMAS certification).</li> <li>• An Innovation Team has been set up within the Port organization to systematically promote a culture of innovation, detect and select ideas, implement prototypes.</li> <li>• The Port has a track record in identifying and developing innovations with considerable external market potential and helping establish spin-off companies and service organizations</li> <li>• The Water Technology Platform is an established knowledge infrastructure supporting collaborative projects and entrepreneurial initiatives. The Platform is financed through FESR, Government and private companies.</li> </ul>	<ul style="list-style-type: none"> <li>• The current market crisis is strongly limiting the financial capability of the Port to invest in initiatives with long-to-medium payback horizon</li> <li>• While the Port is apt at the technical and internal organizational issues, entrepreneurial and venture support capabilities, venture financing, counselling, etc. are not available and should be brought in from the outside.</li> </ul>
opportunities	threats
<ul style="list-style-type: none"> <li>• set up an internal - external process to systematically involve SMEs to develop eco-innovation solutions.</li> <li>• Establish a strategic link between the Port and RDC and the RTI SI to foster breakthroughs in new products and processes and SME growth</li> <li>• Adapt the Guarantee Scheme managed by RDC to serve R&amp;D investments of SMEs developing innovations for the Port plays as Lead User.</li> <li>• Increase the use of ICT in energy efficient and “intelligent” buildings / Warehouses.</li> <li>• Develop a ‘life-cycle’ perspective to eco-innovation encompassing novel or significantly improved solutions introduced at any stage of the product or service life (‘from cradle to grave’) in all sectors</li> </ul>	<ul style="list-style-type: none"> <li>• without a proper - outside oriented and strongly networked entrepreneurial organization, the Port will not be able to exploit its innovation potential as a Lead User</li> <li>• organizational changes in ownership structure may decrease the current attention to eco-innovation and to the Lead User role of the Port.</li> </ul>
NEEDS/ INTERVENTIONS NECESSITIES	
<p>5.1 ADAPT and TEST the RDC innovation guarantee scheme for innovation financing</p> <p>5.2 Prepare a proposal with other Slovenian guarantee-scheme agencies (e.g. joint application to EIF - European Investment Fund)</p> <p>5.2 launch an eco-innovation programme for port logistics</p>	

## 5.2 CANDIDATE SECTOR: ECO-BUILDING HOUSING RENOVATION

SWOT Innovation & Eco innovation	
strengths	weaknesses
<ul style="list-style-type: none"> <li>• The Construction Sector is particularly relevant in the region with several small companies / crafts offering construction, architectural and engineering services covering all needs from design to installation to servicing.</li> <li>• Several SMEs are engaged in the production of systems and components for the building industry, including heating, ventilation and insulation.</li> <li>• Banks offer subsidized credit-lines to both private home-owners and SMEs for energy saving investments (e.g. PV systems, heat pumps, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• The current market crisis is affecting this sector in particular. Urgent new market opportunities should be identified.</li> <li>• The general public, although sensitive to environmental protection, still is not investing in home renovation for energy efficiency</li> <li>• Services for Energy Certification of buildings are not regionally available.</li> </ul>
opportunities	threats
<ul style="list-style-type: none"> <li>• set up an internal - external process to systematically involve external SMEs to develop eco-innovation solutions, especially that related to resource efficiency.</li> <li>• Launch a joint project by RDC, Chamber of Economy and Chamber of Crafts and EKO SKLAD to demonstrate savings in building operation.</li> <li>• SMEs having successfully proven innovations working with Lead Users can then proceed to sell the same solutions onto wider markets.</li> <li>• Adapt the current Guarantee Scheme managed by RDC in order to facilitate investments in new equipment by SMEs offering eco-innovative renovation services</li> <li>• Increase the use of ICT in energy efficient and “intelligent” buildings / Warehouses.</li> <li>• Develop a ‘life-cycle’ perspective to eco-innovation encompassing novel or significantly improved solutions introduced at any stage of the product or service life (‘from cradle to grave’) in all sectors</li> </ul>	<ul style="list-style-type: none"> <li>• Without urgent action, the building and construction sector may generate significant unemployment in the short term</li> </ul>
<b>NEEDS/ INTERVENTIONS NECESSITIES</b>	
<p>6.1 Awareness raising and demonstration measures for Eco-Building renovation measures introduced jointly by public and private sector to demonstrate economic viability of eco-investments in housing</p> <p>6.2 launch an eco-innovation programme for URBAN ECO-INNOVATION - Including promotion, training, financial packages, certification, etc.</p>	

### 5.3 CANDIDATE SECTOR: MUNICIPAL PROCUREMENT TO ACCELERATE ECO-INNOVATION (KOPER - GREEN CITY)

SWOT Innovation & Eco innovation	
<b>strengths</b> <ul style="list-style-type: none"> <li>• The Municipalities in the region are highly sensitive to environmental issues and energy saving initiatives.</li> <li>• The largest municipalities have public procurement capacity involving schooling, transport, construction and housing, municipal services (waste management), utilities.</li> <li>• Funds are available (e.g. applying through GOLEA) for eco-friendly public investments to increase energy efficiency</li> </ul>	<b>weaknesses</b> <ul style="list-style-type: none"> <li>• The current market crisis is limiting the investment capacity of Municipalities, which are spending more on urgent social issues and less on investments with a longer term payback perspective.</li> <li>• Municipalities are generally very small and may not have adequate internal technical skills to act as Lead Users</li> </ul>
<b>opportunities</b> <ul style="list-style-type: none"> <li>• set up an internal - external process to systematically involve LOCAL SMEs to develop or implement eco-innovation solutions, especially that related to resource efficiency.</li> <li>• SMEs having successfully proven innovations working with Lead Users can then proceed to sell the same solutions onto wider markets.</li> <li>• Integrate “Green Investments” with initiatives aimed at improving urban living for the elderly and the handicapped</li> <li>• Launch a joint project by RDC, Chamber of Economy and Chamber of Crafts and EKO SKLAD to demonstrate savings in building operation.</li> <li>• Adapt the current Guarantee Scheme managed by RDC in order to facilitate investments in new equipment by SMEs offering eco-innovative renovation services</li> <li>• Increase the use of ICT in energy efficient and “intelligent” buildings.</li> <li>• Develop a ‘life-cycle’ perspective to eco-innovation encompassing novel or significantly improved solutions introduced at any stage of the product or service life (‘from cradle to grave’) in all sectors</li> </ul>	<b>threats</b> <ul style="list-style-type: none"> <li>• Without urgent action, a significant opportunity for economic and entrepreneurial growth may be lost.</li> </ul>
<b>NEEDS/ INTERVENTIONS NECESSITIES</b>	
7.1 connect with neighbouring regions in slovenia and italy to build critical mass	
7.2 Identify priority eco-innovation investments having high visibility and impact	
7.3 Municipalities should join GOLEA or establish their own energy management agency	

## 5.4 CANDIDATE SECTOR: ICT FOR ECO-INNOVATION

SWOT Innovation & Eco innovation	
<b>strengths</b> <ul style="list-style-type: none"> <li>• A number of ICT companies in the region have developed advanced systems for energy management and control. Some systems are supplied to world-leading companies.</li> <li>• Advanced control and metering systems, as developed by local ICT firms, allows significant improvements in energy efficiency</li> <li>• Intelligent Buildings integrate energy savings with improvements in the quality of life, in particular for the elderly (e.g. telemedicine, teleassistance, e-health)</li> </ul>	<b>weaknesses</b> <ul style="list-style-type: none"> <li>• The current market crisis is limiting the investment capacity of the market to make investments with a longer term payback perspective.</li> <li>• Local ICT SMEs, although very dynamic, are not able to provide complete solutions to the vast range of eco-innovation needs arising in both the private and public sectors.</li> </ul>
<b>opportunities</b> <ul style="list-style-type: none"> <li>• SMEs having successfully proven innovations working with Lead Users can then proceed to sell the same solutions onto wider markets.</li> <li>• Integrate “Green Investments” with initiatives aimed at improving urban living for the elderly and the handicapped</li> <li>• Adapt the current Guarantee Scheme managed by RDC in order to facilitate investments in new equipment by SMEs offering eco-innovative renovation services</li> <li>• Increase the use of ICT in energy efficient and “intelligent” buildings.</li> <li>• Utilize ICT to develop a ‘life-cycle’ perspective to eco-innovation encompassing novel or significantly improved solutions introduced at any stage of the product or service life (‘from cradle to grave’) in all sectors</li> </ul>	<b>threats</b> <ul style="list-style-type: none"> <li>• Without urgent action, a significant opportunity for economic and entrepreneurial growth may be lost.</li> </ul>
<b>NEEDS/ INTERVENTIONS NECESSITIES</b>	
8.1 Organize funding from concept to prototype stage involving stakeholders	
8.2 Identify priority eco-innovation ICT investments having high visibility and impact	

**Part 5:**  
**THE PARTICIPATIVE PROCESS IN THE TERRITORIAL  
CONTEXT**

## 5. THE PARTICIPATIVE PROCESS IN THE TERRITORIAL CONTEXT

Eco-innovation, being a significant, highly dynamic and high-impact market has the potential to become a driving opportunity to foster the creation, growth, continuous innovation and attraction of innovative companies, thus contributing to sustained regional entrepreneurial and economic growth.

Promoting eco-innovation in local enterprises offers to entrepreneurs (existing SMEs as well as new companies) the opportunity to offer innovative products, systems and services for energy-efficient and environmental solutions and to improve the overall quality of life of the population.

Through an efficient participative process it is possible to accelerate the broader long-term environmental sustainability of economic growth by pursuing greater efficiency and better use of alternative energy sources, as well as improve the quality of life and attractiveness of the Coastal-Karst region.

Within this framework, the ambition is to establish the RDC Koper - and the future Koper Technology Incubator (RTI SI) - as a reference centre in the regional, national and cross-border entrepreneurial ecosystem related to Eco-Innovation. The RTI SI is expected to begin operations by end 2012.

However, promoting eco-innovation in the Coastal-Karst region implies *stimulating a process of transition, including cultural, both from the Offer-Side, and from the Demand-Side*. From the methodological point of view, the following approaches have been identified as particularly useful in the local context:

- **On the Demand Side, develop the Lead Users approach.** the concept of *Lead Users*<sup>7</sup> provides a very useful methodology in order to identify the unmet Eco-Innovation needs expressed by local organizations - including Municipal Administrations (in particular Municipal Utilities, Hospitals and Health Care services), as well as Utilities, Logistics and larger Companies (transport, environment ,etc). The methodology is based upon the idea that breakthrough products or services may be developed by identifying unmet local Eco-innovation needs - which may correspond to larger needs and leading trends in the marketplace. Although, on a regional scale, it will be difficult to identify unmet needs with global market potential, serving Local Lead Users is an excellent starting point to innovate existing companies and increase the level of innovation in the region. References acquired serving Lead Users are conducive to further market development. *It is important to stress that The Lead User approach is also supported by the EC (e.g. LivingLabs, Lead Users / Lead Markets Initiative ). Several such unmet needs / SME innovation and diversification opportunities can be identified within “green public services”, “sustainable construction”, “green logistics”, “advanced environmentally sustainable tourism”.*

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<sup>7</sup> Eric Von Hippel - Democratizing Innovation (2005)

- **On the Demand Side, focus on opportunities in the B&C (Building and Construction) sector.** *The buildings and construction sector offers considerable business opportunities for Eco-Innovation*, such as improving energy efficiency and minimizing environmental impact in residential housing and public buildings is a high-impact initiative embracing hospitals, housing, buildings, small energy small plants powered by biomass - organic waste, agricultural excerpts, etc.,. The opportunity lies in taking advantage of In national Slovenian incentives aimed to increase energy efficiency and to reduce emissions into the atmosphere.

Some banks (Banka Koper) are offering new financial products (soft loans and credit schemes) aimed to improve even more the convenience of this investment on the part of private home - owners.

The investment process can be further accelerated through the National Environmental revolving fund that incentivates private Eco-innovation investments. Such resources could give a strong contribution to the renewal of real estate in city Centers (eg. Koper), which is very old and no longer meets new standards for energy savings (in many cases, not even those related to safety and habitability of private housing).

- **On the Supply Side, the concepts of Open Innovation<sup>8</sup> and of Collaborative Entrepreneurship<sup>9</sup>** can be utilized in order to develop an integrated entrepreneurial support infrastructure, designed to activate market, entrepreneurial, business and scientific potential through continuous innovation.

In line with the EC guideline to “*Promote innovation poles and knowledge-driven and industrial clusters*”, the role of the RDC Koper will be to contribute to fill the “development and acceleration gap” in the innovative Eco-technology sector by establishing new and better connections among existing and new companies, potential customers, investors and strategic partners.

- **On the Supply Side, the Adoption of the Customer Development Process<sup>10</sup>** allows to develop and locally implement Eco-Innovation products and services. The path from early-stage entrepreneurship to maturity needs seed funding and expert assistance to literally prove the concept entrepreneurs wish to bring to market. Entrepreneurs must be able to confront as soon as possible with issues of real world innovation, commercialization, launch and growth.

### **Key Success Factors and Values of the Participative Process**

The implementation of the participative process in the territorial context to stimulate growth will comply to the following Key Success Factors and Values :

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<sup>8</sup> Henry Chesbrough - Open Business Models: How to Thrive in the New Innovation Landscape (2006)

<sup>9</sup> Raymond E. Miles, Grant Miles, and Charles Snow - Collaborative Entrepreneurship: How Communities of Networked Firms Use Continuous Innovation to Create Economic Wealth by (2005)

<sup>10</sup> Four Steps to the Epiphany - Successful Strategies for Products that Win - Stephen G. Blank 2006

- *support for entrepreneurship and systematic collaboration between local businesses* - including also crafts and micro enterprises - and larger companies and organizations, the system of public and private research, public administration. The implementation of the Lead User method calls not to seek occasional purchases of innovative products and services, but *to establish stable co-development and innovation-oriented value creation in the interests of mutual benefit.*
- *Ensure strong orientation to serve potential markets* and set up a team with technological as well as research and business partners outside the Region. The catalyst role of RDC-KP will help assess the presence of larger market opportunities (eg sustainable construction, the "green economy, logistics, advanced environmentally sustainable tourism) that can be addressed once the pilot local demonstration implementation has proved successful. A key role of RDC Koper is especially that of facilitating businesses to work together on pilot demonstration projects.
- *Involve a multitude of stakeholders* - primarily banks and other financial entities - and spur entrepreneurs to innovate SMEs and adopt more advanced standards, exploring a range of technological innovations to create new links between SMEs, research laboratories, training centers and service.
- *Liaise with other Eco-Innovation initiatives in other regions.* The presence of a critical mass of resources and technology skills in the Notransko-Kraska region as well as and the neighbouring regions in Italy must be exploited. One of the achievable end-results is the transformation of the Coastal-Karst region and the Slovenia-Italy border region into a driving force behind the development of very specific innovations and rapid deployment affecting large sectors of the traditional economy. *Additional synergies can be built with the other Agencies of the MEDOSSIC Project.*

The implementation of such a "collaborative path " would benefit from the support of a new service infrastructure, hosting Eco-Innovation initiatives, which will be ideally hosted as a service of the new RTI SI Technology Incubator.

Such an initiative will be especially able to attract the interest of citizens, enable significant private capital, generate economies of scale, and thus allow to strengthen the specialized production (eg in the field of 'construction, tourism, mechanical crafts, etc.). and create new high value added and internationally competitive clusters.

**Expected outputs from this transformation are the following:**

- *The innovation and growth of existing SMEs and increase of their size and added value*, identification of new customers and market opportunities. This can contribute to accelerate the exit from the current situation of economic crisis, furthermore the most successful companies will become ready to attract investment and improve their capitalization;

- *the creation and attraction of new business production and services*, high value added manufacturing and service suppliers;
- *the development of collaborative links between SMEs and larger companies*, which may be primarily a source of actionable innovative technologies. Large companies may also facilitate the quick market and manufacturing scale-up of innovations in several markets such as logistics, environmental protection, civil construction, renewable energy, etc..;
- *the attraction of new enterprises* - such as integrated logistics operators - areas very busy industrial and logistics (eg the Port of Koper);
- *co-ordinated development of collaborative connections* between SMEs, Universities and Research Centers, service and energy certification agencies and consultants, financial services, etc. - such collaborations may well emerge not just on a local basis but may extend to EU-wide clusters and SME networks.

Finally, it is worth mentioning that the end impact of this activity will not remain confined to the regional geographic scope, but may benefit from a spill-over effect which geographical scope may be as large as the whole Euroregion, contributing to accelerate the region of Coasta-Karst recovery.

## 5.1 LOCAL WORKSHOPS

### 5.1.1. LOCAL WORKSHOPS' ROLE

A local workshop on eco-innovation has been organized on Apr. 12<sup>th</sup>, 2010 to act as catalyst of the dynamics which can really bring to a suitable development of an operational and strategic plan supporting local eco-innovation and baiting politics and virtuous actions of development.

The RDC Koper team has based the design of the workshops in order to identify the key Functions and Services to be offered by the forthcoming Technology Park through a workshop programme that has included the following:

- a **“field based” survey**, which has included visits and meetings with potential Lead Users and an extensive document analysis. This has led to a field survey assessment of the Eco-Innovation needs of larger companies /public organizations and of their interest in taking active part to the Eco-Innovation initiatives to be launched within the TP Koper project. The survey has involved 6 potential Lead Users discussing their interest in the following four main functions: (a) need assessment; (b) availability of internal technical skills and other resources - and possibility to use them in the demonstration project; (d) availability of financial resources to fund the demonstration project; (e) networking with similar users and partners, (f) education issues, (g) access to international markets.

- **An exhaustive analysis of the Partnerships to be activated.** The RDC Koper team aims to offer different / complementary services from those available from other supporting organizations existing in the main “Catchment Area” (i.e. Coastal-Karst Region, Slovenia, neighboring regions in Italy).
- **An assessment of the interests of potential Partner Institutions.** The RDC Koper aims to act as a “One Stop Shop” for would be entrepreneurs and SMEs in the Eco-Innovation sector. RDC Koper intends to implement active signposting towards entrepreneurial support Institutions (e.g. Government and Regional Development Agencies, University, Chamber of Commerce, Chamber of Crafts, and towards specialized external consulting firms and experts).
- **An assessment of reference international Eco-Innovation “best practices”,** some of which have been presented and illustrated on the occasion of the MEDOSSIC Workshop which has taken place in Koper on Oct. 11st 2010 (presence of Port of Koper, Municipality of Koper and leading innovative SMEs).

Following the workshop, a series of one-to-one interviews have been conducted in order to discuss conclusions and generate ideas and proposals for new eco-innovation projects.

The aim of the process has been to identify in particular the opportunities to activate the Lead Users and the first two steps of the Customer Development process (i.e. step 1. “Opportunity Discovery” and step 2. “Opportunity Validation”).

### **5.1.2 WORKSHOPS’ STEPS AND WORKING MODALITIES-METHODOLOGY**

The Workshop has been organized around these four phases:

**Phase 1: Preparing for the Lead User Workshop**

**Phase 2: Identifying Trends and Key Customer Needs**

**Phase 3: Exploring Lead User Needs and Solutions and discovering available Resources**

The phases are not sharply separated. Some activities in one phase may be repeated in the next one, with the emphasis of the work gradually shifting as the lead user study progresses.

#### **PHASE ONE: Preparing for the Lead User Project**

A research group, composed by RDC Koper team and external experts (namely Eco-Innovation entrepreneurS) first spells out the focus and overriding goals of the Eco-innovation initiatives. Specifically, these are the key questions to be answered:

Which types of markets and which types of new products or services are of most interest for this project?

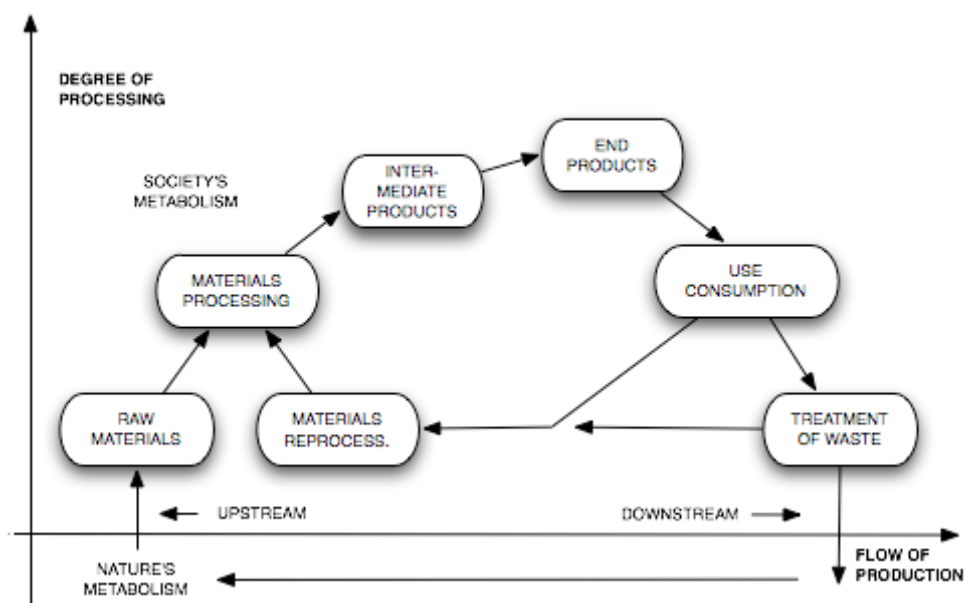
What is the desired level of innovation? (Are we seeking “breakthrough” innovation? - or are we primarily interested in creating opportunities for extending product or service lines currently offered by local SMEs ?)

What are the key business goals and constraints?

## PHASE TWO: Identifying Trends and Key Customer Needs

In Phase Two the team does an in-depth investigation of the Eco-Innovation needs expressed by (larger sized) Companies and Organizations (“Lead Users”) as well as of relative trends and emerging market needs. The main activities are to identify and interview lead users who have both an understanding of their needs and which can provide useful solution information to offer. Interviewing has been done in-person since this is the most efficient and interactive way to discover needs and opportunities as well as information that is especially important to the project. Interviews have been carried out in Port of Koper, CIMOS, Municipality of Koper, TOC, Harpha-Sea, Robotina, Incubator Sežana.

It must be pointed out that Eco-innovation encompasses novel or significantly improved solutions introduced at any stage of the product or service life (‘from cradle to grave’). The so-called ‘end-of-pipe’ or curative technologies are the least efficient solutions from this point of view. Resource and energy efficiency become of key importance as preventive measures minimising material inputs and decreasing levels of waste throughout the production and use process.



The ‘life-cycle’ perspective for Eco-Innovation products and services

## PHASE THREE: Understanding the Needs of Lead Users and Discovering Resources

In Phase Three, the team acquired a more precise understanding of the development opportunities it has selected as the area of focus. The team also begins to generate

concepts during this phase relating to Strategies, Measures, and Initiatives leading to the development of Eco-Innovation entrepreneurship in the region . These concepts are only preliminary ones. The Project teams have thus proceeded to an informal assessment of the business potential for the type of products or services. As part of this assessment, data has been collected on the size and profitability of the targeted markets and on resources available locally, at the national or EU level that can be tapped in order to launch the initiatives. Resources include funding programmes, private investors, trade associations, Local Energy Agencies, etc.

### **5.1.3 DIFFICULTIES ENCOUNTERED DURING THE PARTICIPATIVE PROCESS**

The Participative process raised a significant interest on the part of all the stakeholders. This has been due to carefully orchestrate meetings with Stakeholders. RDC Koper has engaged an external team of experts in innovation, entrepreneurship and regional development. The experts have been involved to carry out an assessment of the documentation prepared thus far under the Project, notably by RDC Koper and by the Delta200 and Development Agency of Inner-Karst Region, also Partnera of the Project. The experts have been engaged by RDC Koper under the contract with ICRA - the Agency of the Idrija-Cerkljansko Region. The professional experience of the experts contributed to raise interest on the part of the Stakeholders, who considered the meeings and interviews to be a real opportunity to exchange ideas, strategies and analysis. The Experts contributed to gathering of strategic inputs from Leading Companies, Stakeholders and Opinion Makers in order to discover and validate a first set of main themes related to “Entrepreneurial EcoInnovation” through:

- discussions with Lead Users - i.e. are larger companies (e.g. Port of Koper, CIMOS, etc. ) or public organizations (Municipality, etc ) which may express a local demand for innovative products and services.
- The moderation of the Workshops with selected Entrepreneurs and Opinion Makers - which helped provide practical opinion about the necessary initiatives, actions, positioning etc.
- the Preparation of the “Strategic and Operational Plan for the Coastal - Karst Region” as a deliverable of the MEDOSSIC Project.

## 5.2 INSTITUTIONAL CONTEST

### ***5.2.1. THE FRAMEWORK OF THE MAIN INSTITUTIONAL STAKEHOLDERS AND THE MAIN TOOLS FOR ECO-INNOVATION***

There are different bodies/actors at European, national and/or local level, directly and indirectly entitled to influence the process of support and stimulation of eco-innovation. Likewise, there are different tools these bodies/actors have at their disposal as political, financial, services, supporting tools, etc.

Referring to the Investigational Institutional Settings WC 4.1 the Matrix 1 was aimed at identifying the framework synthesis about all these institutional bodies as well as the tools at disposal of partners of the project, to be presented to the stakeholders during the local workshops in order to share them with a wider group of subjects and therefore upgrade them.

**Matrix 1 - Matrix of existing stakeholders & tools to support eco-innovation**

Body/ subject	Operational level	Typology of support	Support tool			Impact on eco-innovation in local context	Involvement in SOP definition ?
			Title	Short description	Reference to the project's document		
	Specify if: - European level - National level - Regional level - Local level	Specify if: - Political - Financial - Service - Others (specify)	Law / proclamation / service / good practice / other		Example ref. Report ESA - Report BP) for further detail	Specify direct or indirect impact	(yes / not) IF YES, please specify the kind of involvement for example (telephone contact, participation to meetings, etc.)
Ministrstvo za visoko šolstvo, znanost in tehnologijo - Ministry for Higher Education, Science and Technology (MHEST)	National level	- Political - Financial	-Set of laws related to the RR -Set of programmes related to RR	MHEST is the central national body on the area of RR	Research and Development Act - (ZRRD) Ur.l. RS, št. 96/2002 Resolution on the 2006 - 2010 National Research and Development programme- Resolucija o Nacionalnem raziskovalnem in razvojnem programu za obdobje 2006 - 2010 /ReNRRP/Ur.l. RS, št. 3/2006 Rules on Keeping the Register of Innovative Environment - Pravilnik o vodenju evidence subjektov inovativnega okolja Ur.l. RS, št. 25/2008 Industrial Property Act - Zakon o industrijski lastnini (ZIL-1) Ur.l. RS, št. 45/2001 Employment Related Industrial Property Rights Act - Zakon o pravicah industrijske lastnine iz delovnega razmerja (ZPILDR) Ur.l. RS, št. 45/1995	In-direct influence	not
Ministrstvo za okolje in prostor -	National level	- Political - Financial	-Set of laws related to the environment	MESP is the central national body on the	- Act Declaring the Ecological Protection Zone and Continental Shelf	In-direct influence	not

Body/ subject	Operational level	Typology of support	Support tool			Impact on eco-innovation in local context	Involvement in SOP definition ?
			Title	Short description	Reference to the project's document		
Ministry of the Environment and Spatial Planning (MESP)			-Set of programmes related to the environment	area of environment	of the Republic of Slovenia - Zakon o razglasitvi zaščitne ekološke cone in epikontinentalnem pasu Republike Slovenije (ZRZECEP) Ur.l. RS, št. 93/2005 The Environment Protection Act - Zakon o varstvu okolja (ZVO-1) Ur.l. RS, št. 41/2004 Noise Safety in Natural and Living Environment Act - Zakon o varstvu pred hrupom v naravnem in bivalnem okolju (ZVPH) Ur.l. SRS, št. 15/1976 Ionising Radiation Protection and Nuclear Safety Act - Zakon o varstvu pred ionizirajočimi sevanji in jedrski varnosti (ZVISJV) Ur.l. RS, št. 67/2002 Water Act - Zakon o vodah (ZV-1) Resolution on The National Environmental Action Programme 2008-2016 (Neap) - Nacionalni akcijski načrt za energetska učinkovitost za obdobje 2008-2016		
Ministrstvo za gospodarstvo - Ministry of the Economy	National level	- Political - Financial	-Set of laws related to the competitiveness -Set of programmes related to the competitiveness	Ministry of the Economy is the central national body on the area of the competitiveness	- Companies Act - Zakon o gospodarskih družbah (ZGD-1) Ur.l. RS, št. 42/2006 (60/2006 popr.) Public Funds Act - Zakon o javnih skladih (ZJS-1) Ur.l. RS, št. 77/2008 Restructuring Economies Act with the Merits of Funding - Zakon o kriterijih za usmerjanje sredstev za prestrukturiranje gospodarstva Ur.l. SRS, št. 5/1990 Venture Capital Companies Act - Zakon	In-direct influence	not

Body/ subject	Operational level	Typology of support	Support tool			Impact on eco-innovation in local context	Involvement in SOP definition ?
			Title	Short description	Reference to the project's document		
					o družbah tveganega kapitala (ZDTK) Ur.l. RS, št. 92/2007 Award for Business Excellence Act - Zakon o priznanju Republike Slovenije za poslovno odličnost (ZPPO) Ur.l. RS, št. 22/1998 Promotion of Foreign Direct Investment and Internationalisation of Enterprises Act - Zakon o spodbujanju tujih neposrednih investicij in internacionalizacije podjetij (ZSTNIIP) Ur.l. RS, št. 86/2004 Promotion of Balanced Regional Development Act -		
Javna agencija RS za podjetništvo in tuje investicije - Public Agency for Entrepreneurship and Foreign Investment (PAEFI - JAPTI)	National level	- Financial	- Implementation of programmes in the area or innovation support	PAEFI - JAPTI is the central national body in the area Implementation of support to innovation programmes		In-direct influence	Yes (meeting)
Tehnološka agencija Slovenije - Slovenian Technology Agency (STA - TIA).	National level	- Financial	--Implementation of programmes in the area of RR and innovation	STA - TIA is the central national body in the area of implementation of RR and innovation support programmes		In-direct influence	not
EKO SKLAD Slovenia	National level	- Financial	Financial Subsidies and incentives for environmental incentives undertaken by both private citizens and SMEs	EKO - SKLAD is the central national body in the area of financing eco-innovation investments		direct influence	not
Regional Development Agency of Coastal-Karst Region - (RDC Coastal-Region) ORA Sežana	Regional level	- Service	- Regional strategic plans - Operational support in the area of regional	RDA Inner-Karst is central regional body that deals with the regional development	- Regionalni razvojni program Obalno - kraške regije 2007 - 2013, RDC Obalno - kraške regije, 2006 - Izvedbeni nacrt regionalnega	Influence on regional strategy	Yes (project coordinator)

Body/ subject	Operational level	Typology of support	Support tool			Impact on eco-innovation in local context	Involvement in SOP definition ?
			Title	Short description	Reference to the project's document		
subregional agency for Karst and Brkini			development	(prepares strategy studies and implements part of operational support)	razvojnega ,programa Obalno-kraške regije, 2010 - 2012, Regionalna razvojna agencija Obalno-kraške regije d.o.o., 2009		
Organisation: Slovenian Chamber of Commerce (GZS), Regional Chamber Koper	Regional level	- Service	- Intermediately role between regional enterprises and regional political structures - Operational support to regional enterprises - Support in organisation of regional contest in innovation	- Regional Chamber of Commerce is a representative of the enterprises, among several services it coordinates also successful regional contest in innovation		Direct influence on innovation	Yes (organisation, meetings)
Tecology Ecological Center (TEC d.o.o.).	Regional level	- Service	- Operational support in area of cultural and ecological heritage - conducting of VEM (one stop points) for entrepreneurs	- TEC effectively conducts EU projects in the area of eco-innovation. It also provides analytical services to the Port of Koper .		Direct influence on innovation in area of waste mgmt.	Yes (meeting)
Technology Platform Water Technologies	Regional level	- Service	- Coordination of regional activities in the area of innovation related to Sea Technologies. Port of Koper is the central organization, operating as a Lead User.	- The Platform coordinates regional activities in the area of innovation and also implements tasks in the frame of regional contest in innovation		Direct influence on innovation	Yes (meetings)
IN-PRIME Programme 2002-2013	Regional level	- Service	- Innovation breakthrough of the Primorska region	Coordination of regional activities in the area of innovation including culture, development of key technologies, education and training,		Direct influence on innovation	Yes (meetings)

Body/ subject	Operational level	Typology of support	Support tool			Impact on eco-innovation in local context	Involvement in SOP definition ?
			Title	Short description	Reference to the project's document		
				provision of R&D subsidies			
Regional Craft and Entrepreneurial Chamber Koper	Local level	- Service	Local operational support to entrepreneurs	Various operational support tasks to entrepreneurs		In-direct	Yes (meetings)
Business Incubator of Sežana	Local level	- Service	The Business Incubator of Sežana is a Best Practice incubator in Southern and Eastern Europe	-	-	Direct influence on enterprise creation	Yes (meeting)
University Incubator of Koper	Local level	- Service	The University Incubator of Koper provides business planning and entrepreneurial support services to spin-off companies of University of Primorska	-	-	Direct influence on enterprise creation	Yes (meeting)
GOLEA - Local Energy Agency Goriska	Regional level	- Service	GOLEA provides advice to Public and private bodies. Although not members, Municipalities of Coastal - Karst Region occasionally also access GOLEA services.	Development, research, educational, promotional and advisory activities in the field of energy efficiency and introduction of renewable energy sources in Goriška Statistic region to maximize local energy self-sufficiency			No

## 5.3 A GENERAL COMMENT ON THE EXISTING INSTITUTIONAL CONTEXT

### 5.3.1 *The main stakeholders and tools for innovation and eco-innovation.*

The main stakeholder that influence eco innovation in the Inner-Karst region are:

#### National level:

- **Ministrstvo za visoko šolstvo in znanost - Ministry for Higher Education, Science and Technology (MHEST)** defines policies and performs tasks in the areas of higher education, research, technology, metrology, and promotes the information society in areas that do not fall within the responsibilities of other ministries. It also coordinates state directed activities in the area of information society. Influence on the regional eco innovation is indirect in formulation of legislation and installation of relevant support programmes in area of research and development.
- **Ministrstvo za okolje in prostor - Ministry of the Environment and Spatial Planning (MESP)** defines policies and performs tasks in the areas of ensuring healthy environment for all the inhabitants of Slovenia, encouraging and coordinating efforts aimed at sustainable development grounded in social well-being, and based on the prudent use of natural resources. Influence on the regional eco innovation is indirect in formulation of legislation and installation of relevant support programmes in area of ecology.
- **Ministrstvo za gospodarstvo - Ministry of the Economy** defines policies and performs tasks in the areas of internal market, enterprise and competition, foreign economic relations, tourism, energy and electronic communications. Influence on the regional eco innovation is indirect in formulation of legislation and installation of relevant support programmes in area of competitiveness and innovation.
- **Javna agencija RS za podjetništvo in tuje investicije - Public Agency for Entrepreneurship and Foreign Investment (PAEFI)** looks after the implementation of the development policy designed to cater to the development of entrepreneurship and competitiveness in Slovenia on one hand, and to run programmes aimed at attracting foreign direct investments and company internationalisation on the other. Influence of PAEFI - JAPTI on the regional eco innovation is indirect in form of implementation of support programmes for innovation.
- **Tehnološka agencija Slovenije - Slovenian Technology Agency (STA)** is an independent public agency responsible for the enhancement of technology development and innovation in the Republic of Slovenia. Its main activities are granting programs aimed at technology development and fostering cooperation of R&D institutions and universities with the industry. An important part of STA's activities are international projects. Through the cooperation with partners abroad,

the agency strives to develop new policies in technology development and services in the Slovenian industry.

Influence of PAEFI - JAPTI on the regional eco innovation is indirect in form of implementation of support programmes for research and development as well as innovation.

- **The Slovene Enterprise Fund (SEF).** This is a central national institution founded with the aim of making the sources of funds more accessible to SMEs. SEF cooperates closely with other domestic and international financial institutions, such as commercial banks, the SID Bank, the European Investment Fund (EIF) and the European Mutual Guarantee Association (AECM). Financial instruments available include Enterprise Grants to innovative Start-ups, Guarantee Funds as collateral for bank loans intended for financing of development & expansion investments and Risk Capital.
- **EKO - SKLAD J.S. - Eco Fund of Slovenia.** The Fund encourages the development of environmental protection by providing loans or guarantees for environmental investments and other forms of assistance. The Fund promotes investments that comply with National Environmental Action Plan and European Union environmental policy.

#### Regional level:

- **Regional Development Center Koper, together with ORA Sežana - subregional agency for Karst and Brkini in PPC Piran, perform the following undertakings:**
  - services in the area of designing and performing projects and regional structure policy;
  - enhancement of local and regional development in the area of economy, social matters, spatial planning and environment;
  - **management of a SME guarantee scheme to support innovative SME investments. The scheme current funding is 1.5 Mio Eur. Since Multiplication factor is 2.0:1, with the current resources, the guarantee scheme is currently financing up to 3.Mio Eur of SME investment programmes, on a revolving basis.**
  - consultancy and enrichment of small economy development;
  - coordination of the Scholarship scheme for Coast-Karst region;
  - guidance on innovation and technological development;
  - designing, coordinating and assessing the execution of regional development programmes;
  - training and education;
  - other activities directed to region development.

The RDC Koper prepares strategy studies and implements part of operational support for regional development as well as participates in the several national and EU projects.

The RDC is engaged in the process of launching the RTI SI, as a Technology Incubator with the mission to foster creation and growth of innovative enterprises in the region.

- **Regional Chamber of Commerce in Koper** provides support activities to companies acting in different business environments. Among other things, the Chamber offers the following services:
  - data and information on the economic situation: statistics, population, labour market, economic sectors, foreign trade, production;
  - legal and contractual information that govern domestic and international activities in Slovenia;
  - information on fairs in Slovenia;
  - useful addresses in Slovenia;
  - credit report information on Slovenian companies;
  - seeking out and selecting potential customers and suppliers for effective matchmaking.

**In the field of innovation** - through deep knowledge of the Slovenian R&D policy - the Chamber actively contributes to support the technological platforms and 'innovative clusters' on the national level. The Chamber has a comprehensive insight into the R&D sector in Slovenia - from institutions to enterprises. The Regional Chamber of Commerce coordinates also successful regional contest in innovation.

- **PIC - Inkubator Sežana** is a support organization for innovative small and medium-sized enterprises and entrepreneurs. It contributes to regional and local development by creating new innovative companies and innovative projects in existing SMEs. The Centre is officially recognized by the European Commission under the special scheme of certification and quality control operations of EBN - The European Business and Innovation Center Network.
- **GOLEA - the Local Energy Agency of the Goriška Statistical Region** provides advice to Public and private bodies. Although not members, Municipalities of Coastal - Karst Region occasionally also access GOLEA services. Activities include Development, research, educational, promotional and advisory activities in the field of energy efficiency and introduction of renewable energy sources in region to maximize local energy self-sufficiency. Since no Local Energy Agency is available in the Coastal-Karst region, GOLEA is the reference Agency also for some these Municipalities, even if they are not yet formal members.
- **Programme IN PRIME 2002- 2013 (Innovation breakthrough of the Primorska region)** was set by the statistical regions Goriška, Coastal-Karst and Inner-Karst. The plan intends to accomplish the vision that the whole Primorska region becomes one of the most innovative and competitive regional economies in the new Europe. In order to accelerate regional development, the programme creates linkages and connections among human, financial and technology resources. Several projects

have been established and a network of technology nodes has been created financed by European and Slovenian funds.

- **TOC d.o.o. , Tehnološko - okoljski in logistični center, Technological and environmental centre ltd.** is a high-technology enterprise established by the Port of Koper, the Municipality of Koper and private entrepreneurs. The company is dealing with the development of new transport and environmental technologies. It also provides analytical and certification services to the Port related to certification of fuels and other goods. In 2008 the company developed a new sustainable technology for the transformation of waste from the paper industry in an eco absorbent material for cleaning the water surface, eg. in ports, marinas etc. The Executive Agency for Competitiveness and Innovation (EACI) awarded 1.5 MEUR for the development of the innovation. The technology has been invited to take part at The 2009 Eco-Innovation Summit in Brussels.

#### Local level:

- **Regional Craft and Entrepreneurial Chambers Koper** support its members who are seeking for support to develop their business idea. It associates (on the basis of the Law of Craft) craftsmen and other small businesses in a local environment. They are obliged to manage several important tasks:
  - Representing craftsmen before the state/local authorities and defending their business interests,
  - Giving information to craftsmen,
  - Offering services to craftsmen,
  - Realisation of different public authorisations (issuing craft permits, keeping the craft register and the register of craft masters)

The main activities of the Chambers are thus: consulting, training and education, coordination, designing and supervising projects, information, ensuring and coordinating financial resources - financial engineering. They collaborate in different development projects.

### ***5.3.2 DIFFICULTIES AND PROBLEMS ENCOUNTERED WITH REFERENCE TO STAKEHOLDERS AND TOOLS FOR ECO-INNOVATION***

Eco-Innovation is the result of strong collaborative efforts on the part of many different stakeholders - both public and private.

The main problems preventing stakeholders to collaborate effectively have been developed as a result of shortage of funds or resources, lack of qualified or trained personnel, different legislative priorities or mandates, duplicated services or the need for additional services, pressures from clients, and ownership of mutual problems.

A particularly important problem arises from the very narrow localistic mentality of Municipalities, which typically expect that own funds. A notable example is the guarantee scheme managed by the RDC Koper whereby funds made available by various participating Municipalities to support entrepreneurship are required to be used strictly for beneficiaries located on their own territory.

Competition among stakeholders and namely public agencies for resources often provokes frictions that could harm the whole innovation and entrepreneurial support systems. Ultimately, the main losers are the entrepreneurs served by the systems. Reducing competition and developing a sense of cooperation and interdependence among public stakeholders are, therefore, vital to serving entrepreneurial target groups and accomplish the mission to jointly support Eco-Innovation through shared tools.

The following factors have been identified to inhibit the success of collaboration:

- a) **lack of a deeply shared joint regional development vision;**
- b) **unclear operational goals and objectives ;**
- c) **difficulties of understanding of other agencies' policies,**
- d) **lack of communication between policymakers and service providers,**
- e) **lack of time for collaborative efforts, and**
- f) **gaps in evaluating impact of services.**

Other barriers identified include: (g) inconsistent service standards, (h) difficulty in defining decision-making rules among team members, (i) insufficient time, (j) lack of sustained availability of key people, and (k) resistance to change.

### ***5.3.3 ACTORS AND TOOLS FOR THE NEXT FUTURE***

#### **The Regional Technology Incubator of Slovenian Istra (RTI SI)**

There is a widespread consciousness among leading public and private organizations in the Coastal-Karst Region that the available business and intellectual resources do not meet their full potential capacity for wealth creation through continuous breakthrough innovations brought to market. Funds invested in R&D do not generate equivalent effects and results in the market. Meanwhile, competitive pressure is increasing and new threats are emerging as a consequence of the global economic crisis.

The RTI SI is intended to be the key tool to counter this threat and contribute to regional development by fostering the creation of new innovative companies (incubation); accelerated growth and continuous innovation of existing companies on global markets; attraction of companies from abroad.

The RTI SI concept belongs to a new type of integrated entrepreneurial support infrastructure which is emerging, designed to activate market, entrepreneurial, business and scientific potential through continuous innovation. Operations and services are

grounded upon the leading experience in supporting entrepreneurship in the region gathered by RDC Koper in over a decade.

Urgent action is required in order to overcome the important structural weaknesses such as:

- a lack of young companies, with high potential for global growth,
- modest growth of existing SMEs,
- difficulties for SMEs to generate and bring to market continuous innovations

Based upon a thorough opportunity and needs analysis conducted in the Region, RTI SI would focus on supporting innovative SMEs from the following three main sectors:

- **Transport and logistics**
- **Mechatronics and ICT**
- **Eco- Innovation**

The role of the RTI SI is to contribute to fill the “development and acceleration gap” in high technology sectors by establishing better connections among existing and new companies, potential customers, investors and strategic partners and stakeholders. The RTI SI has been proposed since several years, but the construction of its premises has been so far delayed, lately due to the financial crisis which is affecting some of its main stakeholders. National/ERDF and Municipal co-financing have been secured in the percentage of 50% of investment costs (up to 2,5 Mio Eur). The new RTI SI is envisioned to integrate also the:

#### **The University incubator of Primorska**

The University incubator has been established at the University of Primorska with the mission to link the academic sphere with the economy in order to extend the entrepreneurial culture among young people, students, teaching staff and researchers and other population of the Primorska region. The Incubator aims to become a leading Slovene university incubator according to the number of successful newly established start-up and spin-off companies founded by professors and students.

The Innovation school is intended for the development of new products or services, processes or business models and is directed at creating innovations.

#### **The Port of Koper**

The Port of Koper, besides environmental certification activities, has set for itself the following **Specific objectives for sustainable development**:

- **reduction of emissions  $PM_{10}$  on the entire area of the port to  $30 \text{ mg/m}^3$ .**
- **increase of the share of separate waste collection to 80% of all waste.**
- **cleaning of sanitary waste water in the extent of 100% of all waste water.**

Also in the field of human resources and organisation, the Port of Koper has stated it will strive to raise the level of innovation, with the following objectives:

- obtain 5 innovative proposals per 10 employees or
- obtain one improvement per each employee in the long term.

The Port is leading the following entrepreneurial initiatives connected to Eco-Innovation:

**Tehnološki okoljski center (TOC) d.o.o. - Technological and environmental centre ltd.**

TOC has been established by the Port of Koper together with private partners and the Municipality of Koper. TOC seeks new technological solutions for environmental conservation and carries out technological and ecological researches. TOC is focused on renewable sources of energy, waste processing and fuel quality analysis.

Eco-morje, d.o.o. The enterprise will have three concessions to deliver services for safety protection of the sea within the port area and will apply for a concession for the implementation of the activity for the protection of the sea on the entire territory of the Slovenian sea.

Project Ecopark In 2008, together with Centre TOC, the Port prepared a conceptual project entitled Ecopark, which foresees the establishment of a innovative waste treatment centre, whereby municipal waste would be transformed into energy and recycled materials.

Ecoporto Koper, d.o.o. The new enterprise has developed an innovative technology to produce fuel oil from oily water, which can be used for own needs or sales. The new method of processing involves an entirely non-invasive technology (oil and water separation), which does not involve emission in the environment.

Adriazole, d.o.o. The newly established enterprise will set up and manage a photovoltaic power plant with a net power of 2MW. Sollar collectors will be mounted on the roofs of warehouses.

## Part 6. STRATEGIC LINES

## 6. STRATEGIC LINES

### 6.1 IDENTIFICATION OF THE SECTOR/SECTORS AND/OR CANDIDATED ECO-INNOVATION TYPOLOGY

“Eco-Innovation” is characterized by growing market demand despite the current economic crisis. This sector represents therefore a very important opportunity and a strategic priority to accelerate company growth and business creation in the Coastal-Karst Region. Eco-innovation, albeit indirectly, falls among the strategic priorities of the RDP 2007-2013 of the Primorska Region.

Eco-innovation is a large and fast growing market, several needs to minimize energy consumption, CO<sub>2</sub> emissions, reduce waste etc. can be identified in the local economy. These needs can often be satisfied by innovative products and services developed by local SMEs teaming up with research groups and Universities.

Along with other private and public stakeholders and public institutions of the region, the RDC Koper can play a dual role:

- (a) be an agent for change, stimulation, and networking - thus contributing to aggregation of actors and initiatives leading to innovative processes, products and services.
- (b) activate financial resources, starting from adapting its own guarantee scheme for SME investments

The strategic role of RDC Koper is to be therefore an activator and a catalyst for change in eco-innovation and financial resources, private and public. The strategy needs to be based on incremental steps, aimed at launching **Demonstrator - Flagship Projects**.

The target of the Strategy are Small and micro enterprises, which need to be supported in order to enter into this high growth market.

Projects need be characterized by the following features:

- strong market orientation and sustainability in the medium and long term;
- potential for application outside the region, on the basis of capacity for leadership, collaboration and local action of main proponents;
- availability of funding - i.e. private and public resources (region, national, European)
- opportunity to implement financial tools of rotating nature (i.e. credits rather than grants and subsidies)

On the basis of the above criteria, and of the strengths of the region, the following sectors / candidates for eco-innovation have been identified as priorities for eco-innovation in the Coastal-Karst region:

1. ECO-INNOVATION FOR MARITIME LOGISTICS AND TRANSPORT
2. ICT BASED ECO-INNOVATION
3. “INNOVATIVE BUILDING” ECO-INNOVATION FOR HOUSING, BUILDING AND CONSTRUCTION
4. TECHNOLOGY INCUBATOR SUPPORTING ECO-INNOVATIVE FIRMS
5. GUARANTEE SCHEME SUPPORTING ECO-INNOVATIVE FIRMS

Due to the limited amount of funding available for RDC Koper under the MEDOSSIC project budget for implementation of Pilot Actions, all Pilot actions will be implemented within Projects already benefitting from available consistent funding, i.e.:

**PILOT ACTION 4: TECHNOLOGY INCUBATOR SUPPORTING ECO-INNOVATION**

**PILOT ACTION 5: GUARANTEE SCHEME SUPPORTING ECO-INNOVATION**

Together, the above multiannual projects have a total investment target of up to 5.3 M€, thereby generating a potentially very significant impact on the regional entrepreneurial development strategy.

The MEDOSSIC Project has enabled to outline the entrepreneurial relevance and potential of Eco-Innovation, and to include it as a main priority for the overall strategy of both the Regional Technological Incubator of Slovenian Istra (RTI SI) and the Credit Guarantee Scheme for Innovative Companies . Vice-versa, the identification of regional development opportunities related to Eco-Innovation offers a strategic framework accelerating the implementation of both Projects.

In all of the retained sectors, the role of the RDC Koper is as follows:

- highlighting the opportunities for business, especially as related to Lead Users,
- contribute at organizing collaborative (“Open Innovation”) local supply through the aggregation of complementary competencies (SMEs, University, contractors, artisans and skilled human resources) and in terms of training, qualification, technological transfer.
- Providing financial means - first of all by adapting its own guarantee scheme

These with the aim of creating a network of businesses in the Coastal-Karst Region the competent, qualified to operate according to principles of efficiency and sustainability, able to seize the opportunities arising from renewable resources and sustainable development in the construction field.

## 6.2 IDENTIFICATION OF THE GLOBAL OBJECTIVE

The Global Objective is to improve the overall health of the local economy by providing a stable and predictable set of common assets (information, finance, human, etc.) that SMEs and other organizations use to build their own offerings. The projects aim to increase competitiveness, productivity and growth of the local economy by connecting network participants to one another therefore making more efficient the creation of new products and services. The global objective of the project is to improve the offer and demand of Eco-innovations by helping to consistently incorporate technological innovations and business growth skills (marketing, finance, organization) by providing a reliable point of reference that helps participants respond to new and uncertain conditions. The project is also intended to encourage eco-innovation niche creation by offering innovative technologies to a variety of third-party organizations.

The following Global SOP objectives have been identified:

- Promote Eco-Innovation Entrepreneurship
- Support financing of Eco-Innovation Investments
- Accelerate creation and growth through Technology Park and business incubation programmes
- Business Advisory Services Customer Development / Technology Programmes
- Eco-cluster projects (Maritime Transport; Green Buildings; ICT and Eco-Innovation)
- Support access to venture capital funds

Five major Flagship projects have been identified :

### **6.2.1 ECO INNOVATION FOR MARITIME LOGISTICS AND TRANSPORT**

The activities of the Port of Koper are characterised by significant needs for innovative solutions concerning energy savings, environmental control, safety and security needs. The Port is of considerable economic and employment importance and of extraordinary importance and is already playing an important role in driving innovative SME as suppliers of eco-innovative solutions to its diverse needs. The Company is currently subject to intense competition and cost pressure, which is mandating to focus on efficient logistics, safety and organizational processes as well as on innovations offering both savings and improved environmental impact. In the Coastal-Karst region there are numerous SMEs, frequently operating on local and niche markets, which often are able to design and build prototype solutions.

The partnership with the Port of Koper allows SMEs to thus acquire new technology skills and learn and conform to strict environmental standards. Once the innovative solution has been put in place it is then possible to use this as a commercial reference to start larger series production, achieve economies of scale and sell on to the very competitive global markets. Several innovations may well apply to other sectors than Port or maritime logistics - i.e.: construction, energy saving, environmental technologies.

The main role of RDC Koper is to support such project by coaching entrepreneurs on networking, business planning, access to human resources, promotion , etc - as well as by making available its guarantee scheme to SMEs that have been identified by the Port of Koper as innovative suppliers.

Eco-Innovation for maritime logistics would also benefit from the existing service support and research infrastructure available within the Platform for Sea Technologies, for which the Port of Koper is one of the leading stakeholders.

In Friuli Venezia Giulia, the “DITENAVE” (Distretto Tecnologico Navale - Technological Cluster for Shipbuilding”) has similar SME support objectives, and it seems opportune to connect the two projects together.

### **6.2.2 "INNOVATIVE BUILDINGS"**

The Project is aimed at demonstrating cost-effectiveness ("full cost") of new solutions for energy saving bioclimatic architecture in the broadest sense. The project is aimed to stimulate innovation at construction companies and local artisans (e.g. installators of HVAC and electric systems), public institutions (e.g. schools, public housing), banks, local bodies. The demonstration project in collaboration with the banking system to launch ad hoc financial products (loans, guarantees) as to offset the greater initial investment with greater subsequent savings in energy and utility consumption. Other aspects related to the proposed project are: safety and environmental responsibility certification, energy certification of buildings, education of professional experts (engineers, architects, etc) in matters of energy efficiency and bioclimatic architecture.

The demonstration project can be strengthened extending it to Notranjsko Kraska, and through connections with GOLEA in Nova Gorica, the certification center for innovative construction materials in Ajdovscina, and - across the border - with similar initiatives being carried out in Friuli Venezia Giulia. In Friuli Venezia Giulia the reference actor is APE (Regional Energy Agency), which collaborates with the Chambers of Commerce of Gorizia, Trieste, Udine and Pordenone on a similar approach.

### **6.2.3 ICT ECO-INNOVATION**

ICT is at the center of innumerable eco-innovations, such as ICT goods and services generate significant improvements in economic and social structures. These ICT-enabled changes affect economic and social parameters such as: the attitudes, expectations and behaviour of individuals as consumers, citizens and members of communities; the demand and supply of goods and services; organizational structures; production, distribution and service processes; and governance in the private and public sectors. ICT is therefore playing a potentially significant role in successful global response to the challenge of climate change. The subject of ICT eco-innovation covers a wide range of additional fields such as: using ICTs to improve practices in agriculture and forestry; monitoring atmospheric and water pollution; waste management and recycling; disaster warning and

relief; improving the efficiency of the energy, transportation, goods and services sectors; and ICTs as a source of toxic waste.

The Coastal-Karst region boasts a critical mass of capabilities and competencies available at large companies to innovatively develop, apply and use ICTs throughout the economy and society, in government and public institutions, and in the research and academic communities.

SMEs can be included in projects related to the development of production and use of renewable energy (mini-wind turbines, mini-hydro, mini-PV), to feasibility studies for the construction of plants for electricity generation from renewable sources and in particular the use of biomass, organic waste and / or agricultural waste. Software programming is called upon to improve the logistics of biomass load transport to optimize plant performance and the containment of costs of transport and waste disposal.

These ICT related initiatives could have considerable public visibility and large economic impact - and would open the way for considerable entrepreneurial and economic development in the Coastal - Karst region.

Cross-border collaborative projects related to ICT applications for eco-innovation can be explored and activated by linking up with the DOMOTICA project managed by AREA Science Park.

#### **6.2.4 TECHNOLOGY INCUBATOR SUPPORTING ECO-INNOVATIVE FIRMS**

The Technology Incubator of Slovenian Istria (Regionalni Tehnološki Inkubator Slovenske Istre RTI SI) Entrepreneurial is a project consisting in infrastructure premises and related basic services, mentoring and supporting services for potential entrepreneurs. The main expected contributions of the RTI SI to regional development are:

- creation of new companies (incubation)
- accelerated growth of existing companies on global markets
- clustering and collaborative projects among companies.

The RTI SI is expected to offer 2.500 m<sup>2</sup> of total surface (of which 1500 net rentable space for companies, 500 m<sup>2</sup> for common premises, 500 m<sup>2</sup> for management and staff). The total envisaged investment is EUR 2,3 Million.

The Ministry of Economy, has made available financial resources through an ERDF funded public tender for the establishment of a number of "Development Centres for the Slovenian economy".

Whilst the key identified theme for the RTI SI is "Logistics", **the MEDOSSIC Project has enabled to identify Eco-Innovation as the main priority within this theme, and for the overall strategy of the RTI SI.**

**Due to the significant amount of financial resources that have already been set aside, the RTI SI can be regarded as an enabling Project for ALL PILOT ACTIONS related to Eco-Innovation.**

Notwithstanding the availability of ERDF co-financing, the RTI SI is encountering start-up difficulties, notably due to the economic crisis which is affecting all Stakeholders. It is believed that the Eco-Innovation development Strategy that has been devised under the MEDOSSIC project will considerably contribute to accelerate the investment process that will bring the RTI SI to become a high-impact entrepreneurial support reality in the Coastal - Karst region.

### **6.2.5 GUARANTEE SCHEME SUPPORTING ECO-INNOVATIVE FIRMS**

The objective of the Pilot Action is to strengthen the existing Guarantee Scheme operated by RDC with the purpose of providing credit guarantees in favour of innovative SMEs, and particularly investments in new eco-innovative products and services.

Within the MEDOSSIC Pilot Action, RDC Koper would assess the feasibility to increase the size of the Fund available by assessing the availability of the Ministry to earmark ERDF 2007 - 2013 resources for such a purpose.

This Pilot Action should be undertaken in agreement with other Slovenian Regional Agencies, and with the Slovenian Entrepreneurial Fund, in order to submit a joint proposal to the Ministry of Economy. The Agencies may consider using their own, already available and fully operational existing Funds as a source of co-financing .

The RDC Koper has a long track record in making available financial resources to entrepreneurs in ways that are efficient, fast and non-bureaucratic. This implies the adoption of efficient and transparent internal processes.

## **6.3 STRATEGIC SYSTEM**

In relation to the global objective stated above, the strategic lines, namely the strategic system intended to be the basis to pursue the global objective supporting eco-innovation necessarily consists of a mix of market-based and policy tools supported by voluntary agreements involving all relevant stakeholders in the region.

Eco-innovation involves in fact comprehensive changes in policies, production chains, energy systems, product-service systems, consumption patterns and lifestyles.

Table 6 outlines the main strategy lines that need be activated with reference to the three identified sectors (1. Eco-innovation for maritime logistics and transport; 2. ICT based eco-innovation; 3. “Innovative building” eco-innovation for housing, building and

construction), an integrated set of strategy lines is required to generate impact and broad consensus.

*Table 6: Strategy Lines for Eco-Innovation Projects*

Strategy line	How	Policy Area
Public procurement	<ul style="list-style-type: none"> <li>- Foster green public procurement</li> </ul>	<ul style="list-style-type: none"> <li>- relevant for all fields with the public procurement capacity (notably transport, construction and housing policy, defence)</li> </ul>
Standards and normative framework	<ul style="list-style-type: none"> <li>- encourage SME environmental certification eco-labels and other soft standardisation instruments (Energy Efficient Buildings)</li> </ul>	<ul style="list-style-type: none"> <li>- environmental policy</li> <li>- industrial policy</li> <li>- energy policy trade policy</li> <li>- local development</li> </ul>
Support for innovation activity	<ul style="list-style-type: none"> <li>- Promote Eco-Innovation Entrepreneurship</li> <li>- Provide / adapt financial schemes (guarantees, loans and credits)</li> <li>- Facilitate access to subsidies (e.g. renewable energy infrastructure subsidies)</li> <li>- Technology Park and business incubation programmes</li> <li>- business advisory services customer development / technology programmes</li> <li>- targeted eco-cluster policies (cluster involved in eco - innovation development and support for eco-innovative solutions in 1. Maritime Transport; 2. Green Buildings; 3. ICT and Eco-Innovation)</li> <li>- Facilitate access to venture capital funds</li> </ul>	<ul style="list-style-type: none"> <li>- economic policy</li> <li>- energy policy</li> <li>- innovation policy</li> <li>- entrepreneurship policy</li> <li>- research policy</li> <li>- regional policy</li> </ul>
Capacity building and demonstration measures	<ul style="list-style-type: none"> <li>- professional training (eco-efficiency capacity building for enterprises and housing)</li> <li>- changes in educational programmes</li> </ul>	<ul style="list-style-type: none"> <li>- education and training policy</li> </ul>
Strategic planning and foresight	<ul style="list-style-type: none"> <li>- green foresight</li> <li>- strategic spatial planning</li> </ul>	<ul style="list-style-type: none"> <li>- foresight is relevant for all policy fields</li> </ul>

The Five Strategy Lines of Table 6 have been identified, each of them dynamically complements the others. Each Strategy Line involves measures / tools to accelerate SMEs innovation and growth in the region, and the alignment of the regional standards to EU standard of excellence.

Of the strategic lines outlined in Table 6, the “Support for Innovation Activity” is the one where RDC Koper will have the highest direct impact in implementation.

In order to provide a detailed blueprint of how a multi-firm collaborative network can be built and operated by RDC Koper, the following three strategic components<sup>11</sup> must be defined:

- **Organizational Components and Structure;**
- **Management Processes;**
- **Sustaining Mechanisms.**

### ***6.3.1 Organisational Components And Structure***

#### **Setting up a Network of Member and affiliate firms**

RDC KOPER, and in the future the RTI SI, will **assemble a dynamic network of member firms and affiliates**. Member firms are expected to create products and services for their own markets and to work with other firms in the network on Eco-innovation projects. The network is dynamic in that none of its members has a fixed role, and the resources each firm has assembled are often shared in business ventures with other firms, usually but not always within the network. It is also dynamic in that its membership should expand dramatically since founding, and the process of adding new members must be ongoing.

#### **Launching Market Exploration Workshops**

Workshops should be held periodically in order to identify market opportunities and foster collaboration across the network on development projects that do not have obvious connections to the SMEs' own markets.

SMEs are expected to engage in joint development efforts and to contribute needed skills and abilities to other firms without prior calculation of costs or benefits. It is the responsibility of the user to recognize contributions and initiate equitable payment, and to make certain that the provider is satisfied with the outcome.

#### **RDC Koper acting as Central Services Office**

The services provided by the CSO fall into five categories:

- a) **continuing education**, and it focuses mainly on the development of **collaborative skills and processes**. That CSO facilitates discussions of inter- firm collaboration among member and affiliated firms, and it publishes accounts of outstanding examples of wealth creation and appropriation.
- b) **identifying new network members**. The CSO staff helps member firms create visionary scenarios for their respective industries, including market maps that identify potential new Eco-Innovation members.
- c) **venturing**. The CSO provides a variety of venturing services to member firms, such as facilitating the acquisition of project opportunities with Lead Users. CSO staff specialists work with member firms on all matters involving the generation of

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<sup>11</sup> Raymond E. Miles, Grant Miles, Charles C. Snow - COLLABORATIVE ENTREPRENEURSHIP, 2005

venture Business Models; the activation of sources of financing (private and public), the pursuit and protection of intellectual property.

- d) **Innovation Catalog.** The overall objective is to make ideas, product or service designs, and research projects developed in any one firm available to all member firms. The Innovation Catalog should be supported by an intranet.
- e) **Project Management.** The CSO does not manage any of the various projects directly; this is done by the member firms themselves. However, the CSO monitors the development of the various projects, acting as a consulting firm that helps SMEs set up and operate virtual organisations that may span firms, industries, and countries. The CSO may utilize adequate project management software designed for use on its intranet.

### **6.3.2 Management Processes**

#### **Operating protocols**

The term protocol is utilised to address voluntarily agreed-on behaviors which are likely to lead to trust and collaborative behavior: (1) demonstrate trust by immediately sharing something valuable, (2) stimulate equitable reciprocity by volunteering a generous distribution of jointly created returns, and (3) publicly give credit to collaborators for their contributions to innovation projects.

#### **Philosophy of minimal organisation**

Financial constraints mandate to keep at a minimum the basic structure. The main components of which are: a **Leaders' Council** at the executive level, **facilitators** at the managerial level, and **innovation teams** at the operating level. Innovation Teams are made up by personnel of SMEs taking part to specific eco-innovation projects. Leaders' Council members are appointed based on their technical and/or market knowledge as well as collaborative skills. The **Leaders Council** meets periodically to assess all of the ongoing projects and to offer assistance as appropriate.

#### **Self-management**

Innovation teams are largely self-managed and are engaged in the specific projects and lead users.

### **6.3.2 Sustaining Mechanisms**

#### a) Motivation and rewards

The Eco-Innovation network permits individuals and teams in its member firms to satisfy their needs for growth and accomplishment primarily through the work that they do, coupled with the confidence that their economic returns will be equitable and their long-term rewards will be exemplary. SMEs are urged to work with local leaders to make valued contributions to the communities in which they operate.

**b) Financial returns on the Guarantee Scheme for Innovation Loans**

RDC Koper operates a successful guarantee scheme, which it intends to strengthen and offer to SMEs participating in Eco-Innovation projects, in order to sustain their R&D investments in developing “proof of market” market prototypes. As a result of successful adaptation and use of the guarantee scheme to Eco.-Innovation projects, the scheme is expected to be strengthened with additional funding being provided through the EIF - European Investment Fund.

**c) Ongoing investments**

There is broad recognition within the Eco-Innovation network that the entire enterprises is built primarily on intangible assets. Therefore, investments made by member firms in areas such as R&D, education and training, information technology, brand development, and relational capital will be co-financed through **programmes available at the national, EU, cross border levels.**

**Success Factors**

The main success factors for the Strategy are the following ones:

- **the strategy must be "proactive" and bottom-up.** It is fundamental in fact that **each initiative will be preceded by the presence of a champion** (entrepreneur or manager within a larger organization). Furthermore, an analysis must be conducted of market potential and competitive positioning to justify the investment. Particular attention should be given to collaborative forms of enterprises that come together to accelerate product development and introduction on the international markets.
- **To work closely with the SME support system and instruments that are made available to support Eco-Innovation in Slovenia and in the EU.** Appropriate "twinning" initiatives must be put in place with other institutions (eg technology parks, guarantee schemes and innovation funds, guarantee funds, etc..) of Slovenia to ensure maximum efficiency and to take part into the activities of Eco-Innovation clusters spanning across borders.

## 6.4 FRAMEWORK OF THE OPERATIONAL OBJECTIVES

The following “set of objectives” is specific to the “Support for Innovation Activity” strategic line outlined in Table 6. This strategy line is in fact directly affected by the entrepreneurial support activities conducted by RDC Koper.

*Table 7: Strategy Lines and Operational Objectives*

Strategy line	Operational Objectives
- Promote Eco-Innovation Entrepreneurship	- Devise and communicate Eco-Innovation activities through NewsLetter, web site, press-conference
- Provide / adapt financial schemes (guarantees, loans and credits)	- Adapt procedures of existing guarantee scheme to support Eco-Innovation investments of SMEs - Provide guarantee financing to 2 - 4 SMEs for investments in Eco-Innovation - Put forward a National Slovenian proposal for a Guarantee scheme for Innovation and Eco-Innovation - compatible with EIF standards
- Facilitate access to subsidies (e.g. renewable energy infrastructure subsidies)	- Explore feasibility to involve the Slovenian Eko Fund and GOLEA to co-finance Energy Efficient Buildings initiatives and Demonstration Projects
- RTI SI and business incubation programmes	- Launch a RTI SI Membership Programme - Involve Private Stakeholders in co-financing the RTI SI Infrastructure - Devise an Integrated support programme for Eco-Innovation with the University Incubator and with Inkubator Sežana
- Business Advisory Services Customer Development / Technology Programmes	- Set up a “Leader’s Council” and a roster of external experts to advise companies - Provide advisory services for business growth to 2- 4 SMEs, on a pilot basis
- Eco-cluster projects	- Launch Clusters: 1. Maritime Transport; 2. Green Buildings; 3. ICT and Eco-Innovation
- Support access to venture capital funds	- Explore feasibility of VC financing for 1 SME

## 6.5 ANALYSIS OF THE COHERENCE AMONG INTERVENTION NEEDS, AND POSSIBLE STRATEGIC LINES AND OPERATIONAL OBJECTIVES

### MATRIX 2 -ANALYSIS OF THE COHERENCE BETWEEN INTERVENTION NEEDS AND STRATEGIC LINES

a. Intervention needs	b. Sector/typology of reference eco-innovation	c. Strategic lines	d. Involved or to involve stakeholders	e. Relevance for the strategy
1. Poor financial background in the region, low added value	Tourism, manufacturing and renewable energy	Education, mentoring	Businesses, politics, households	4
2 Brain drain (to Ljubljana), no R&D and no critical mass for R&D	manufacturing and renewable energy	support, education	Businesses, politics, households	3
3. Lack of ambitious development planning and low EU funds absorption	Tourism, manufacturing and renewable energy	Promotion, support mentoring	Businesses, politics, households	2
4. Slow growth of local economy	Tourism, manufacturing and renewable energy	Education	Businesses, politics, households	5 - the least relevant among this group
5. Lack of innovative culture, thinking and new ventures	Tourism, manufacturing and renewable energy	Promotion, support, education, mentoring	Businesses, politics, households	1 - the most important issue

**MATRIX 2 -ANALYSIS OF THE COHERENCE BETWEEN INTERVENTION NEEDS AND STRATEGIC LINES**

<b>a. Intervention needs</b>	<b>b. Sector/typology of reference eco-innovation</b>	<b>c. Strategic lines</b>	<b>d. Involved or to involve stakeholders</b>	<b>e. Relevance for the strategy</b>
Integrate the economy with educational and research institutions	All	Support for Innovation Activity	University, Companies, citizens	3
1.2 Encourage entrepreneurial culture for the young and women	All	Support for Innovation Activity	Government, Trade Associations, Municipalities, University, Companies, citizens	2
2.1 establish the TECHNOLOGY PARK as the CORE of the entrepreneurial innovation ECOSYSTEM	All, priority to: Maritime Logistics, Mechatronics, Eco-Innovation	Support for Innovation Activity	Government, Trade Associations, Municipalities, University, Companies, citizens	1
3.1 Implement regional policy for systemic eco-innovation and entrepreneurship promotion	All	Support for Innovation Activity	Government, Trade Associations, Municipalities, University, Companies, citizens	4
4.1 CAPACITY BUILDING - demonstration and raising awareness programmes	All. Priority to Maritime Logistics, ICT Eco Innovation and Innovative Buildings	Support for Innovation Activity; Capacity Building and Demonstration	Port of Koper, Trade Associations, Municipalities, University, Companies, citizens	2
5.1 Adapt and TEST the RDC innovation guarantee scheme for innovation financing	All	Support for Innovation Activity	Government, EIF, other Slovenian Guarantee Agencies	2
6.1 Awareness raising and demonstration	Maritime Logistics, ICT Eco Innovation and Innovative Buildings	Capacity Building and Demonstration	Port of Koper, Trade Associations, Municipalities, University, Companies, citizens	3
7.1 connect with neighboring regions in slovenia and Italy	All	Support for Innovation; and Demonstration	Area Science Park, Region Friuli Venezia Giulia, Region Veneto, Region Emilia Romagna	4
8.1 ORGANIZE FUNDING FROM CONCEPT TO PROTOTYPE STAGE INVOLVING STAKEHOLDERS	Maritime Logistics, ICT Eco Innovation and Innovative Buildings	Support for Innovation and Demonstration	Government, EIF, other Slovenian Guarantee Agencies	5

**Matrix 3 - SYNTHESIS FRAMEWORK OF SOP OBJECTIVES**

Global SOP objective	Strategic lines	Operational objectives	Possible identifiable actions
A. Promote Eco-Innovation Entrepreneurship	1. Promotion	Rising awareness of eco-innovation entrepreneurial opportunities	Promoting eco-innovation through RDC Koper Newsletter, web-site and new mass media (blogs, advanced web portals)  Organize (participate to) 3 workshops dedicated to explore venture opportunities in:  1. Maritime Transport; 2. Green Buildings; 3. ICT and Eco-Innovation
	2. Eco-Innovation Prizes	Encourage Eco-Innovation Idea Generation and Entrepreneurship	Team up with the Port of Koper to extend to outside participants a contest for Eco-Innovation Idea Generation  Explore the feasibility for a Business Plan Competition to be launched in partnership with the University Incubator  Explore feasibility of establishing a seed capital initiative for Young Eco-Innovation Entrepreneurs
B. Support financing of Eco-Innovation Investments	3. Provide / adapt financial schemes (guarantees, loans and credits)	Accelerate learning in Eco-Innovation Project Assessment and Rating	Adapt procedures of existing guarantee scheme to support Eco-Innovation investments of SMEs  Provide guarantee financing to 2 - 4 SMEs for investments in Eco-Innovation
		Set up the competence grounds to increase the size of the guarantee scheme	Put forward a National Slovenian proposal for a Guarantee scheme for Innovation and Eco-Innovation - compatible with EIF standards
	4. Facilitate access to subsidies (e.g. renewable energy infrastructure)	Increased number of successful eco-innovation projects	Explore feasibility to involve the Slovenian Eko Fund and GOLEA to co-finance Energy Efficient Buildings initiatives and Demonstration Projects  Exemption from local taxes when investing in eco-innovation projects.

	subsidies)		
C. Accelerate creation and growth through RTI SI and business incubation programmes	5. Involve SMEs and Leaders in the RTI SI Project	Increased number of successful eco-innovation projects	<p>Launch a RTI SI Membership Programme</p> <p>Involve Private Stakeholders in co-financing the RTI SI Infrastructure</p> <p>Devise an Integrated support programme for Eco-Innovation with the University Incubator and with Inkubator Sežana</p>
D. Business Advisory Services Customer Development / Technology Programmes	6. Mentoring SMEs with high growth potential	Increased number of successful eco-innovation projects	Involve entrepreneurs as business Angels and external consultants as coach of Eco-Innovation projects
E. Eco-cluster projects	7. Launch Cluster Projects	Increased number of successful eco-innovation projects	<p>Launch Cluster Projects concerning:</p> <ol style="list-style-type: none"> <li>1. Maritime Transport;</li> <li>2. Green Buildings;</li> <li>3. ICT and Eco-Innovation</li> </ol> <p>Link up with Projects in neighbouring Italian regions</p>
F. Support access to venture capital funds	8. Mobilize external financing for SME investments and Growth	Set up example for financing SMEs with high growth potential	Introduce one high Potential SME to Venture Capital investors

**Part 7**  
**THE OPERATIONAL PLAN**

## 7. THE OPERATIONAL PLAN

### 7.1 GOOD PRACTICES FOR THE ACTUATION OF THE STRATEGIC AND OPERATIONAL PLAN

#### 7.1.1 IDENTIFIED GOOD PRACTICE n.1 Inventive Activities Port Of Koper

Good practice Title	Inventivna Dejavnost (Inventive Activities Port Of Koper)
Promoting Subject	Port of Koper
Good practice description	Internal programme for the ongoing promotion, selection, awarding and implementation of innovative ideas
Info (website, contacts etc.)	www.luka-kp.si
Name of the MEDOSSIC project partner that analyzed the good practice and reference code of the Good Practices report of project partners (deliverable number)	RDC Koper
Why it represent a good practice for the identifies pilot project/projects? What are the relief elements in the good practice suitable for the identified pilot project?	The Inventive Activities Programme allows to systematically encourage, select and put into practice innovative activities

#### 7.1.2 IDENTIFIED GOOD PRACTICE n.2 Inkubator Sežana

Good practice Title	Creation of Innovative companies
Promoting Subject	Innkubator Sežana
Good practice description	PIC - Inkubator Sežana is a leading example of providing sustainable support to entrepreneurs
Info (website, contacts etc.)	www.inkubator.si/
Name of the MEDOSSIC project partner that analyzed the good practice and reference code of the Good Practices report of project partners (deliverable number)	RDC Koper
Why it represent a good practice for the identifies pilot project/projects? What are the relief elements in the good practice suitable for the identified pilot project?	Est in 1992, the business centre Inkubator Sežana offers 10.000 m2 of business premises and a large range of services to support innovation. It currently hosts 34 firms.

**7.1.3 IDENTIFIED GOOD PRACTICE N.3 Technology Logistic Environment Centre**

Good practice Title	TOC d.o.o. - Technological and environmental centre ltd.
Promoting Subject	
Good practice description	Award winning EC Eco-Innovation Programme, the company was set up by Port of Koper, Municipality of Koper and private shareholders
Info (website, contacts etc.)	www.toc.si
Name of the MEDOSSIC project partner that analyzed the good practice and reference code of the Good Practices report of project partners (deliverable number)	RDC Koper
Why it represent a good practice for the identified pilot project/projects? What are the relief elements in the good practice suitable for the identified pilot project?	TOC is engaged in the development of innovations with world-class potential in the area of waste treatment and water reclamation.

## **7.2 PILOT PROJECT N.1 ECO INNOVATION FOR MARITIME LOGISTICS AND TRANSPORT**

### **7.2.1. GENERAL DESCRIPTION**

**ACTION'S TITLE "ECO INNOVATION FOR MARITIME LOGISTICS AND TRANSPORT"**

#### **OPERATIONAL OBJECTIVES**

To develop the Lead User role of the Port of Koper , i.e.:

- To connect the Port's environmental, safety and logistics needs to innovative SME suppliers.
- To arrange financing for prototype / demo implementation
- To promote "Open Innovation" - i.e.collaborative efforts between various SMEs to a) realize system and b) organize for further sales and development
- To explore wider market application of innovations to additional markets (i.e. non-Port related)

#### **INVOLVED SECTOR OR SUBSECTOR**

Remote water sensing and vessel automation

#### **INVOLVED ECO-INNOVATION TECHNOLOGY**

- "high Tech" case: Develop mini-Vessel for sensing water quality and harbor safety with Autopilot
- "Inno-Tech" cases: Low-tech, easy to implement innovations can be developed

#### **INVOLVED OR TO INVOLVE ACTORS/STAKEHOLDERS**

- Port of Koper
- HARPHA SEA d.o.o.
- TOC d.o.o.
- Ministry of Environment, Ministry of Defence
- RDC Koper - Guarantee Scheme

#### **TARGET GROUPS**

- Port Authorities
- Geophysical Research Organizations
- Ministries for Environment
- Ministry of Defence - NATO

#### **ACTION'S GENERAL DESCRIPTION / FORESEEN PILOT PROJECT**

The activities of the Port of Koper are characterised by significant needs for innovative solutions concerning energy savings, environmental control, safety and security needs. The

Company is focussing on innovations to improve logistics, safety and organizational processes while offering both savings and improved environmental impact.

The action will allow to put in place a systematic effort to detect new ideas, select them and bring about prototype implementation. A preliminary assessment will also be carried out to verify potential for wider market application, including outside the logistics/maritime sector.

The methodology is applicable to both high tech solutions and to medium-to-low tech solutions meeting the identified need and lowering energy and other costs.

As a case in point to be evaluated for feasibility during the Medossic implementation is a high tech innovative system (conceptualized by the company HARPHA SEA). The vessel allows for remote sensing of numerous water quality parameters in different points of the harbour. The surface vessel equipped can be guided with autopilot and advanced sensors. The innovation has already been presented to the Port, which considers the concept very important in order to continuously monitor water surface.

Once the prototype will have demonstrated its features, it is then possible to use similar systems for a variety of environmental monitoring applications having global market potential.

Similarly to the above described case, several other - less technologically demanding - innovation needs have been identified by the Port of Koper.

An internal "Invention Discovery" Team, IntraNet web site and Award Process are in place to push all employees to continuously bring forward proposals for energy saving or environmental friendly solutions.

The Intranet may well be made accessible also to external, qualified and accredited SMEs.

RDC Koper may provide guarantees for loans needed by SMEs to develop the innovation Demo/Prototype.

RDC Koper may help SMEs prepare a preliminary market analysis and assist at generating a business plan foreseen business development for the Ports market - and for other markets as well (i.e.: construction, energy saving, environmental technologies).

### **7.2.2. ACTUATION AND MANAGEMENT MODALITY**

#### **PARTNERSHIP COMPETENCES AND THEIR ORGANIZATIONAL MODALITIES**

The key Partner for the Pilot Project will be the Port of Koper, and specifically the R&D and Quality Departments.

Additional Partners, besides RDC Koper include: the Municipalities of the Coastal - Karst region, The Chamber of Economy, the Chamber of Crafts.

For ICT-related innovations, two partner providing solutions and networking at the local and EU levels are ROBOTINA doo and HARPHA SEA doo.

When considered as a whole, the Group of Partners ensures a deep knowledge and expertise of the measures required for the project. These are:

- innovation financing,
- promotion and dissemination,
- R&D management,
- incubation, training,
- regional development,
- business planning,
- EU-level networking,
- project management of Pilot Action

Table 8 below Maps the complementary competencies brought about by the Partners of this Pilot Action.

The Strategic Objectives of the Pilot Actions are very much in line with the Partners’ Mission and operational activities, thus ensuring strong motivation and high level and sustainable results.

**Partners’ complementary skills and critical competencies for Pilot Action 1**

Participants’ skills and complementarities

Participant Name	RDC KP	PORT OF KP	MUNICIPALITY	GZS	OZS	Harpha SEA	TOC
Innovation Financing							
Promotion and Dissemination							
EcolInno and R&D							
Incubation							
Training							
Regional Development							
Business planning							
EU and EC Networks							
Project Management							

 Partner Competence

**MANAGEMENT SUBJECT AND/OR MODEL****Project Organisation**

The Pilot Action requires a strict management organisation to professionally achieve the tasks and respect the implementation timeline through reporting at regular intervals as required by the Project Leader. Internal progress reports will also be prepared by each Pilot Action leader addressing in simple form issues, achievements, actions, main decisions taken, etc..

**The RDC Koper, as Local Project Coordinator, will be in charge of:**

- collecting relevant information from all other Pilot Action leaders, on activities and achievements.
- provide templates for other Partners' to follow, to ensure coherence and thoroughness of the results as well as homogenous reports, including progress reports. Delays, gaps and corrective actions will therefore be identified, measured and continuously monitored.
- Take care of the overall quality and “scalability” of the Pilot Action.
- Management of the Communication flow
- The communication flow among the Partners of the Pilot Action will be ensured through a continuous up-date on project development co-ordinated by RDC Koper, as local project co-ordinator for Pilot Actions.

**ACTUATION PROCEDURES**

Phase	Time frame (months)	Basic actions	Critical elements
Initial	0 - 7	1. Set-up of organizational structure 2. scan Port needs, define terms of agreement for innovation exploitation 3. define innovation financing scheme for SME and tech case 4. Set up roster of SMEs to be involved 5. training of personnel 6. promotion of service 7. initial implementing of service	1. definition of innovation financing scheme 2. set up roster of SMEs 3. organize financing for Tech Case
Normal operation	8 -	8. identification of sustainable sources of funding 9. normal implementing of service 10. monitoring and improving of service	4 raise additional sources of funding (guarantee scheme) for amplified operation

## **INTEGRATION AND COHERENCE WITH OTHER PLANNING TOOLS FOR THE LOCAL DEVELOPMENT IN THE REFERENCE TERRITORY**

The Coastal - Karst region has available a core of experienced support institutions and support tools which complement - at the local regional level - the entrepreneurial support and financing instruments available at national institutions.

- Platform for Sea Technologies and logistics
- Other regional guarantee -scheme Agencies of Slovenia
- Ministry of the Environment
- Ministry of Defence

The Pilot Projects will mostly interact with the contest in innovation organised by the regional Chamber of Commerce.

The financial incentives will be promoted by RDC Koper and by the partners Chamber of Commerce and Chamber of Crafts.

It is estimated that innovations will be identified and rewarded first within the Port, and later supported with information and consulting services in order to:

- raise funds,
- networking,
- commercialisation,
- protection of intellectual properties,
- etc.

### **7.2.3. PILOT STRUCTURE'S ACTIVITIES**

#### **I. Initial Phase (0- 7 months)**

##### **I.1 Set up of organizational structure**

##### **I.2. Scan of Port needs of the target groups**

- interact with Port R&D and Quality Department
- define agreement for innovation exploitation
- open up intranet portal to outside SMEs
- define criteria for SMEs to be invited to develop innovation

##### **I.3. Define Innovation financing scheme for SMEs and Tech Case**

- check conditions to apply existing guarantee scheme for prototype development
- definition of criteria for financing
- alignment with other guarantee Agencies
- definition of process

##### **I.4. Set up roster of SMEs**

- preparing the list of key requirements for SMEs to become innovation suppliers

##### **I.5. training of personnel**

##### **I. 6. promotion of service-**

- preparing the promotion plan
- implementing the promotion plan using various media and direct contact tools

- I. 7. initial implementing of service
- II. Normal operation (8- months)
- II.9 identification of sustainable sources of funding
- II.10 Normal implementing of service

#### 7.2.4 FINANCIAL PLAN

##### FINANCING: FINANCIAL BUDGET PLAN

Planned costs in EUR for the initial phase:

	Unit	Planned units	Planned cost per unit	Total cost
Staff costs	Hours	500	16	8.000
External expertise	expertise	6	800	4.800
Travel costs	travel	5	50	250
Promotion	action	1	1000	1.000
Overhead	Hours	100	15	1.500
Durable goods				-
<b>TOTAL</b>				<b>15.550</b>

#### FURTHER POSSIBLE SOURCES OF FINANCING BESIDES MEDOSSIC PROJECT?

Some costs, namely overhead and small material costs might be covered by the stakeholders- RDC Koper and Regional Chamber of Commerce, there might be a chance for some funds also from Budgets of regional and local authorities related to the support of competitiveness and innovation. However in the initial phase it is not realistic to expect some major external funding.

#### ECONOMIC AND FINANCIAL SUSTAINABILITY

The future of the project is very much dependent on the quality and external market self sustainability of the innovation prototypes that will be built first of all to meet Port environmental, energy reduction and safety needs.

It is foreseen that an innovation guarantee scheme can be launched on the basis of this experience by leveraging national funding as well as EIF - European Investment Fund (JEREMIE programme).

In summary, sources of external funds for further future implementation include :

- PAEFI (JAPTI): financing subjects of innovative environment

- EIF Funding (joining forces with with other Agencies managing regional guarantee schemes, RDC Koper would submit proposal to act as an intermediary within the JEREMIE scheme)
- Budgets of regional and local authorities related to the support of competitiveness and innovation
- EU horizontal projects

### 7.2.5. THE MONITORING AND THE EVALUATION

#### IMPACT INDICATORS

GLOBAL OBJECTIVE	IMPACT INDICATOR/INDICATORS	ACTUAL VALUE, IF IDENTIFIABLE	EXPECTED VALUE
RASISING THE ECO INNOVATIVE CULTURE IN THE REGION	% OF SMES IN THE REGION DIRECTLY ADDRESSED BY THE ACTION OR INFORMED ABOUT THE ACTION		30% IN ONE YEAR

#### RESULT INDICATORS

GLOBAL OBJECTIVE	RESULT INDICATOR/INDICATORS	ACTUAL VALUE, IF IDENTIFIABLE	EXPECTED VALUE
RAISING THE NUMBER ECO INNOVATIONS	NUMBER OF PATENTS		3 NATIONAL PER YEAR IN THREE YEARS
RAISING THE NUMBER OF SUCCESSFULLY COMMERCIALISED ECO-INNOVATIONS	NUMBER OF SUCCESSFUL COMMERCIALISED ECO-INNOVATIONS		5 PER YEAR IN THREE YEARS

#### REALIZATION INDICATORS

OPERATIONAL OBJECTIVES	REALIZATION INDICATOR/INDICATORS	ACTUAL VALUE, IF IDENTIFIABLE	EXPECTED VALUE
Established "Open Innovation" service	Normal operation of service	Non existent	Fully operational in 7 months
Massive information on eco-innovation (mail, newsletters)	Number of sent mails, newsletters on different addresses per year	0	2000
Pilot financing (guarantee fund)	Number of projects benefitting from guarantee scheme for innovations	0	6 SME innovations per year
Increase amount of funding availbe for guarantee scheme	Define proposal to adapt guarantee scheme to foster SME innovation linked to Port of KP as Lead User	1.5 Mio € for SME investment	2.5 Mio for innovative SME investment

## **7.3 PILOT PROJECT N.2 ECO-INNOVATIVE BUILDINGS**

### **7.3.1. GENERAL DESCRIPTION**

#### **ACTION'S TITLE "ECO-INNOVATIVE BUILDINGS"**

#### **OPERATIONAL OBJECTIVES**

- To accelerate the application of eco-innovative building technologies in public and private buildings
- To help micro companies (including crafts) invest in new equipment needed to install and certify eco-innovative solutions.
- To demonstrate value of eco-innovation and energy efficiency (e.g. savings)
- To ignite a self-sustaining private investment process in building renovation for energy efficiency

#### **INVOLVED SECTOR OR SUBSECTOR**

Building and construction, HVAC (Heating, Ventilation, Air Conditioning)

#### **INVOLVED ECO-INNOVATION TECHNOLOGY**

New insulation materials, efficient heaters/conditioners, intelligent buildings, etc

#### **INVOLVED OR TO INVOLVE ACTORS/STAKEHOLDERS**

- Municipality of Koper
- Chamber of Economy
- Chamber of Crafts
- GOLEA
- Local Banks

#### **TARGET GROUPS**

- Micro companies : installations, builders, carpenters
- Public Housing
- Banks

#### **ACTION'S GENERAL DESCRIPTION / FORESEEN PILOT PROJECT**

The Pilot Project is aimed at accelerate competence and skill building by small and micro-entreprises in the area of eco-innovative construction and HVAC installations.

The Pilot Project is also aimed at demonstrating cost-effectiveness (on a "full cost" basis) of new solutions for energy saving bioclimatic architecture in the broadest sense. The project is aimed to stimulate innovation at construction companies and local artisans (e.g. installators of HVAC and electric systems), public institutions (e.g. schools, public housing), banks, local bodies.

The demonstration project is also aimed to induce the the banking system to devise financial credit lines for eco-friendly renovation of existing households and public buildings.

Key aspects related to the proposed project environmental responsibility certification, energy certification of buildings, education of professional experts (engineers, architects, etc) in matters of energy efficiency and bioclimatic architecture. sensors.

**7.3.2. ACTUATION AND MANAGEMENT MODALITY**

**PARTNERSHIP COMPETENCES AND THEIR ORGANIZATIONAL MODALITIES**

Partners’ complementary skills and critical competencies for Pilot Action 2

Participants’ skills and complementarities

Participant Name	RDC KP	MUNICIPALITY	GZS	OZS	Robotics	TOC
Innovation Financing	■	■	■	■	■	■
Promotion and Dissemination	■	■	■	■	■	■
Ecolno and R&D	■	■	■	■	■	■
Incubation	■	■	■	■	■	■
Training	■	■	■	■	■	■
Regional Development	■	■	■	■	■	■
Business and service modelling	■	■	■	■	■	■
EU and EC Networks	■	■	■	■	■	■
Project Management	■	■	■	■	■	■

■ Presence of Competence

**MANAGEMENT SUBJECT AND/OR MODEL**

**Project Organisation**

The Pilot Action requires a strict management organisation to professionally achieve the tasks and respect the implementation timeline through reporting at regular intervals as required by the Project Leader. Internal progress reports will also be prepared by each Pilot Action leader addressing in simple form issues, achievements, actions, main decisions taken, etc..

The RDC Koper, as Local Project Coordinator, will be in charge of:

- collecting relevant information from all other Pilot Action leaders, on activities and achievements.

- provide templates for other Partners' to follow, to ensure coherence and thoroughness of the results as well as homogenous reports, including progress reports. Delays, gaps and corrective actions will therefore be identified, measured and continuously monitored.
- Take care of the overall quality and "scalability" of the Pilot Action.
- Management of the Communication flow
- The communication flow among the Partners of the Pilot Action will be ensured through a continuous up-date on project development co-ordinated by RDC Koper, as local project co-ordinator for Pilot Actions.

## ACTUATION PROCEDURES

The actuation procedures are presented in the table:

Phase	Time frame (months)	Basic actions	Critical elements
Initial	- 7	1. Set-up of organizational infrastructure 2. identify Demonstration Buildings, identify Leading SMEs 3. define innovation financing scheme for SME and tech case 4. Set up pilot financing 6. training of personnel 7. promotion of service 8. initial implementing of service	1. definition of innovation financing scheme 2. Identify Demonstration Buildings 3. organize financing Demonstration Buildings
Normal operation	8 -	9. normal implementing of service 10. monitoring and improving of service	4 raise additional sources of funding (guarantee scheme) for amplified operation

## INTEGRATION AND COHERENCE WITH OTHER PLANNING TOOLS FOR THE LOCAL DEVELOPMENT IN THE REFERENCE TERRITORY

The Coastal - Karst region has available a core of set of Leading Users (the Municipality of Koper, in the first place, is committed to implement energy efficient solutions in existing and new buildings intended for public and social use). Furthermore, at the National Level, incentives for Eco-innovation investment are available from:

- EKO SKLAD, the eco-fund of Slovenia
- GOLEA - the Local Energy Agency of Nova Gorica
- Local Banks

Specifically, relative to demand, **Eko Sklad** provides funding for investment lending to private residents for the following purposes:

- A - installation of modern equipment and systems for space heating or hot water
- B - the use of renewable sources of energy for space heating and hot water
- C - Modern facilities for electricity generation
- D - reducing heat loss in the renovation of residential buildings (built before 1.1.2003)
- E - construction of residential buildings in low-energy or passive technology
- F - the purchase of energy efficient appliances
- G - the purchase of environmentally friendly vehicles
- H - drainage and waste water treatment
- I - the replacement of building materials containing hazardous substances
- J - efficient use of water resources
- K - drinking water

Furthermore, the Pilot Project will interact with APE (Regional Energy Agency of Friuli Venezia Giulia), which collaborates with the Chambers of Commerce of Gorizia, Trieste, Udine and Pordenone on a similar approach.

### **7.3.3. PILOT STRUCTURE'S ACTIVITIES**

#### I. Initial Phase (0- 7 months)

##### I.1 Set up of organizational structure

##### I.2. Identify Demonstration Buildings, identify Leading SMEs to be involved

- interact with Municipality to identify and select Demonstration Buildings
- define criteria for SMEs to be invited to develop innovation

##### I.3. Define Innovation financing scheme for SMEs

- check conditions to apply existing guarantee scheme
- definition of criteria for financing
- alignment with Eko Sklad and other guarantee Agencies
- definition of process

##### I.4. Set up roster of SMEs

- preparing the list of key requirements for SMEs to become innovation suppliers

##### I.5. training of personnel

##### I. 6. promotion of service-

- preparing the promotion plan
- implementing the promotion plan using various media and direct contact tools

##### I. 7. initial implementing of service

#### II. Normal operation (8- months)

##### II.9 identification of sustainable sources of funding

##### II.10 Normal implementing of service

- identification of sustainable sources of funding
- identification of implementing organisation
- training of personnel
- normal implementing the service

### 7.3.4 FINANCIAL PLAN

#### FINANCING: FINANCIAL BUDGET PLAN

Planned costs in EUR for the initial phase:

	Unit	Planned units	Planned cost per unit	Total cost
Staff costs	Hours	600	16	9.600
External expertise	expertise	10	800	8.000
Travel costs	travel	10	50	500
Promotion	action	1	2000	2.000
Overhead	Hours	150	15	2.250
Durable goods				-
<b>TOTAL</b>				<b>22.350</b>

#### FURTHER POSSIBLE SOURCES OF FINANCING BESIDES MEDOSSIC PROJECT?

Some costs, namely overhead and small material costs might be covered by the stakeholders- RDC Koper and Regional Chamber of Commerce. Ideally, the Project should integrate with public investments aimed at the renovation / improvement of public efficiency of existing buildings.

#### ECONOMIC AND FINANCIAL SUSTAINABILITY

The future of the project is very much dependent on the intensity of the response from the targeted SMEs quality and external market self sustainability of the innovation prototypes that will be built first of all to meet Port environmental, energy reduction and safety needs.

External funds could be acquired in the next possible sources:

- PAEFI (JAPTI): financing subjects of innovative environment
- EKO SKLAD
- GOLEA
- Budgets of regional and local authorities related to the support of competitiveness and innovation
- EU horizontal projects

**7.2.5. THE MONITORING AND THE EVALUATION****IMPACT INDICATORS**

Global objective	Impact indicator/indicators	Actual value, if identifiable	Expected value
Raising the eco innovative culture in the region	% of population in the region directly addressed by the action or informed about the action		15% in one year
Raising the eco innovative culture in the region	% of SMEs in the region involved in building and construction and directly addressed by the action or informed about the action		80% in one year

**RESULT INDICATORS**

Global objective	Result indicator/indicators	Actual value, if identifiable	Expected value
Raising the number eco innovative B&C investments	Number of buildings renovated using eco-innovative solutions		3 buildings per year in three years
Raising the number of SMEs skilled at eco-innovative technologies for building renovation	Number of successful eco-innovative SMEs operating in the B&C sector		10 per year in three years

## REALIZATION INDICATORS

OPERATIONAL OBJECTIVES	REALIZATION INDICATOR/INDICATORS	ACTUAL VALUE, IF IDENTIFIABLE	EXPECTED VALUE
Established information and consulting service targeted to SMEs in the B&C sector	Normal operation of service	Non existent	Fully operational in 7 months
Massive information on eco-innovation (mail, newsletters)	Number of sent mails, newsletters on different addresses per year	0	600
Pilot financing (guarantee fund)	Number of projects benefitting from guarantee scheme for innovations	0	6 SME innovations per year
Increase amount of funding available for guarantee scheme	Define proposal to adapt guarantee scheme to foster SME innovation linked to B&C renovation	1.5 Mio € for SME investment	2.5 Mio for innovative SME investment

## 7.4 PILOT PROJECT N.3 ICT ECO-INNOVATION

### 7.4.1. GENERAL DESCRIPTION

#### ACTION'S TITLE "ICT ECO-INNOVATION"

#### OPERATIONAL OBJECTIVES

- To accelerate the application of ICT-based eco-innovative technologies in public and private buildings
- To help ICT companies develop new eco-innovative solutions.
- To demonstrate value of eco-innovation and energy efficiency (e.g. savings)
- To ignite a self-sustaining private investment process in building renovation for energy efficiency

#### INVOLVED SECTOR OR SUBSECTOR

- Building Energy Management
- Control and Monitoring of plants using renewable energies (e.g. PV, etc.)

#### INVOLVED ECO-INNOVATION TECHNOLOGY

- Energy management, PV, renewable energies in general

#### INVOLVED OR TO INVOLVE ACTORS/STAKEHOLDERS

- Municipality of Koper
- University Incubator of Primorska (UIP)
- Chamber of Economy
- Chamber of Crafts
- ROBOTINA
- Local Banks

#### TARGET GROUPS

- ICT companies
- Public Housing
- Banks

#### ACTION'S GENERAL DESCRIPTION / FORESEEN PILOT PROJECT

ICT is at the center of innumerable eco-innovations. These ICT-enabled changes affect economic and social parameters and are playing a significant role in successful energy savings and global response to the challenge of climate change. The subject of ICT eco-innovation covers a wide range of additional fields such as: using ICTs to improve practices in agriculture and forestry; monitoring atmospheric and water pollution; waste management and recycling; disaster warning and relief; improving the efficiency of the energy, transportation, goods and services sectors; and ICTs as a source of toxic waste.

The Coastal-Karst region boasts a critical mass of capabilities and competencies available at large companies to innovatively develop, apply and use ICTs throughout the economy and society, in government and public institutions, and in the research and academic communities. **An important Target Group for the Pilot Action are young people, students, teaching staff, researchers.** This Target Group can be reached and served in partnership with the University Incubator of Primorska (UIP).

SMEs can be included in projects related to the development of production and use of renewable energy (mini-wind turbines, mini-hydro, mini-PV), to feasibility studies for the construction of plants for electricity generation from renewable sources and in particular the use of biomass, organic waste and / or agricultural waste. Software programming is called upon to improve the logistics of biomass load transport to optimize plant performance and the containment of costs of transport and waste disposal.

These ICT related initiatives could have considerable public visibility and large economic impact - and would open the way for considerable entrepreneurial and economic development in the Coastal - Karst region.

Cross-border collaborative projects related to ICT for eco-innovation can be explored and activated by linking up with the DOMOTICA project managed by AREA Science Park.

#### 7.4.2. ACTUATION AND MANAGEMENT MODALITY

##### PARTNERSHIP COMPETENCES AND THEIR ORGANIZATIONAL MODALITIES

Partners' complementary skills and critical competencies

Participants' skills and complementarities

Participant Name	RDC KP	Inkubators PIC UIP	MUNICIPALITIES Lead Users	GZS	OZS
Innovation Financing					
Promotion and Dissemination					
Ecolno and R&D					
Incubation					
Training					
Regional Development					
Business and service modelling					
EU and EC Networks					
Project Management					

 Presence of Competence

**MANAGEMENT SUBJECT AND/OR MODEL****Project Organisation**

The Pilot Action requires a strict management organisation to professionally achieve the tasks and respect the implementation timeline through reporting at regular intervals as required by the Project Leader. Internal progress reports will also be prepared by each Pilot Action leader addressing in simple form issues, achievements, actions, main decisions taken, etc..

The RDC Koper, as Local Project Coordinator, will be in charge of:

- collecting relevant information from all other Pilot Action leaders, on activities and achievements.
- provide templates for other Partners' to follow, to ensure coherence and thoroughness of the results as well as homogenous reports, including progress reports. Delays, gaps and corrective actions will therefore be identified, measured and continuously monitored.
- Take care of the overall quality and "scalability" of the Pilot Action.
- Management of the Communication flow
- The communication flow among the Partners of the Pilot Action will be ensured through a continuous up-date on project development co-ordinated by RDC Koper, as local project co-ordinator for Pilot Actions.

**ACTUATION PROCEDURES**

The actuation procedures are presented in the table:

Phase	Time frame (months)	Basic actions	Critical elements
Initial	0 - 7	1. Set-up of organizational infrastructure 2. identify SMEs and young entrepreneurs 3. define innovation financing scheme for technology based ICT SMEs and start-ups 4. Set up pilot financing 6. training of personnel 7. promotion of service 8. initial implementing of service	1. definition of innovation financing scheme 2. Identify innovative ICT companies with sustainable BPs affecting eco-innovation 3. organize financing of ICT eco-innovation projects
Normal operation	8 -	9. normal implementing of service 10. monitoring and improving of service	4 raise additional sources of funding (guarantee scheme) for amplified operation

## INTEGRATION AND COHERENCE WITH OTHER PLANNING TOOLS FOR THE LOCAL DEVELOPMENT IN THE REFERENCE TERRITORY

The Pilot Projects will mostly interact with the entrepreneurial support and financing instruments available at the two business incubators in the Coastal-Karst region, i.e.:

- The Inkubator Sežana
- The University Incubator of Primorska

### 7.4.3. PILOT STRUCTURE'S ACTIVITIES

#### I. Initial Phase (0- 7 months)

I.1 Set up of organizational structure

I.2. Identify Leading ICT SMEs or ICT business ideas to be involved

- interact with Lead Users to identify and select possible demonstrative applications
- define criteria for SMEs to be invited to develop innovation

I.3. Define Innovation financing scheme for SMEs

- check conditions to apply existing guarantee scheme
- definition of criteria for financing
- alignment with Slovenian Innovation Funding Agencies and guarantee Funding
- definition of process of integration of different support instruments

I.4. Set up roster of innovative ICT related SMEs

I.5. Identify current programmes and applicability to ICT

I. 6. promotion of service-

- preparing the promotion plan
- implementing the promotion plan using various media and direct contact tools

I. 7. initial implementing of service

#### II. Normal operation (8- months)

### 7.4.4 FINANCIAL PLAN

#### FINANCING: FINANCIAL BUDGET PLAN

Planned costs in EUR for the initial phase:

	Unit	Planned units	Planned cost per unit	Total cost
Staff costs	Hours	500	16	8.000
External expertise	expertise	12	800	9.600
Travel costs	travel	10	50	500
Promotion	action	1	1000	1.000
Overhead	Hours	150	15	2.250
Durable goods				-
<b>TOTAL</b>				<b>21.350</b>

#### FURTHER POSSIBLE SOURCES OF FINANCING BESIDES MEDOSSIC PROJECT?

Additional sources of funding are the following:

- TIA - the Slovenian Innovation Agency
- Slovenian Risk Capital Funds, in the course of being established
- Business Angels of Slovenia (Poslovni Angeli Slovenije)

## ECONOMIC AND FINANCIAL SUSTAINABILITY

The future of the project is very much dependent upon the successful development of beneficiary SMEs and young entrepreneurs who are expected to receive the consulting and financial support foreseen by the Pilot Action. Additional to the above mentioned sources of private and public financing, it is opportune to underline the following availability:

- PAEFI (JAPTI): financing subjects of innovative environment
- Budgets of regional and local authorities related to the support of competitiveness and innovation
- EU horizontal projects

### 7.4.5. THE MONITORING AND THE EVALUATION

#### IMPACT INDICATORS

Global objective	Result indicator/indicators	Actual value, if identifiable	Expected value
Raising the number of eco innovations	Number of innovations		3 national per year in three years
Raising the number of successfully commercialised ICT based eco-innovations	Number of successful commercialised eco-innovations		5 per year in three years

#### RESULT INDICATORS

Operational objectives	Realization indicator/indicators	Actual value, if identifiable	Expected value
information on ICT eco-innovation (mail, newsletters)	Number of sent mails, newsletters on different addresses per year	0	300
Pilot financing (guarantee fund)	Number of projects benefitting from guarantee scheme for innovations	0	3 ICT SME innovations per year
Increase amount of funding available for guarantee scheme	Define proposal to adapt guarantee scheme to foster SME innovation linked to Port of KP as Lead User	1.5 Mio € for SME investment	2.5 Mio for innovative SME investment

**REALIZATION INDICATORS**

Operational objectives	Realization indicator/indicators	Actual value, if identifiable	Expected value
information on eco-innovation (mail, newsletters)	Number of sent mails, newsletters on different addresses per year	0	200
Pilot financing (guarantee fund)	Number of projects benefitting from guarantee scheme for innovations	0	4 SME innovations per year
Increase amount of funding available for guarantee scheme	Define proposal to adapt guarantee scheme to foster SME innovation linked to Port of KP as Lead User	1.5 Mio € for SME investment	2.5 Mio for innovative SME investment

## **7.5 PILOT PROJECT N.4 TECHNOLOGY INCUBATOR**

### **SUPPORTING ECO-INNOVATION**

#### **7.5.1. GENERAL DESCRIPTION**

The Regional Technology Incubator of Slovenian Istria (Regionalni Tehnološki Inkubator Slovenske Istre - RTI SI) is a project consisting in infrastructure premises and related basic services, mentoring and “proof of concept” services and initiatives especially conceived for potential entrepreneurs. The main role of the RTI SI is therefore to increase the number of high-potential start-ups provide conditions for the creation and growth of successful, hi-potential new companies arising as a spin-off or start-ups.

The RTI SI is expected to offer 2.500 m<sup>2</sup> of total surface (of which 1500 net rentable space for companies, 500 m<sup>2</sup> for common premises, 500 m<sup>2</sup> for management and staff).

The total envisaged investment is EUR 2,3 Million.

#### **ACTION’S TITLE “TECHNOLOGY INCUBATOR SUPPORTING ECO-INNOVATION”**

#### **OPERATIONAL OBJECTIVES**

- To support the creation and accelerated growth of eco-innovative companies in the region
- To help SMEs and Lead User-companies develop new eco-innovative solutions.
- To demonstrate value of eco-innovation and energy efficiency (e.g. savings)
- To stimulate private investment in eco-innovation and energy efficiency

#### **INVOLVED SECTOR OR SUBSECTOR**

- Logistics
- Renewable Energies
- Building and Construction

#### **INVOLVED ECO-INNOVATION TECHNOLOGY**

- Energy management, PV, renewable energies in general, ICT

#### **INVOLVED OR TO INVOLVE ACTORS/STAKEHOLDERS**

- Port of Koper
- Intereuropa
- CIMOS
- Municipality of Koper
- University of Primorska and UIP Incubator
- PIC - Inkubator Sežana
- Chamber of Economy
- Chamber of Crafts
- Innovative firms (Robotina, Harpha-Sea, Pick&Place, etc.)
- Local Banks

- Early Stage Investment Funds (National Slovenian)
- TIA - Technology Investment Agency

### TARGET GROUPS

- New Entrepreneurs, undergraduate and postgraduate students and graduates, young researchers and Academics and other innovators
- Young companies
- Innovative Entrepreneurs / Mentors

### ACTION'S GENERAL DESCRIPTION / FORESEEN PILOT PROJECT

The project of establishing the RTI SI is based upon the widely held recognition that, in an increasingly dynamic and global economy, regional innovation performance requires to strategically align three key development factors: **human resources** (the availability of high-skilled and educated people), **opportunities for early commercialization and development of IP - Intellectual property generated through research and finance and support** (the availability of finance for innovation projects and the support of governments for innovation activities) and. Key outputs of such an integrated environment conducive to economic growth are:

- new companies (incubation)
- accelerated growth of existing companies on global markets
- clustering an collaborative projects among companies.

In particular, the Ministry of Economy, has made available financial resources through an ERDF funded public tender for the establishment of a number of "Development Centres for the Slovenian economy". The purpose is to encourage the establishment and operation of entrepreneurial support centers for long-term growth in the specific regions. The RDC Koper is leading a Public/Private Partnership which has applied for funding under the tender, and which includes the following: the Port of Koper, Intereuropa (Private Logistics Company), CIMOS, Municipality of Koper, University of Primorska, and a representation of regional small innovative companies.

Whilst the key identified theme for the RTI SI is "Logistics", the **MEDOSSIC Project has enabled to identify Eco-Innovation as the main priority within this theme, and for the overall strategy of the RTI SI.**

The identification of Eco-Innovation as a priority for entrepreneurial development derives from the "Context and Territorial Analysis" (ref. Chapter 4.), which outlined the presence in the region of key success factors such as:

- Availability of entrepreneurial and human resources,
- Presence of Lead -Users for eco-innovative products and services,
- Availability of Public and private funding for eco-innovation investments and core competence in innovation financing.

Each of the above key success factor above critical mass of resources, capabilities and competencies.

An important Partner for this action are the two Business Incubators present in the Coastal-Karst Region, i.e.:

- **University Development Center and Incubator of Primorska (UIP)**, which mission is to foster and promote an entrepreneurial culture and create new knowledge-based enterprises. The Incubator main targets are young people, students, teaching staff, researchers. The team helps translate innovative, knowledge-based and market-oriented business ideas into viable businesses, providing pre-incubation and incubation comprehensive support.
- **Inkubator Sežana d.o.o.**, the leading Slovenian business incubator- established in 1991. On the basis of the enterprise and employment creation accomplishments, Inkubator Sežana has been identified by the World Bank as a “best practice” example.

**A particularly close relationship is expected to be set up in the first place with the UIP, to carry out the following activities:**

- Encouraging and promoting the entrepreneurial culture and creating new knowledge-based enterprises, particularly among young people, students, teaching staff, researchers and other people
- Encourage the submission of numerous business ideas, the selection of innovative, knowledge-based and market-oriented projects and their coaching through the process of pre-incubation and incubation
- renting premises equipped offices with a subsidized price
- providing advice, monitoring and education to corporate employees and individuals
- assisting in finding potential investors, facilitating SME access to research within the university, networking,
- Enable access to potential investors, venture capital, business angels and other institutions to finance projects
- Organizing events and competitions related to entrepreneurship (Evening with successful entrepreneurs, competition Enterprising Primorska, workshops, ...)
- assessing and identifying the commercial potential of research results, counseling and supervision of intellectual property protection, providing advice and assistance in the marketing of intellectual property, searching for partners in the licensing industry research,

### **7.5.2. ACTUATION AND MANAGEMENT MODALITY**

The main partners of the RTI SI project are:

- the RDC Koper, the UIP, the Municipality of Koper, the Chamber of Economy, the Chamber of Crafts of Koper
- The Port of Koper, CIMOS, existing innovative companies

**PARTNERSHIP COMPETENCES AND THEIR ORGANIZATIONAL MODALITIES**

Partners' complementary skills and critical competencies

Participants' skills and complementarities

Participant Name	RDC KP	Inkubators UIP PIC	MUNICIPALITY& Lead Users (PORT, CIMOS, Intereuropa,..)	Innovativ e SMEs	GZS OZS
Innovation Financing					
Promotion and Dissemination					
Eco-Inno and R&D					
Incubation					
Training					
Regional Development					
Business and service modelling					
EU and EC Networks					
Project Management					

 Presence of Competence

**MANAGEMENT SUBJECT AND/OR MODEL**

**Project Organisation**

The Pilot Action involves significant investment, **needed also to build the Incubator Premises and physical infrastructure.**

RDC Koper possesses all needed competencies to professionally achieve the tasks and respect the implementation timeline through reporting at regular intervals as required by the Project Leader. Internal progress reports will also be prepared by each Pilot Action leader addressing in simple form issues, achievements, actions, main decisions taken, etc..

The RDC Koper, as Local Project Coordinator, will be in charge of:

- Devise a clear positioning with reference to Eco-Innovation, i.e. including the theme into the RTI SI strategic and action plan aimed at creating innovative companies
- Interacting with the Public and Private Stakeholders (which have undersigned a formal Agreement to provide co-financing matching funds to the ERDF contribution), ensuring strong consensus about the need and opportunity for the RTI SI
- Contribute to identify a suitable management team totally dedicated at scouting and Incubating firms, including companies operating in Eco-Innovation. Supporting new businesses to start-up and grow requires specific attitudes and skills. **The EBN-European Business and Innovation Center Network BIC Quality Mark criteria require a dedicated team of at least three full time staff.**
- Ensure sources of financing through the **Guarantee Scheme for Innovative Companies** (see Pilot Project 5 Below), or other innovation financing instruments

- Operate as a “Proof of Concept” Center, by connecting Lead Users, SMEs and potential entrepreneurs and stimulating networking at the regional, national and EU level.
- Management of the Communication flow
- The communication flow will be ensured and co-ordinated by RDC Koper.

## ACTUATION PROCEDURES

The actuation procedures for the overall RTI SI project are expected to be implemented within a time frame of 3 years. **The MEDOSSIC project will contribute significantly to launch and start the RTI SI, through the following main activities to be undertaken within a 7 month framework, as summarized in the table:**

Phase	Time frame (months)	Basic actions	Critical elements
Initial	0 - 7	<ol style="list-style-type: none"> <li>1. Finalize the RTI SI business plan, including in particuale the theme of “ECO - INNOVATION”</li> <li>2. Finalize negotiations with stakeholders and government</li> <li>3. Finalize design of premises infrastructure</li> <li>4. set-up of organizational infrastructure</li> <li>5. Submission of a project proposal for national or EU funds</li> </ol>	<ol style="list-style-type: none"> <li>1. Get to final agreement with partners and stakeholders (Government financng has already been secured, the Municipality of Koper has made available the land for construction)</li> </ol>
Pilot operation	8 - 23	<ol style="list-style-type: none"> <li>6. promotion of services in conjunction with UIP</li> <li>6. Provide innovation financing guarantees on a test basis to young entrepreneurs and start-ups</li> <li>7. implement training of personnel and networking initiatives</li> <li>8. Initial service implementation</li> <li>9. pilot implementation of pilot service with UIP</li> <li>10. launch of full scale incubation service in the new RTI SI premises</li> </ol>	<ol style="list-style-type: none"> <li>2. operational and strategic alignment between RDC and UIP</li> <li>3. Identify innovative Eco-Innovation entrepreneurs and companies with sustainable BPs to be incubated</li> <li>4. timely completion of the incubator building construction (within 15 months from kick-off)</li> </ol>

## INTEGRATION AND COHERENCE WITH OTHER PLANNING TOOLS FOR THE LOCAL DEVELOPMENT IN THE REFERENCE TERRITORY

The RTI SI Pilot Project will closely interact with all the ECO-INNOVATION projects, i.e.:

1. PILOT PROJECT N.1 ECO INNOVATION FOR MARITIME LOGISTICS AND TRANSPORT
2. PILOT PROJECT N.2 ECO-INNOVATIVE BUILDINGS
3. PILOT PROJECT N.3 ICT ECO-INNOVATION
4. PILOT PROJECT N. 5 GUARANTEE SCHEME

### 7.5.3. PILOT STRUCTURE'S ACTIVITIES

#### I. Initial Phase (0- 7 months)

1. Finalize the RTI SI business plan on the theme of "ECO - INNOVATION"
2. Finalize negotiations with stakeholders and government
3. Finalize design of premises infrastructure
4. Set-up of organizational infrastructure
5. Submission of a project proposal for co-financing

#### II. Pilot operation Phase (8 - 23 months)

6. Promotion of services in conjunction with UIP
7. Provide innovation financing guarantees on a test basis to young entrepreneurs and start-ups
8. Implement training of personnel and networking initiatives
9. Pilot implementation of service
10. launch of full scale incubation service in the new RTI SI premises

### 7.5.4 FINANCIAL PLAN

#### FINANCING: FINANCIAL BUDGET PLAN

Planned costs in EUR for the initial phase:

	Unit	Planned units	Planned cost per unit	Total cost
Staff costs	Hours	120	25	3.000
External expertise	expertise			
Travel costs	travel			
Promotion	action			
Overhead	Hours			100
Durable goods				
<b>TOTAL</b>				<b>3.100</b>

Planned costs in EUR for the pilot phase:

	Unit	Planned units	Planned cost per unit	Total cost
Staff costs	Hours	1200	35	42.000
External expertise	expertise	30	800	24.000
Travel costs	travel	15	400	6.000
Promotion	action	2	2000	4.000
Overhead	Hours	200	15	3.000
Durable goods				0
<b>TOTAL</b>				<b>79.000</b>

Planned revenues in EUR for the pilot phase:

Type of revenue	Year 1
Rents	-
consulting services	12.000
Research services	63.000
<b>Total Revenues</b>	<b>75.000</b>

#### **FURTHER POSSIBLE SOURCES OF FINANCING BESIDES MEDOSSIC PROJECT?**

Additional sources of funding are the following:

- Ministry of Economy of Slovenia (Public Tender “Development Centers of the Slovenian Economy)
- Municipality of Koper
- Private Stakeholders (Port of Koper, CIMOS, INTEREUROPA, INNOVATIVE SMEs)

#### **ECONOMIC AND FINANCIAL SUSTAINABILITY**

It has to be underlined that “Incubators” centers are aimed at new or potential entrepreneurs who are not able to fully pay for the assistance they receive. Therefore, with the exception of the “Business Accelerator” model (in a medium-term perspective), financial sustainability requires the injection of outside subsidies or funding from either public or private sources. Since Incubators act upstream of the creation of SMEs and be active with projects at a stage prior to company formation, potential entrepreneurs usually contribute only to a fraction of the costs.

Incubators must therefore have access to an allocated budget to support operations. Additional sources of public financing include the following:

- PAEFI (JAPTI): financing subjects of innovative environment
- Budgets of regional and local authorities related to the support of competitiveness and innovation

- EU horizontal projects

**7.5.5. THE MONITORING AND THE EVALUATION****IMPACT INDICATORS**

Global objective	Result indicator/indicators	Actual value, if identifiable	Expected value
Creating new eco innovative companies	Number of companies	3	3 per year in three years
Implementing EU eco-innovation projects aimed at networking SMEs	Number of EU eco-innovation projects in the region	1	1 per year in three years

**RESULT INDICATORS**

Operational objectives	Realization indicator/indicators	Actual value, if identifiable	Expected value
RTI SI business plan including Eco-Innovation as priority accepte by Stakeholders	Business Plan accepted and financed	0	2.3 EUR Million
information on eco-innovation incubation services (mail, newsletters)	Number of sent mails, newsletters on different addresses per year	0	300
Pilot coaching and financing (guarantee fund)	Number of projects benefitting from guarantee scheme for innovations	0	3 Eco-innovation entrepreneurs per year

**REALIZATION INDICATORS**

Operational objectives	Realization indicator/indicators	Actual value, if identifiable	Expected value
RTI SI business plan including Eco-Innovation as priority accepte by Stakeholders	Business Plan accepted and financed	0	2.3 EUR Million
information on eco-innovation (mail, newsletters)	Number of sent mails, newsletters on different addresses per year	0	200
Pilot coaching of new entrepreneurs	Number of projects benefitting from guarantee scheme for innovations	0	3 SME innovations per year

## **7.6 PILOT PROJECT N.5 GUARANTEE SCHEME SUPPORTING ECO-INNOVATION**

### **7.6.1. GENERAL DESCRIPTION**

#### **ACTION'S TITLE "GUARANTEE SCHEME SUPPORTING ECO-INNOVATION"**

#### **OPERATIONAL OBJECTIVES**

- To accelerate the CREATION AND GROWTH of eco-innovative ventures
- To help eco-innovative companies develop new eco-innovative solutions.
- To leverage private investment in eco-innovative SMEs

#### **INVOLVED SECTOR OR SUBSECTOR**

- atmospheric and water pollution;
- waste management and recycling;
- disaster warning and relief;
- new materials for energy efficiency,
- services for building certification and energy management
- energy efficient logistics and transportation,
- goods and services sectors;
- Building Energy Management
- Control and Monitoring of plants using renewable energies (e.g. PV, etc.)

#### **INVOLVED ECO-INNOVATION TECHNOLOGY**

- Energy saving, Energy Generation, Environmental Protection in general

#### **INVOLVED OR TO INVOLVE ACTORS/STAKEHOLDERS**

- Municipalities of Koper, Izola, Piran, Sežana, Hrpelje-Kozina, Ilirska Bistrica
- Slovenian Banks
- Regional Slovenian Agencies offering Guarantee Scheme Financing
- Ministry of Economy of Slovenia / EIF - European Investment Fund, JEREMIE Programme
- Chamber of Economy
- Chamber of Crafts

#### **TARGET GROUPS**

- Innovative existing SMEs
- Start-up companies

#### **ACTION'S GENERAL DESCRIPTION / FORESEEN PILOT PROJECT**

The objective of the Pilot Action is to strengthen the existing Guarantee Scheme operated by RDC Koper with the purpose of providing credit guarantees in favour of innovative SMEs, and particularly investments in new eco-innovative products and services.

The Scheme would cover part of their borrowing requirements from credit and financial institutions.

**Within the MEDOSSIC Pilot Action, RDC Koper would assess the feasibility to increase the amount of Fund available by proceeding as follows:**

- a. Assess the availability of the Ministry to earmark ERDF 2007 - 2013 resources for such a purpose, e.g. activating the JEREMIE Facility of the EIF - European Investment Bank,
- b. Under JEREMIE, the EIF launches a public tender to select a financial intermediary to operate such a Fund/scheme. The EIF is available to conduct a preliminary feasibility analysis on behalf of the Slovenian Ministry of Economy to devise the necessary strategy.
- c. Undertake an agreement with other Slovenian Regional Agencies in order to submit a joint proposal to the Ministry of Economy. The Agencies may consider using the existing Funds as co-financing / co-guarantees

**Setting up the Innovation guarantee fund is a critical prerequisite for the success of all the Pilot Actions.**

The RDC Koper has a long track record in making available financial resources to entrepreneurs in ways that are efficient, fast and non-bureaucratic. This implies the adoption of efficient and transparent internal processes.

**The main limitation, until now, of the operational efficiency of the Guarantee scheme has been that each Municipality requires that funds are allocated precisely according to its stake in the overall fund.**

This limit prevents some credit-worthy innovative companies to receive the credit guarantees they deserve, e.g. in the case the SMEs are located in a Municipality that has “exhausted” the amount of guarantees that can be provided in proportion to its investment in the Scheme.

By adding a sizeable ERDF - sourced additional financial resources for innovative, and especially eco-innovative, companies would allow the Scheme to improve its impact and capacity.

**A preliminary estimate envisages a total funding of 1,5 M EUR to be made available under this Pilot Action (matching the 1.5 MEUR already available).**

## 7.6.2. ACTUATION AND MANAGEMENT MODALITY

### PARTNERSHIP COMPETENCES AND THEIR ORGANIZATIONAL MODALITIES

Partners' complementary skills and critical competencies

Participant Name	RDC KP	Inkubators PIC UIP	MUNICIPAL ITIES	Local Banks other Agencies	EIF JEREMIE	GZS OZS
Innovation Financing						
Promotion and Dissemination						
Eco-Inno and R&D						
Incubation						
Training						
Regional Development						
Business and service modelling						
EU and EC Networks						
Project Management						

Table 10 - Participants' skills and complementarities

 Presence of Competence

### MANAGEMENT SUBJECT AND/OR MODEL

#### Project Organisation

The Pilot Action involves a significant investment of up to 1,5 M Eur, **needed to match the existing guarantee fund.**

RDC possesses a proven track record and all needed competencies to professionally manage such a Fund.

Under the MEDOSSIC programme, the RDC Koper, as Local Project Coordinator, will be in charge of:

- Devise a clear positioning of the Guarantee Scheme with reference to Eco-Innovation, i.e. including this theme as a strategic and operational priority of the Scheme.
- Interacting with Public and Private Stakeholders at the Slovenian National level (and if necessary interacting also with the EIF - JEREMIE) to activate the scheme and provide co-financing matching funds to the ERDF contribution.
- **Update existing agreements with local banks, and with Muniaplities**, in order to specifically operate on behalf eco-innovation investments.

## ACTUATION PROCEDURES

The actuation procedures are presented in the table:

Phase	Time frame (months)	Basic actions	Critical elements
Initial	0 - 7	1. Assess the availability of the national institutions to earmark ERDF 2007 - 2013 2. Undertake an agreement with other Slovenian Regional Agencies in order to submit a joint proposal to Slovenian Government Office for Local Self-Government and Regional Policy (SVLR)	1. definition of innovation financing scheme 2. Reach Agreement with Slovenian Government
Normal operation	8 -	3. Undertake Agreement with local Banks 4. Set up pilot financing 5. training of personnel 6. promotion of service 7. initial implementing of service normal implementing of service 8. monitoring and improving of service	3. define financing strategy for eco-innovation projects 4 arrange matching funding for the guarantee scheme

## INTEGRATION AND COHERENCE WITH OTHER PLANNING TOOLS FOR THE LOCAL DEVELOPMENT IN THE REFERENCE TERRITORY

The Guarantee Scheme supporting Eco-Innovation SMEs will closely interact with, and is a critical success factor for, all the ECO-INNOVATION projects, i.e.:

1. PILOT PROJECT N.1 ECO INNOVATION FOR MARITIME LOGISTICS AND TRANSPORT
2. PILOT PROJECT N.2 ECO-INNOVATIVE BUILDINGS
3. PILOT PROJECT N.3 ICT ECO-INNOVATION
4. PILOT PROJECT N. 4 RTI SI INCUBATOR

### 7.6.3. PILOT STRUCTURE'S ACTIVITIES

#### I. Initial Phase (0- 7 months)

1. Assess the availability of the Ministry to earmark ERDF 2007 - 2013
2. Undertake an agreement with other Slovenian Regional Agencies in order to submit a joint proposal to the Slovenian Government Office for Local Self-Government and Regional Policy (preparation of a joint proposal to the SVLR)

**II. Normal operation (8- months)**

3. Undertake Agreement with local Banks
4. Set up pilot financing definition of criteria for financing
5. training of personnel
6. promotion of service
7. initial implementing of service normal implementing of service
8. monitoring and improving of service

**7.6.4 FINANCIAL PLAN****FINANCING: FINANCIAL BUDGET PLAN**

Planned costs in EUR for the initial phase :

	Unit	Planned units	Planned cost per unit	Total cost
Staff costs	Hours	120	25	3.000
External expertise	expertise			
Travel costs	travel			100
Promotion	action			
Overhead	Hours			
Durable goods				-
<b>TOTAL</b>				<b>3.100</b>

Planned costs in EUR for the first year of operation:

	Unit	Planned units	Planned cost per unit	Total cost
Staff costs	Hours	500	25	12.500
External expertise	expertise	12	800	9.600
Travel costs	travel	8	400	3.200
Promotion	action	2	2000	4.000
Overhead	Hours	200	15	3.000
Durable goods				-
<b>TOTAL</b>				<b>32.300</b>

**FURTHER POSSIBLE SOURCES OF FINANCING BESIDES MEDOSSIC PROJECT?**

Additional sources of funding are the following:

- Slovenian Enterprise Fund
- Slovenian Regional Development fund

## **ECONOMIC AND FINANCIAL SUSTAINABILITY**

The future of the project is very much dependent upon the successful development of beneficiary SMEs and young entrepreneurs who are the main targets of the Pilot Action.

On the basis of the experience gathered so far, the Guarantee Scheme is financially self sustainable.

**7.6.5. THE MONITORING AND THE EVALUATION****IMPACT INDICATORS**

Global objective	Result indicator/indicators	Actual value, if identifiable	Expected value
Raising the number of investment in eco innovative firms	Number of investments in eco innovative firms	3 per year	6 per year
Raising the size of investment in eco innovative firms	Size of average SME Investment in eco innovative firms	40.000 EUR	85.000 per SME in three years

**RESULT INDICATORS**

Operational objectives	Realization indicator/indicators	Actual value, if identifiable	Expected value
information on Guarantee Fund for eco-innovation (mail, newsletters)	Number of sent mails, newsletters on different addresses per year	0	300
Pilot financing (guarantee fund)	Number of projects benefitting from guarantee scheme for innovations	0	6 SME innovations per year
Increase amount of funding available for guarantee scheme	Define proposal to adapt guarantee scheme to foster SME innovation linked to Port of KP as Lead User	1.5 Mio € for SME investment	2.5 Mio€ for innovative SME investment

**REALIZATION INDICATORS**

Operational objectives	Realization indicator/indicators	Actual value, if identifiable	Expected value
information on eco-innovation (mail, newsletters)	Number of sent mails, newsletters on different addresses per year	0	200
Pilot financing (guarantee fund)	Number of projects benefitting from guarantee scheme for innovations	0	4 SME innovations per year
Increase amount of funding available for guarantee scheme	Define proposal to adapt guarantee scheme to foster SME innovation linked to Port of KP as Lead User	1.5 Mio € for SME investment	2.5 - 3 Mio€ for innovative SME investment