



## **MEDOSSIC**

*Mediterranean organization structure and strengthening  
of innovation capacities for sustainable development*

*no. 1G-MED08-289*

### ***Strategic and Operational Plan Marche Region***

*Med Programme*

*Priority-Measure 1-2*

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# Part 1: IDENTIFICATION SHEET

## 1. IDENTIFICATION SHEET

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Abstract (for dissemination)	This document presents the Strategic Operational Plan elaborated by Tecnomarche for the Marche region in the framework of the MEDOSSIC project

Part 2:  
**EXECUTIVE SUMMARY**

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.

→ **Participative process:** Chapter 5 “The participative process in the territorial context”.

The situation about the main institutional stakeholders and the tools at disposal for the (eco)-innovation is underlined in a synthetic way. 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 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.

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

The activities of analysis and investigation, the results and the emerged needs, their presentation and discussion in an approach based on the participation and on the involvement of social and economic actors of the territory bring to a joint, shared and legitimated definition of the common vision or a global objective to act on, to pursue the objectives 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 project: 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.

### 3.3. DEFINITIONS OF KEY CONCEPTS

The SOP is based on some **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:** it presents all forms of innovation activities resulting in or aimed at significantly improving environmental protection. Eco-innovation includes new production processes, new products or services, and new management and business methods, the use or implementation of which is likely to prevent or substantially reduce the risks to the environment, pollution and any other negative impact of the use of resources throughout the lifecycle of related activities.

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

#### 1. ENVIRONMENTAL TECHNOLOGIES:

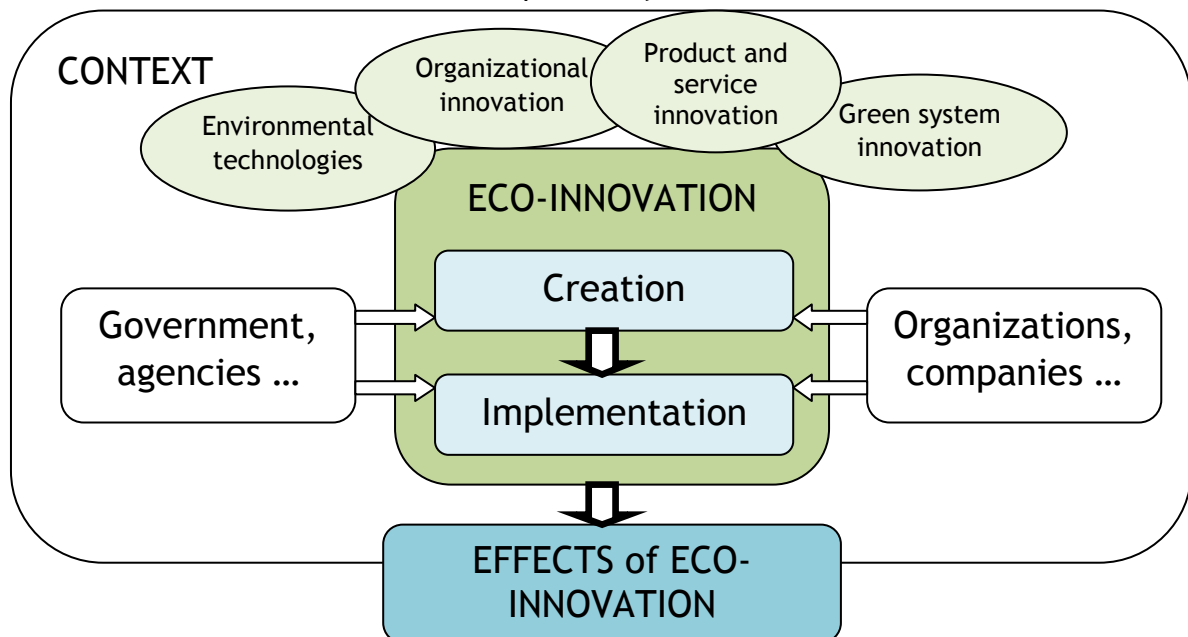
- pollution control technologies including waste water treatment technologies
- cleaning technologies to treat the pollution released into the environment;
- cleaner process technologies: less polluting new manufacturing processes and/or more resource efficient than relevant alternatives;
- waste management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

#### 2. 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).
3. **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).
4. **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.

Picture 2: SWOT Analysis

## SWOT ANALYSIS



Part 4:  
**CONTEXT AND TERRITORY ANALYSIS**

## 4. CONTEXT AND TERRITORY ANALYSIS

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

Note: the statistic values reported on follow pages refer to year 2007 or 2008 where not differently specified.

The Marche Region is located in the central eastern part of Italy, it covers an area of 9.694 km<sup>2</sup> and has a total population of 1.553.063 inhabitants (density: 160,21 citizens/km<sup>2</sup>) and as such is one of the smaller regions in Italy. The Region is made up of 5 provinces - *Pesaro-Urbino, Ancona, Macerata, Ascoli Piceno* and *Fermo* with 246 municipalities. The administrative capital of Marche is Ancona, the only city with over 100,000 inhabitants, an indicator of the low level of urbanisation within the Region.

The Region has functions and powers according to the principle and limitations of the Constitution and the Regional Statute, which give it a significant amount of autonomy, and is governed through the Regional Assembly (the highest decision-making body which represents the Regional Institution), Regional Council (executive body which is responsible for general administration), President of the Council (representing the Institute both legally and politically).

In a *national* context, the Marche Region has:

- GDP (€ 33 billion for 2006 and € 41.2 billion for 2008) which contributes to 2-3% of National wealth.
- High GDP growth rate (2000-2007): 11.4% compared to 7.9% for Italy in large. Although GDP decreased between 2007 and 2008 at a rate of 1.2%, higher than the national rate (1%).
- High rates of employment: 64,1% for the Marche compared to 58,4% for Italy in large.
- Unemployment under national rates: 4.2% compared to 6.1% for Italy in large.
- High rate of employment in high-tech services and industry (2006): 11.2% (of total amount of employment) compared to 10.7% at National level.
- High rates of entrepreneurship: 1 company to every 9.7 inhabitants (Region with the highest density of entrepreneurship at National Level).
- Significant export businesses and openness to international markets: exports cover approximately 3,5% of the total national exports, in 2006 total exports corresponded to more than 11.000 M Euro - an increase of 21% with respect to the previous year, whereas the national average was 9%.
- District type production organisation with prevalently small and medium sized companies specialising in 'light' industries.
- Very flexible production systems and high production rates.
- High rates of active handicraft enterprises: 32,5% compared to 28,6% for Italy in large.
- Marche Region was (2005 year) was in first place on the IRPET classification of Italian Regions based on quality of life-welfare indicators.

The industrial landscape of the Marche is characterised by family-run small or medium sized enterprises, which have their roots in the ancient traditions of the Region, where rural development in terms of small-scale craftsmanship and artisan creativity has prevailed. This development is closely bound to the cultural and social dimensions of Marche traditions and way of living, and therefore strongly fortified and carefully maintained within the Region. More than 52.000 registered active companies are involved in artisan and handicraft manufacturing activities, which constitute 75% of the manufacturing companies and 32% of the whole active companies in the regional production system. This not only has an impact within traditional production systems but also in sectors where innovative technologies play a significant role (e.g. Footwear and Leather, Mechanics, Constructions, Furniture, Chemicals).

In the last 30 years the productive system of the Marche has been radically modernised although networks of small or medium-sized companies still characterise the Region's industrial and economical profile. This development has led to the emergence of highly specialised industrial districts, which are significantly competitive and profitable.

The *Footwear and Leather* sector in the Marche Region is the largest in Italy in terms of numbers of companies and workers, with approximately 5.000 companies employing approximately 43.000 workers. The sector is characterised by high numbers of small enterprises. Exports total more than 2.000 M. euro.

*Mechanics and Mechanical Engineering* has recently seen the greatest growth rates in terms of exports to the value of 4.000 M euro. As a consequence of the market slump of the beginning of the century, companies that produce equipment and machinery for industries of the *Made in Italy* system (food, textile clothing and footwear, wood and furniture) are in crisis. The crisis drives the search for new international markets and new forms of multi-sectorial collaboration (building, energy efficiency, alternative energy). There are around 3.500 companies, employing around 38.000 workers operating in the mechanical engineering sector in the Marche.

The *Wood and Furniture industry*, makes up approx. 4.000 companies and employs 27.000 workers. Exports total 717 million Euro.

The *Clothing and Textile industries* with 2.600 companies, employing approximately 22.000 workers are mainly found in the provinces of Macerata, Ancona, and Pesaro-Urbino. Recently it has been characterized by downsizing in terms of businesses, employees, ideas and projects. The downsizing has forced enterprises to take different paths (creativity and in terms of quality).

The *Construction* sector is characterised by smaller enterprises (96% with less than 9 employees). More dynamic compared to other regional productive sectors both in terms of creation of wealth and in terms of employment.

*Tourism* in the Marche has been a significant business since the 50's and the region continues to draw tourists, whose increasing numbers have been attracted to the coast, the protected areas and nature reserves, the cultural-artistic heritage, and gastronomy . The tourist business is extremely important for the regional economy and represents an important share of the gross domestic product.

Seeing as 57% of the population works in services, 40% in industry and only 3% in *Farming*, it is by no surprise that the agricultural economic contribution is of less importance than in

the past, and the gross value added generated by the sector is less significant, just above the national average.

Other important sectors of industry for the Marche Region are: *Rubber & Plastic, Shipbuilding, Gold & Silversmiths, and Foodstuff and Agroindustry.*

Existing Challenges to Industrial development and competitiveness in the Marche and the uptake of innovative activities and eco-innovation stem from the nature of the productive system which operates mainly through, often family run, SMEs. Fundamentally this means that investment in R&D and innovation is low and the highly competitive environment between enterprises hinders the collaborations necessary to create the critical mass necessary in order for innovative development.

Another challenge is lack of mobility of talent within the Region and the brain drain phenomenon which can be attributed to the lack of a 'meritocratic' culture that pervades the Italian system, the scarce research opportunities available, the low pay received by researchers and the difficulties found by young people to enter in the labour market. This greatly hinders a culture of innovation (eco-innovation) and the uptake of innovative practices by enterprises.

## 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	
STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>• Large scale, environmentally damaging industries are minimal due to the prevalence of small or medium sized enterprises, which have their roots in the ancient traditions of the Region, where rural development in terms of small-scale craftsmanship and artisan creativity has prevailed</li> <li>• Strong educational/university system with the availability of courses and masters programmes encouraging environmental protection and eco-innovation</li> <li>• Good quality of life and generally healthy environment deriving from the maintenance of ancient methods and traditions. Marche Region in first place on the IRPET classification of Italian Regions based on quality of life-welfare indicators (2005 year)</li> </ul>	<ul style="list-style-type: none"> <li>• The predominance of traditional and often family run SMEs and Micro enterprises has hindered a culture of innovation (eco-innovation)</li> <li>• Lack of human resources trained to a high-level (with academic degree) in SMEs</li> <li>• Significant 'brain drain' and consequential lack of young researchers/innovators</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>• The Regional government has significant autonomy both in policy and financing deriving from the principle and limitations of the Constitution and the Regional Statute</li> <li>• Small or medium sized enterprises, which have their roots in the ancient traditions of the Region, where rural development in terms of small-scale craftsmanship and artisan creativity has prevailed provide a relatively white sheet on which to implement eco-innovative activities/initiatives</li> </ul>	<ul style="list-style-type: none"> <li>• The Marche is characterized by often family-run small or medium sized enterprises which leads to low investment in R&amp;D and innovation.</li> <li>• A highly competitive environment between enterprises hinders the collaborations necessary to create the critical mass necessary in order for innovative development.</li> <li>• Lack of mobility of talent within the Region and the brain drain phenomenon due to : <ul style="list-style-type: none"> <li>- lack of a 'meritocratic' culture,</li> <li>- scarce research opportunities available,</li> <li>- the low pay received by researchers</li> <li>- difficulties found by young people to enter in the labour market.</li> </ul> </li> </ul>
<b>NEEDS/ INTERVENTIONS NECESSITIES</b>	
<i>"Not relevant for the SOP"</i>	

**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	
STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>• The Marche Region is characterised by a generally stable GDP</li> <li>• High GDP growth rate (2000-2007): 11.4% compared to 7.9% for Italy in large.</li> <li>• GDP has shown a growth rate of 2,6% from 2006 to 2007</li> <li>• High rates of employment: 64,1% for the Marche compared to 58,4% for Italy in large</li> <li>• High rate of employment in high-tech services and industry (2006): 11.2% (on total amount of employment) compared to 10.7% at National level</li> <li>• High rates of entrepreneurship: 1 company to every 9.7 inhabitants (Region with the highest density of entrepreneurship at National Level)</li> <li>• Significant export businesses and openness to international markets: exports cover approximately 3,5% of the total national exports, in 2006 total exports corresponded to more than 11.000 M Euro - an increase of 21% with respect to the previous year, whereas the national average was 9%</li> <li>• A high driving force comes from universities and research centres (higher education funds) contributing with a rate of 47.4 % on R&amp;D regional expenditures, much higher compared with the national average</li> <li>• Very flexible production systems and high production rates</li> <li>• The Footwear and Leather sector in the Marche Region is the largest in Italy</li> <li>• The emergence of highly specialised industrial districts, which are significantly competitive and profitable.</li> </ul>	<ul style="list-style-type: none"> <li>• GDP decreased between 2007 and 2008 at a rate of 1.2%, higher than the national level which decreased at a rate of 1%.</li> <li>• The Marche Region holds 16th position in classification of Italian Regions on Gross Expenditure on R&amp;D and it contributes at a rate of 1,5 % to the national value, in terms of public institution expenditures and employment in R&amp;D activities.</li> <li>• As a consequence of the market slump of the beginning of the century, companies that produce equipment and machinery for industries of the Made in Italy system are in crisis (food, textile clothing and footwear, wood and furniture).</li> </ul>
OPPORTUNITIES	THREATS

<ul style="list-style-type: none"> <li>• Current regional economic resources improving investments on eco-innovation try to cover the need of structural capital expenditures in R&amp;D despite few and fragmented public regional funds. This reflects a positive attitude of government bodies towards eco-innovation enhancement actions both in productive and public sectors.</li> <li>• Economic resources allocated by local government bodies for improving eco-innovation actions can be easily channelled in a more definite and dedicated way for eco-innovation interventions by SMEs.</li> <li>• The high growth rate (28,4%) of R&amp;D expenditure indicator between years 2004 and 2006 shows a positive approach of the local productive system and puts the Marche Region in the third place on national classification of Region's R&amp;D expenditures growth</li> <li>• Current regional and provincial economic resources, improving investments in high quality and technological training, attempt to cover the need for qualified human resources</li> <li>• Needs of enterprises concerning information on innovations are covered if only superficially.</li> <li>• SMEs recognise the importance of applying eco-innovation systematically</li> <li>• Eco-innovation can produce benefits and opportunities, both on environmental and socio-economical levels, and this fact is widely confirmed by private and public stakeholders.</li> <li>• Trends are now changing towards a more comprehensive acknowledgment of the importance of innovation introduced through a scientific approach and based on R&amp;D activities and results</li> <li>• In recent years the number of SMEs based on partnerships and corporation organisations has increased; this shows a tendency towards a more organized structuring of SMEs.</li> <li>• Very flexible production systems and high production rates</li> <li>• District type production organisation with prevalently small and medium sized companies specialising in 'light' industries.</li> <li>• International and global markets open new collaborative opportunities as well as new competition from emerging countries.</li> </ul>	<ul style="list-style-type: none"> <li>• Handicraft manufacturing activities, which constitute 75% of the manufacturing companies and 32% of the whole active companies in the regional production system. This not only has an impact within traditional production systems but also in sectors where innovative technologies play a significant role (e.g. Footwear and Leather, Mechanics, Constructions, Furniture, Chemicals).</li> <li>• SMEs are not easily persuaded to implement a strategic common project</li> <li>• Difficulty in transfer of technological knowledge process from research centres to SMEs</li> <li>• Technological gap between local manufacturing and global economies caused by lack of continuous collaboration between innovation management structures and innovation users</li> <li>• Economic resources allocated by local government bodies for improving eco-innovation actions are fragmented even if consistent</li> <li>• International and global markets open new competition from emerging countries</li> </ul>
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#### NEEDS/ INTERVENTIONS NECESSITIES

1. To create the base for applying the process of technological knowledge transfer from research centres to SMEs
2. To increase the level of technological knowledge in the traditional sectors
3. To involve institutional stakeholders in order to systematize the definition of programmes for public funds related to eco-innovation
4. To create the base to enable SMEs to implement a strategic common project
5. To show the real potential importance of investing in eco-innovative products or processes, despite the low incoming perspective

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

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

<b>SWOT TERRITORIAL AND ENVIRONMENTAL SYSTEM</b>	
<b>STRENGTHS</b>	<b>WEAKNESSES</b>
<ul style="list-style-type: none"> <li>• The implementation of some key projects/initiatives within the Marche Region regarding Eco-innovation, e.g. House to Future, Tecnomarche &amp; ECO-FOOTWEAR, Alfiere Spa - Fondazione Elios</li> <li>• The implementation ECOMARCHE by Confindustria Marche in order to create interest in the management of environmental issues, and more particularly, towards the adoption of environmental certification systems .</li> <li>• Increase in Regional adoption of ISO 14001:2004 to 339 in 2008</li> <li>• The Chamber of Commerce of Ancona's promotion of the establishment of an EMAS School for Environmental Consultants and auditors, and thus having taken a leading role in the spread of Environmental Management Systems and environmental culture.</li> </ul>	<ul style="list-style-type: none"> <li>• Current low level of uptake of Eco-innovative activities</li> <li>• Public funds related to eco-innovation were fragmented in many programmes and actions creating difficulties for SMEs to clearly identify eco-innovation improvement measures.</li> </ul>
<b>OPPORTUNITIES</b>	<b>THREATS</b>
<ul style="list-style-type: none"> <li>• The ESA carried out by Tecnomarche showed:</li> <li>• A high level of investments in eco-innovation made by private subjects. This reflects a high potential and sensibility on the demand side towards eco-innovation issues such an attitude can be motivated not only with an environmental ethics or behaviour, but can be ascribed to the awareness of the economical potential foreseen in eco-innovative investments.</li> <li>• Although public funding is fragmented it has been increased in recent years, reflecting more awareness of the importance of innovation practice on sustainable development principles.</li> <li>• All candidate sectors show: <ul style="list-style-type: none"> <li>- awareness that introduction of eco-innovation presents extra sales</li> <li>- awareness that environmental protection is important for company's competitiveness</li> <li>- awareness that introducing an environmental innovation could help in response to existing or future environmental regulations</li> </ul> </li> <li>• Candidate sectors showed interest and knowledge in: <ul style="list-style-type: none"> <li>- LCA</li> <li>- Green Chemistry</li> <li>- Materials Recycling</li> <li>- Energy generation systems</li> <li>- Energy Saving</li> <li>- Energy Efficiency on productive chain</li> <li>- Monitoring and Control of Energy sources of consumption</li> <li>- Eco-Design and Eco-development of products</li> <li>- Environmental sustainable models</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Still relatively low consciousness of the potential importance of investing in eco-innovative product or process innovation, because of low incoming perspective (eco-innovative products are not so frequently requested)</li> <li>• More structural capital expenditures are needed</li> <li>• Lack of human resources trained to a high-level (with academic degree) in SMEs</li> <li>• Low percentage of human resources involved in R&amp;D activities.</li> <li>• Current know-how comes from traditional sectors with low technological content in SMEs</li> <li>• Low degree of specialisation in Service sector</li> <li>• Low capacity in attracting International investors</li> <li>• Low capacity of public funds expenditure (mostly in R&amp;D)</li> </ul>

**NEEDS/ INTERVENTIONS NECESSITIES**

1. To increase rate of human resources trained to a high-level (with academic degree) in SMEs
2. To increase the percentage of human resources involved in R&D activities
3. To increase the level of technological knowledge in the traditional sectors
4. To involve institutional stakeholders in order to systematize the definition of programmes for public funds related to eco-innovation
5. To show the real potential importance of investing in eco-innovative products or processes, despite the low incoming perspective

**Table.4 SWOT of the Innovation & Eco innovation in Marche Region context and intervention needs' indication.**

<b>SWOT INNOVATION &amp; ECO INNOVATION</b>	
<b>STRENGTHS</b>	<b>WEAKNESSES</b>
<p>The ESA conducted by Tecnomarche demonstrated that:</p> <ul style="list-style-type: none"> <li>• All candidate sectors show:               <ul style="list-style-type: none"> <li>- awareness that introduction of eco-innovation presents extra sales</li> <li>- awareness that environmental protection is important for company's competitiveness</li> <li>- awareness that introducing an environmental innovation could help in response to existing or future environmental regulations</li> </ul> </li> <li>• Candidate sectors showed interest and knowledge in:               <ul style="list-style-type: none"> <li>- LCA</li> <li>- Green Chemistry</li> <li>- Materials Recycling</li> <li>- Energy generation systems</li> <li>- Energy Saving</li> <li>- Energy Efficiency on productive chain</li> <li>- Monitoring and Control of Energy sources of consumption</li> <li>- Eco-Design and Eco-development of product</li> <li>- Environmental sustainable models</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• SMEs are not easily persuaded to implement a strategical common project</li> <li>• Difficulty in transfer of technological knowledge process from research centres to SMEs</li> <li>• Technological gap between local manufacturing and global economies caused by lack of continuous collaboration between innovation management structures and innovation users</li> <li>• Economic resources allocated by local government bodies for improving eco-innovation actions are fragmented even if consistent</li> <li>• International and global markets open new competition from emerging countries</li> </ul>
<b>OPPORTUNITIES</b>	<b>THREATS</b>
<ul style="list-style-type: none"> <li>• Current regional economic resources improving investments on eco-innovation try to cover the need of structural capital expenditures in R&amp;D, despite few and fragmented public regional funds:               <ul style="list-style-type: none"> <li>- This reflects the positive attitude of government bodies towards eco-innovation enhancement actions both in productive and public sectors thus creating a basis on which it will be possible to reinforce and improve the relationship between eco-innovators and public bodies deputed to funding.</li> </ul> </li> <li>• Current regional and provincial economic resources, improving investments in high quality and technological training, attempt to cover the need for qualified human resources</li> </ul>	<ul style="list-style-type: none"> <li>• Structural capital expenditures are needed</li> <li>• Low consciousness of potential importance of investing in product or process innovation, because of low incoming perspective (eco-innovative products are not so frequently requested)</li> <li>• Lack of human resources trained to a high-level (with academic degree) in SMEs</li> <li>• Existing know-how comes from traditional sectors with low technological content in SMEs</li> <li>• Low specialisation degree in Service sector</li> <li>• Low capacity in attracting International investors</li> </ul>

<ul style="list-style-type: none"> <li>• Needs of enterprises concerning information on innovations are covered if only superficially.</li> <li>• SMEs recognise the importance of applying eco-innovation systematically</li> <li>• Eco-innovation can produce benefits and opportunities, both on environmental and socio-economical levels, and this fact is widely confirmed by private and public stakeholders.</li> <li>• Economic resources allocated by local government bodies for improving eco-innovation actions can be easily channelled in a more definite and dedicated way for eco-innovation interventions by SMEs.</li> <li>• International and global markets open new collaborative opportunities as well as new competition from emerging countries</li> </ul>	<ul style="list-style-type: none"> <li>• Low capacity of public funds expenditure (mostly in R&amp;D)</li> <li>• Low percentage of human resources involved in R&amp;D activities.</li> </ul>
<b>NEEDS/ INTERVENTIONS NECESSITIES</b>	
<ol style="list-style-type: none"> <li>1. To increase rate of human resources trained to a high-level (with academic degree) in SMEs</li> <li>2. To create the base for applying the process of technological knowledge transfer from research centres to SMEs</li> <li>3. To increase the percentage of human resources involved in R&amp;D activities</li> <li>4. To increase the technological level of knowledge in the traditional sectors</li> <li>5. To involve institutional stakeholders in order to systematize the definition of programmes for public funds related to eco-innovation</li> <li>6. To create the base to enable SMEs to implement a strategical common project</li> <li>7. To show the real potential importance of investing in eco-innovative products or processes, despite the low incoming perspective</li> </ol>	

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

*Analysis of strengths, weaknesses, opportunities and threats related to eco-innovation in the candidate sector or with reference to the selected eco-innovative technology/tool and intervention needs' indication.*

SWOT INNOVATION & ECO INNOVATION	
STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>• Candidate sectors showed interest and knowledge in:               <ul style="list-style-type: none"> <li>- LCA</li> <li>- Green Chemistry</li> <li>- Materials Recycling</li> <li>- Energy generation systems</li> <li>- Energy Saving</li> <li>- Construction Energy Efficiency</li> <li>- Pollution management</li> <li>- Energy Efficiency on productive chain</li> <li>- Monitoring and Control of Energy sources of consumption</li> <li>- Eco-Design and Eco-development of products</li> <li>- Environmental sustainable models</li> </ul> </li> <li>• The implementation of some key projects/initiatives within the Marche Region regarding Eco-innovation, e.g. House to Future, Tecnomarche &amp; ECO-FOOTWEAR, Alfiere Spa - Fondazione Elios, represent a starting point from which pursue a common strategy of implementing eco-innovative actions</li> <li>• The implementation ECOMARCHE by Confindustria Marche in order to create interest in the management of environmental issues, and more particularly, towards the adoption of environmental certification systems .</li> <li>• Interest in possibility to apply for               <ul style="list-style-type: none"> <li>○ Eco-certifications</li> <li>○ Green products and services</li> <li>○ Eco-efficiency systems for resource use</li> <li>○ Environmental management schemes</li> <li>○ Green Public Procurement</li> <li>○ Green logistics</li> <li>○ Corporate Responsibility Strategy</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Lack of human resources trained to a high-level (with academic degree) in SMEs</li> <li>• Current low level of uptake of Eco-innovative activities</li> <li>• Difficulty in transfer of technological knowledge process from research centres to SMEs</li> <li>• Low percentage of human resources involved in R&amp;D activities.</li> <li>• Current know-how comes from traditional sectors with low technological content in SMEs</li> <li>• Building: productive systems seems to be less active in this sense (few environmental certification requested (only one EMAS) and no eco-patents.</li> <li>• Fashion: lack of an eco-innovative industrial policy</li> </ul>
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> <li>• Constructions, Fashion, (Footwear/Leather/Textile), Mechanics and Electronics, Tourism sectors show awareness that introduction of eco-innovation presents extra sales</li> <li>• Constructions, Fashion, (Footwear/Leather/Textile), Mechanics and Electronics, Tourism, Furniture and Wood sectors show awareness that environmental protection is important for company's competitiveness</li> <li>• Constructions, Fashion, (Footwear/Leather/Textile), Mechanics and Electronics, Tourism, Chemicals/Rubber/Plastic sector show awareness that introducing an environmental innovation could help in response to existing or future environmental regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Public funds related to eco-innovation were fragmented in many programmes and actions creating difficulties for SMEs to clearly identify eco-innovation improvement measures.</li> <li>• SMEs are not easily persuaded to implement a strategical common project</li> <li>• Still relatively low consciousness of potential importance of investing in eco-innovative product or process innovation, because of low incoming perspective (eco-innovative products are not so requested)</li> </ul>

<ul style="list-style-type: none"> <li>• Building sector: the laws that have recently regulated the construction sector regarding eco-innovation, which take account of energy saving and reducing energy consumption, represent an encouragement towards facing environmental and energy issues</li> <li>• Building and Mechanics and Electronic sectors seem to be very sensitive to energy efficiency issues and show interest in participation to a consultancy table for sharing economic and strategic interest in the field of Domotics</li> <li>• Tourism: as a transversal sectors, tourism shows a great interest in all eco-innovative actions coming from both private and public sectors, thus creating a stimulus to implement and to adopt new environmentally friendly technologies to be used in the tourism field</li> <li>• All sectors: Small or medium sized enterprises, which have their roots in the ancient traditions of the Region, where rural development in terms of small-scale craftsmanship and artisan creativity has prevailed provide a relatively white sheet on which to implement eco-innovative activities/initiatives</li> <li>• All sectors: Trends are now changing towards a more comprehensive acknowledgment of the importance of innovation introduced through a scientific approach and based on R&amp;D activities and results</li> </ul>	
<b>NEEDS/ INTERVENTIONS NECESSITIES</b>	
<ol style="list-style-type: none"> <li>1. To increase rate of human resources trained to a high-level (with academic degree) in SMEs</li> <li>2. To create the base for applying the process of technological knowledge transfer from research centres to SMEs</li> <li>3. To increase the percentage of human resources involved in R&amp;D activities</li> <li>4. To increase the technological level of knowledge in the traditional sectors</li> <li>5. To involve institutional stakeholders in order to systematize the definition of programmes for public funds related to eco-innovation</li> <li>6. To create the base to enable SMEs to implement a strategical common project</li> <li>7. To show the real potential importance of investing in eco-innovative products or processes, despite the low incoming perspective</li> </ol>	

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

## 5. THE PARTICIPATIVE PROCESS IN THE TERRITORIAL CONTEXT

The local workshop on eco-innovation is set 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 concrete pursue of such finalities requires the identification of all those working subjects/stakeholders on the territory of reference entitled to give an exact contribution to the discussion as well as to the implementation and actuation.

### 5.1 LOCAL WORKSHOPS

#### 5.1.1. LOCAL WORKSHOPS' ROLE

The strategy of organizing local workshops has been characterized by providing an initial preparatory one-on-one concertation phase with the stakeholders involved, and potentially involved in the definition of the Strategic Operational Plan (SOP). The meetings were designed to analyze in greater detail with respect to the initial level of investigation conducted in the ESA, requirements and needs in terms of support for innovation activities in key eco-sustainable fields.

This strategy foresaw that the findings of these discussions should provide a foundation on which to set a more rational basis for the workshops in question.

The reason for such a choice stems from the belief that in order to obtain a meaningful and useful participation in the workshops for the definition of the SOP, topics should already be as thoroughly discussed in the local context as possible.

Therefore, the one-to-one meetings that Tecnomarche organized also within its design development and technology transfer activities in the territory of the Marche Region, were attended mainly by individual/private stakeholder who have provided some early essential indications on their needs in terms of support but also more specifically in terms of eco-technological innovation. Specifically among the productive sectors identified in the ESA the more receptive sectors were Building, Fashion, Mechanics / Electronics.

Among the stakeholders contacted for public planning workshops, the Chambers of Commerce of Macerata in particular should be mentioned since it has collaborated with Tecnomarche to create a physical and virtual database of innovative materials available for all those business entities that have the need to develop a product or production process innovation in key eco-sustainable fields. This fits into the broader context of joint action to support and encourage innovation in the province of Macerata and thus allows to maintain an open dialogue with important stakeholders such as local government and the Chamber of Commerce of Macerata.

Tecnomarche also recently launched the creation of a technical consultation among local development actors with the objective of defining strategies and actions for regional development with specific reference to the theme of energy efficiency. It therefore creates an additional opportunity for open debate on an issue specifically related to the concepts of eco-innovation.

No less important are the actions of close cooperation between Tecnomarche and the Provinces of Macerata and Ascoli Piceno which allow for an open discussion regarding policy of regional development.

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

Following the methodology described in Section 5.1.1, the workshop have been organized to try to provide separate tables in individual industrial sectors identified in the ESA. A Medossic project summary, a summary of ESA conducted in the Marche region and a summary of the ESA for the Medossic region have been distributed to illustrate the development potential in terms of eco-innovation with a view to cooperation with partner areas of the project and in a logic of the productive system. A short questionnaire to study specific needs and requirements not specifically identified during the workshop have been then prepared.

The workshops include a brief presentation of the contents of the Medossic project explaining the aims and objectives and will proceed with the open debate among the participants offering an opportunity for dialogue with the public stakeholders that take part in the event.

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

The methodology described in Section 5.1.1 was chosen to allow to better focus workshop topics and identify precise discussion points to be developed during the event thus stimulating wider participation.

During the preliminary one-on-one meetings as well as the local workshops the needs and requirements already identified during the ESA and reported in summary form in the SWOT analysis reported in this paper were confirmed.

## **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.

The Matrix 1 is revised and integrated/implemented in relation to what emerged during workshops and local meetings with stakeholders.

### 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 Good practises	Specify direct or indirect impact	(yes / no) IF YES, please specify the kind of involvement for example (telephone contact, to meetings)
<b>Marche Region</b>	Regional level	Political/Financial	<ul style="list-style-type: none"> <li>• Process of decentralisation ("Bassanini law" 1997 and 1998) and reforms to Title V of the constitution in 2001 and its application through the Law 131/2003</li> <li>• ROP (Regional Operative Programmes)</li> <li>• Regional Programmes of Innovative actions (PRAI)</li> <li>• PEAR (Energy and Environment Regional Plan) - The National Law n. 10 of 9/01/1991 "Regulations for the accomplishment of a National Energy Plan on rational use of energy, energy saving and renewable energy sources development issues"</li> <li>• Regional Strategy for Sustainability - STRAS- Adopted by D.A.C.R. No 44 of 30</li> </ul>	<ul style="list-style-type: none"> <li>• Has autonomy in making policy and managing resources concerning innovation at regional level</li> <li>• Outlines regional innovation strategy and objectives - "Building the system", "Promoting the diffusion of innovation"</li> <li>• Draws up the regional innovation plan - Framework agreement signed by the region, the central administration and other public/private actors to define strategies of common interest incl. the planning of resources allocation, etc</li> <li>• Implements the Regional Operational Programme (co-funded by Structural Funds)</li> <li>• Manages Regional incentives</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Political Influence</li> <li>• Decision-making power at Regional level</li> <li>• Management of financial resources</li> <li>• Access to relevant innovation actors within the Region</li> </ul>	Yes (mail)

			<p>January 2007</p> <ul style="list-style-type: none"> <li>Regional law n. 14 of 17-06-2008: "Regulations for Sustainable Building"</li> </ul>	<p>for the promotion of (eco) innovation</p> <ul style="list-style-type: none"> <li>Manages Regional Programmes of Innovative actions (PRAI) - instruments co-financed by the ERDF</li> </ul>			
<p><i>The Provinces of Ascoli Piceno, Macerata, Ancona, Pesaro and Urbino, Fermo</i></p>	Provincial level	Political/Financial	<ul style="list-style-type: none"> <li>PTC (Territorial Coordination Plan): sets the general guidelines for recovery, protection, and correct use of resources and for sustainable development of local territory</li> <li>Province of Ascoli Piceno has elaborated its own Provincial Energy and Environment Plan (PEAP)</li> </ul>	<ul style="list-style-type: none"> <li>Local Authorities</li> <li>Manage eco-innovation policy at provincial level</li> <li>Have interest in specific sectors relevant to the local system - and knowledge of the specific characteristics of the territory</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>Political Influence</li> <li>Decision-making power at Provincial level</li> <li>Management of financial resources</li> <li>Manages eco-innovation policy at local level</li> <li>Capacity to implement Eco- innovation initiatives at local level</li> <li>Knowledge of and Capacity to communicate specific socio-economic needs and opportunities of the local territory</li> <li>Ability to communicate to local citizens and SME's and other relevant actors (researchers, entrepreneurs, etc. )</li> </ul>	Yes (mail; telephone))
<p><i>The Municipalities of the Marche Region: Ancona, Pesaro, Fano, Ascoli Piceno, San Benedetto del Tronto, Senigallia, Macerata, Jesi, Civitanova Marche, Fermo, Osimo, Fabriano, Falconara, Porto Sant'Elpidio, Recanati, Tolentino, Castelfidardo, Sant'Elpidio a Mare, Porto San Giorgio, Potenza Picena, Urbino, Corridonia, Grottammare</i></p>	Municipal level	Political/Financial	<ul style="list-style-type: none"> <li>Municipal Energy and Environment Plan (PEAC) have been drawn up by some of the Municipalities</li> <li>Law No 10 of 1991, Art. 5 paragraph 5, shall oblige the municipalities with a population over 50,000 inhabitants to adopt, as part of its planning instruments, a plan for the use of renewable energy.</li> </ul>	<ul style="list-style-type: none"> <li>Manage initiatives within their jurisdiction at local level</li> <li>Have knowledge of specific problems and potential opportunities regarding the local territory</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>Capacity to adopt Eco-innovation initiatives at local level</li> <li>Knowledge of and Capacity to communicate specific socio-economic needs and opportunities of the local territory</li> <li>Ability to communicate to local citizens and SME's and other relevant actors (researchers, entrepreneurs, etc. )</li> </ul>	No

<p><i>The ITACA Institute: "Institute for Innovation and transparency in procurement and environmental compatibility"</i></p>	<p>Regional/national level</p>	<p>Political/Service</p>	<p>ITACA Protocol - eco-sustainability score for buildings</p>	<ul style="list-style-type: none"> <li>• Regional and national bodies of reference with the aim of activating actions and initiatives shared by the regional system to promote and ensure effective technical coordination between the regions and autonomous provinces, thus providing the best coordination with state institutions, local authorities and business operators in the sectors.</li> <li>• Developed a shared working protocol (Protocol ITACA) which allows buildings to be allocated a score of eco-sustainability</li> <li>• Enabled a detailed survey of the state of the art in various sectors and the exchange of information between those regions which have already gained experience in the area of Green Building, and Eco-sustainability of buildings to develop a cognitive synergy and common strategies in the field.</li> <li>• Promotion and dissemination of good practice in services, supplies and public works for the urban quality and environmental sustainability</li> </ul>	<p>Ref: Existing Situation Analysis/Good Practices Report</p>	<ul style="list-style-type: none"> <li>• Large concrete confrontation on issues identified (environmental sustainability, energy efficiency, urban quality, etc.)</li> <li>• Knowledge exchange and sharing of projects that may pose hypothesis of socio-economic and environmental sector</li> <li>• Technological knowledge</li> <li>• Wide capacity for dissemination of project results</li> </ul>	
<p><i>University Polytechnic of the Marche</i></p>	<p>Regional level</p>	<p>University</p>	<ul style="list-style-type: none"> <li>• Departments of Physics, Material and Environmental Engineering, Chemical Sciences and Technologies, Mechanics, Energy, Electronics, Artificial Intelligence, Telecommunications, Architecture, Construction and Building, Computer Science Engineering, and Management of Automation</li> </ul>	<ul style="list-style-type: none"> <li>• Higher education and research facilities in technology and Innovation</li> <li>• Existing dialogue with the productive sectors</li> </ul>	<p>Ref: Existing Situation Analysis</p>	<ul style="list-style-type: none"> <li>• Ensure on-going dialogue between academic research and the productive system</li> <li>• Capacity to disseminate project results and influence students and young researchers - future generation of innovators</li> </ul>	

<i>University of Urbino "Carlo Bo"</i>	Regional level	University		<ul style="list-style-type: none"> <li>Higher education and research facilities in technology and Innovation</li> <li>Existing dialogue with the productive sectors</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>Ensure on-going dialogue between academic research and the productive system</li> <li>Capacity to disseminate project results and influence students and young researchers - future generation of innovators</li> </ul>	
<i>University di Camerino</i>	Regional level	University	<ul style="list-style-type: none"> <li>Departments: Mathematics and Computer Science, Chemistry, Physics, Planning and Construction of the Environment</li> <li>First Level Masters "Eco-Design and Eco-Innovation - Strategies, methods and tools for the design and development of environmentally sustainable products."</li> <li>Masters "Production, utilization and management of energy from renewable sources"</li> <li>Second Level Masters "Environmental Sustainability and energy efficiency."</li> </ul>	<ul style="list-style-type: none"> <li>Higher education and research facilities in technology and Innovation</li> <li>Existing dialogue with the productive sectors</li> </ul>	Ref: Existing Situation Analysis/ Good Practices Report	<ul style="list-style-type: none"> <li>Ensure on-going dialogue between academic research and the productive system</li> <li>Capacity to disseminate project results and influence students and young researchers - future generation of innovators</li> <li>Disseminate methods and tools for the design and development of environmentally sustainable products</li> </ul>	
<i>University of Macerata</i>	Regional level	University	<ul style="list-style-type: none"> <li>Departments: Archaeological and Historical Sciences of Antiquity, Italian private and labour Law, Studies on Economic Development, Studies on Economic and Financial Institutions; The Science of Education and Training, Laboratory for Information Technology for Document Management</li> </ul>	<ul style="list-style-type: none"> <li>Higher education and research facilities in technology and Innovation</li> <li>Existing dialogue with the productive sectors</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>Ensure on-going dialogue between academic research and the productive system</li> <li>Capacity to disseminate project results and influence students and young researchers - future generation of innovators</li> </ul>	
<i>Italian Association of Science and</i>	National level	Science and Technology Parks	Network of Italian Association of Science and Technology parks	<ul style="list-style-type: none"> <li>Promotes integration of Italy's 44 science and Technology</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>Capacity to reach a large number of stakeholders</li> </ul>	

<p><i>Technology Parks (APSTI - Associazione Parchi Scientifici e Tecnologici Italiani )</i></p>				<p>parks (31 members)</p> <ul style="list-style-type: none"> <li>• Promotes a culture of innovation and the competitiveness of enterprises for economic growth within the respective territories</li> <li>• Provides integration between the companies' need for innovative growth, especially small- and very small-sized businesses, and the knowledge of Technological and Scientific centres, Universities and Research Centres.</li> <li>• Creates systems and networks between the actors who interact in the field of innovation and the transfer of technology.</li> <li>• Sustains the sharing and use of knowledge in order to raise the level of competitiveness of business systems and local communities.</li> <li>• Systematically promote instruments and policies in support and for the qualification of projects for the development of high-tech business systems;</li> <li>• Promote development of new high-tech companies through an integrated incubator system.</li> </ul>		<p>and target groups at national level</p> <ul style="list-style-type: none"> <li>• Extensive know-how in the field of innovation / eco-innovation</li> <li>• Knowledge of state of the art and ongoing projects regarding innovation/eco-innovation at national level</li> <li>• Promoter of instruments for eco-innovation</li> </ul>	
<p><i>AIDA- "Association for innovation of the Apennine Ridge"</i></p>	<p>Inter-Regional/National level</p>	<p>Science and Technology Parks</p>	<p>Science and Technology parks of Marche, Abruzzo, Molise, Salerno, and internal areas of Campania and Calabria</p>	<ul style="list-style-type: none"> <li>• Promotes innovation within the Marche and neighbouring region of Abruzzo as well as other regions with similar geographical characteristics</li> <li>• Promotes networks between relevant actors in the Apennine Ridge area.</li> <li>• Sustain the sharing of knowledge between members</li> </ul>	<p>Ref: Existing Situation Analysis</p>	<ul style="list-style-type: none"> <li>• Capacity to reach a large number of stakeholders and target groups at national level</li> <li>• Extensive know-how in the field of innovation / eco-innovation</li> <li>• Knowledge of state of the art and ongoing projects regarding innovation/eco-innovation at national</li> </ul>	

						level	
						<ul style="list-style-type: none"> <li>• Promoter of instruments for eco-innovation</li> </ul>	
<i>Partnership of Tecnomarche Scarl (PSTMarche - Science and Technology Park of Marche Region)</i>	Regional level	Science and Technology Park	<ul style="list-style-type: none"> <li>• Existing partnerships with the science/technology as well as business worlds</li> <li>• On-going and implemented projects e.g. <i>House of Future</i> (as outlined in the Good Practices Report)</li> <li>• Partner of the European Enterprise Network (EEN)</li> <li>• Material Point - Physical and Digital database of Innovative Materials in the field of eco-innovation and sustainable development</li> </ul>	<ul style="list-style-type: none"> <li>• PSTMarche acts by promoting and transferring science, technology and knowledge, with the aim to increase the competitiveness of the local productive system, especially SMEs, supporting research and innovation.</li> <li>• PSTMarche participates in knowledge networks at national and European level.</li> <li>• 62 private subjects with about 40 SMEs are in the PSTMarche partnership operating in the following areas: <ul style="list-style-type: none"> <li>- Manufacturing industry (household appliances, home furniture, plastics and wood, footwear and leather, shipbuilding and aviation industry, electronic device, textile, electrical vehicle)</li> <li>- ICT industry (building automation, automatic identification)</li> <li>- Energy &amp; Environment services</li> <li>- Agroindustry</li> <li>- Construction industry</li> </ul> </li> </ul>	Ref: Existing Situation Analysis - Good Practices Report	<ul style="list-style-type: none"> <li>• Capacity to reach a large number of stakeholders and target groups at regional level</li> <li>• Capacity to disseminate project finding and raise awareness amongst relevant actors</li> <li>• Extensive know-how in the field of innovation / eco-innovation</li> <li>• Knowledge of state of the art and ongoing projects regarding innovation/eco-innovation at national level</li> <li>• contributing to research fields in the wide framework of "Key Enabling Technologies", which have a transversal character regarding Marche manufacturing industries and innovative industries.</li> <li>• stimulate the emergence of innovation and research in the Small and Medium Enterprises in the Marche, identified as a priority target.</li> <li>• Creating Collaborative Networks with regional and national Research Centres</li> <li>• Extensive networks of partners and local actors</li> <li>• Extensive knowledge of the territorial productive system and sector analysis</li> </ul>	

						<ul style="list-style-type: none"> <li>• Access to innovators /potential innovators/ students</li> </ul>	
<i>ILO - Industrial Liaison Office - University Polytechnic of the Marche</i>	Regional level	Knowledge Transfer	<ul style="list-style-type: none"> <li>• knowledge transfer promotion with the purpose of creating an effective integration between universities and business</li> </ul>	<ul style="list-style-type: none"> <li>• Provides a link between the University and local enterprises</li> <li>• Promotes knowledge transfer</li> <li>• The main objective of the project is thus to strengthen the structures that are simultaneously monitoring centre of research activities conducted within the universities and central link to the economy and production, especially small and medium businesses in the territory.</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Capacity to disseminate project finding and raise awareness amongst relevant actors</li> <li>• Network-building</li> </ul>	
<i>ILO - Industrial Liaison Office - University of Camerino</i>	Regional level	Knowledge Transfer	<ul style="list-style-type: none"> <li>• knowledge transfer promotion with the purpose of creating an effective integration between universities and business .</li> </ul>	<ul style="list-style-type: none"> <li>• Provides a link between the University and local enterprises</li> <li>• Promotes knowledge transfers</li> <li>• The main objective of the project is thus to strengthen the structures that are simultaneously monitoring centre of research activities conducted within the universities and central link to the economy and production, especially small and medium businesses in the territory.</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Capacity to disseminate project finding and raise awareness amongst relevant actors</li> <li>• Network-building</li> </ul>	
<i>Service PatLib - CCIAA Ancona</i>	Regional level	Service	<ul style="list-style-type: none"> <li>• Patent Library</li> </ul>	<ul style="list-style-type: none"> <li>• PatLib patent (Patent Library) officially recognised by national patent offices of members of European Patents (European Patent Office - EPO).</li> <li>• PatLib Centre users can access databases on patents</li> <li>• This centre is one of 19 PatLib operational centres in Italy</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• State of the Art know-how at European level</li> </ul>	
<i>EQJSrl - European quality institute and Foundation EQJ</i>	National /European level	Service	<ul style="list-style-type: none"> <li>• Quality control and Certification institute</li> </ul>	<ul style="list-style-type: none"> <li>• Quality control and Certification institute</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Technical know-how</li> <li>• Knowledge of state of the art</li> </ul>	

<i>Chambers of commerce industry, handicraft and agriculture of Macerata, Ascoli Piceno, Ancona, Pesaro Urbino, Fermo</i>	Regional level	Political/Service	<ul style="list-style-type: none"> <li>• Chamber of Commerce of Ascoli Piceno - Partner of European Enterprise Network (EEN)</li> <li>• Chamber of Commerce of Macerata: Plan for Innovation in Local Enterprises</li> <li>• Chamber of Commerce of Ancona - Database of environmental patents</li> <li>• Chamber of Commerce of Ancona - Desk dedicated to the promotion, awareness raising and dissemination of socially responsible companies also linked to a number of environmental projects</li> <li>• Chambers of Commerce Ancona - EMAS School</li> </ul>	<ul style="list-style-type: none"> <li>• Provide services to enterprises and develop strategies and projects for innovation to favour the development of enterprises and the economic enhancement of the territory</li> <li>• Important role in the dissemination of innovation, providing enterprises with information, services and grants (e.g. environmental and quality certification)</li> <li>• Technical Assistance and technology transfer, advanced services through agencies specialised in technological innovation</li> <li>• Dissemination of information on technological legislation, training and the exploitation of R&amp;D results.</li> <li>• Autonomous with an institutional status - ability to autonomously govern economic processes</li> <li>• Provide enterprise demographics, business and structural analysis, provincial and regional economic statistics, estimates on added value and investments, labour and price trends in the various markets (business register, networks of enterprises)</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Communication with enterprises - connections with local enterprises</li> <li>• The business register</li> <li>• Extensive networks of partners and local actors</li> <li>• Extensive knowledge of the territorial productive system and sector analysis</li> <li>• Dissemination of project results</li> </ul>	
<i>Unioncamere</i>	National level	Political/Service	<ul style="list-style-type: none"> <li>• Network of Nationwide Chambers of Commerce</li> </ul>	<ul style="list-style-type: none"> <li>• Italian Union of Chambers of Commerce - operating at National level</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Dissemination of project results at national level</li> </ul>	
<i>Confindustria - General Confederation of Italian Industry</i>	Regional/National level	Political/Service	<ul style="list-style-type: none"> <li>• The project Ecomarche established in order to create interest in the management of environmental issues, and more particularly, towards the adoption of environmental certification systems</li> </ul>	<ul style="list-style-type: none"> <li>• Italy's largest organisation representing the manufacturing and service industries.</li> <li>• More than 113,000 member companies of all sizes, organised in 259 associations</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Dissemination of project results at national level</li> <li>• Extensive networks of partners and local actors</li> </ul>	

<i>CNA - National confederation for the craft sector and small and medium Enterprises in Italy</i>	Regional/National level	Political/Service	<ul style="list-style-type: none"> <li>• Network of Nationwide confederation for the craft sector and SMEs in Italy</li> </ul>	<ul style="list-style-type: none"> <li>• Represents craft businesses and their entrepreneurs, small and medium sized enterprises and related associations.</li> <li>• 1,100 branches nationwide</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Dissemination of project results at national level</li> <li>• Extensive networks of partners and local actors</li> </ul>	
<i>Confapi - Italian Confederation of small and Medium sized Industry</i>	Regional/National level	Political/Service	<ul style="list-style-type: none"> <li>• Network of Nationwide confederation for Industrial SMEs in Italy</li> </ul>	<ul style="list-style-type: none"> <li>• Support the aims and interests and to enhance SME's in Italy.</li> <li>• Organised on a Provincial basis and encompassing more than 50,000 enterprises</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Dissemination of project results at national level</li> <li>• Extensive networks of partners and local actors</li> </ul>	
<i>Confartigianato - General Confederation of Italian Artisans</i>	Regional/National level	Political/Service	<ul style="list-style-type: none"> <li>• Network of Nationwide confederation for Artisans in Italy</li> </ul>	<ul style="list-style-type: none"> <li>• Provides associated enterprises with a wide range of services, information and representation of their general interests</li> <li>• Dialogue with counterparts in negotiations and public institutions</li> <li>• Half a million members</li> <li>• 1,200 offices throughout Italy</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Dissemination of project results at national level</li> <li>• Extensive networks of partners and local actors</li> </ul>	
<i>ITCA</i>	Regional/National level	Technology Supply	Technology supply in the furniture district	Information Technology and Advanced Technology consortium Assindustria Pesaro Urbino - Leading companies and technology supply in the Marche furniture district (TecnoMarche is the Marche research centre of the consortium)	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Dissemination of project results at national level</li> <li>• Extensive networks of partners and local actors</li> </ul>	
<i>Elios Foundation - Pole for educational excellence for footwear in the Marche Region</i>	Regional level	Service/Knowledge transfer	<ul style="list-style-type: none"> <li>• A series of services and training for the footwear industry</li> <li>• Project "ECO-FOOTWEAR" (Analysed in the Tecnomarche Good Practices Report)</li> </ul>	<ul style="list-style-type: none"> <li>• A centre of vocational training for the footwear industry within the Marche</li> <li>• Formed through the collaboration of 30 of the Regions largest companies in the footwear sector and industry associations</li> <li>• Directs design of training courses. Promotes contacts and exchanges with Training Centres, Schools, Universities and Research Centres at home and abroad to promote and enhance the culture, the level of knowledge and training of</li> </ul>	Ref: Existing Situation Analysis / Good Practices Report	<ul style="list-style-type: none"> <li>• Extensive knowledge of the footwear sector</li> <li>• Large network of relevant partners</li> <li>• Capacity to disseminate project results to a large number of stakeholders as well as target groups (e.g. students and potential innovators)</li> <li>• Access to innovators /potential innovators/ students</li> </ul>	

				<p>students.</p> <ul style="list-style-type: none"> <li>• Analysis of training needs expressed by companies</li> <li>• Partnerships with Chambers of Commerce, Provinces and Municipalities, Banks, Handicraft Associations and many enterprises.</li> <li>• Designs and supports research and monitoring of the economic and social issues of the footwear district</li> <li>• Monitoring of funding sources.</li> </ul>			
<i>Digital Alliance Partners network coordinated by Freescale</i>	Regional/National/International level	Network/Service	<ul style="list-style-type: none"> <li>• Network for Technology solutions</li> </ul>	<ul style="list-style-type: none"> <li>• Global network for design /technology solutions</li> <li>• Technology alliance intended to aid the design cycle and get products onto the market faster</li> <li>• Provides access to design tools and offers support and training.</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Large network and capacity to disseminate project results at national and international level</li> <li>• Expertise in the design and realisation of new products</li> <li>• Extensive Technical Know-How</li> </ul>	
<i>ISMAR, Institute of Marine Science - CNR (public body)</i> Research Institute with the following departments: Marine Fishery Biology; Environment, Artificial Reefs and Mariculture; Fish Population Dynamics; Oceanography; Applied Electronics; Fishing Gears Technology; Fishing Vessels Technology; Marine Geology; Marine Microbiology; Antarctic studies.	Regional/National level	Technological/Service	<ul style="list-style-type: none"> <li>• Departments:</li> <li>• Marine Fishery Biology; Environment, Artificial Reefs and Mariculture; Fish Population Dynamics; Oceanography; Applied Electronics; Fishing Gears Technology; Fishing Vessels Technology; Marine Geology; Marine Microbiology; Antarctic studies.</li> </ul>	<ul style="list-style-type: none"> <li>• Research activities in Marine Science</li> <li>• Emphasis in developing innovative fishing methods which are not environmentally damaging</li> <li>• Forecasting and analysing of changes in eco-systems</li> <li>• Conservation of species</li> <li>• EU recommendations to achieve sustainable fisheries and the Common Fisheries Policy</li> <li>• Educational and training role, incl. training for fisheries inspectors promoting (standards promoting sustainable fishing)</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Significant technical know-how within marine science</li> <li>• Experienced with eco-innovative activities for the sector</li> </ul>	
<i>Research Unit for</i>	Regional/National	Technological/Service	<ul style="list-style-type: none"> <li>• National Research Organization which operates under the</li> </ul>	<ul style="list-style-type: none"> <li>• Supports innovation and technological evolution of the</li> </ul>		<ul style="list-style-type: none"> <li>• Extensive established networks within the field</li> </ul>	

<p><i>horticulture - CRA Council for Research and Experimentation in Agriculture (public body)</i> National Research Organization which operates under the supervision of the Ministry of Agriculture, with general scientific competence within the fields of agriculture, agroindustry, food, fishery and forestry.</p>	level		supervision of the Ministry of Agriculture, with general scientific competence within the fields of agriculture, agroindustry, food, fishery and forestry.	<p>agricultural sector</p> <ul style="list-style-type: none"> <li>• Supports and performs research activities in favour of a sustainable development for rural and coastal areas</li> <li>• Develops new technological and organisational innovations to meet the specific socioeconomic and ecological needs of local communities so as to improve the competitive capacities of the territory.</li> <li>• Advises Ministries, EU, the International Organizations, Regional and Provincial Administrations, and Self-Governing Provinces.</li> <li>• Promotes and develops relations with Institutions, scientific and technological societies and organizations, labor and trade unions, NGO's and the tertiary sector.</li> <li>• Provide teaching and doctoral courses and training for post-graduate students in cooperation with Universities, and also advanced education in research in non-university studies</li> </ul>		<p>of agriculture</p> <ul style="list-style-type: none"> <li>• Dissemination of project results, to enterprises.</li> <li>• Sharing of knowledge deriving from institutional research activity</li> </ul>	
SMEs	Regional level	Target Group		<p>Within the sectors of:</p> <ul style="list-style-type: none"> <li>• Mechanics and Electronics</li> <li>• Fashion (Footwear, Leather and Textile)</li> <li>• Wood, Furniture and Plastics</li> <li>• Construction</li> <li>• Energy Efficiency and Renewable Energies</li> <li>• Tourism - Building - Sustainable buildings</li> <li>• Food</li> <li>• Shipbuilding</li> </ul>	Ref: Existing Situation Analysis	<ul style="list-style-type: none"> <li>• Will be the end users of the pilot structure and the beneficiaries of the project</li> <li>• Essential to gain interest/support amongst SMEs</li> <li>• Ongoing feedback from SMEs will produce better project results</li> </ul>	

<p><i>Innovators &amp; Potential innovators - Young researchers &amp; Students</i></p>	<p>Regional level</p>	<p>Target Group</p>		<ul style="list-style-type: none"> <li>• Students (incl. engineering, design and economics students)</li> <li>• Young innovators, already working, or potentially working in innovation</li> <li>• Established innovators/engineers already active in the field</li> </ul>	<p>Ref: Existing Situation Analysis</p>	<ul style="list-style-type: none"> <li>• Those parties who will be responsible for future innovative activities</li> <li>• Essential to gain interest/support amongst these groups if project results are to be sustained</li> <li>• Can provide valuable feedback throughout the project</li> <li>• Will be the end users of pilot structure and project results</li> </ul>	
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## 5.3 A GENERAL COMMENT ON THE EXISTING INSTITUTIONAL CONTEXT

### 5.3.1 THE MAIN STAKEHOLDERS AND TOOLS FOR INNOVATION AND ECO-INNOVATION.

Here below are briefly listed some of the institutional stakeholders, among those just reported in the Stakeholder Analysis and in the Matrix 1 of the present document. They have been chosen among the others because of their high potential to concretely support eco-innovation and because of their awareness of the needs of the local territory.

- Marche Region because of its high institutional role in terms of government of the territory, creating policy directives, decision-making power at Regional level, management of financial resources, access to relevant innovation actors within the Region
- Provincial institutions because of their political Influence, decision-making power at Provincial level, management of financial resources, capacity to implement innovation policies and initiatives at local level, knowledge of and Capacity to communicate specific socio-economic needs and opportunities of the local territory
- Universities and Research Centres because of their capacity to ensure an on-going dialogue between academic research and the productive system, capacity to disseminate project results and influence students and young researchers - the future generation of innovators, capacity to disseminate methods and tools for the design and development of environmentally sustainable products, capacity to close the gap between the academic world and the productive system through the institution of specific Masters programmes with a high rate of practical experience of the participants in concrete productive realities.
- Chambers of commerce, industry, handicraft and agriculture because of their capacity to communicate with enterprises and create connections with local enterprises, because they have an extensive networks of partners and local actors, an extensive knowledge of the territorial productive system and sector analysis and finally because of their capacity to disseminate project results
- Confederations of private productive subjects (Confindustria, Confartigianato, Confapi), because of their capacity to disseminate project results at national and regional level and because they have extensive networks of partners and connections with local actors

For more detailed description please see the Matrix of the present document.

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

The main problems related to the process of supporting eco-innovation by institutional stakeholders are those just identified in the ESA and synthesized in the SWOT analysis of the present document; namely:

- Economic resources allocated by local government bodies for improving eco-innovation actions are fragmented and not ever consistent.

- Public funds related to eco-innovation were fragmented in many programmes and actions creating difficulties for SMEs to clearly identify eco-innovation improvement measures.
- Information activities are not sufficient and fragmented.

Moreover some of the institutional stakeholders face the problems of:

- Lack of technical instruments to support eco-innovation actions through the technology and scientific knowledge transfer process
- Lack of scientific tools extremely important to understand the needs of that section of the local productive system that wants to invest in eco-innovation.

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

Rather than involving only a small number of actors to promote eco-innovation it seems to be more strategic to encourage a systematic dialogue among the active local institutional stakeholders, in order to create networks of information and to support and enable the organisation of policies and public funds in favour of eco-innovation actions.

The partnerships among different actors of the local development system represent a tool or a strategic approach that could create a synergy useful for the eco-innovation success. One example is the partnership between Tecnomarche and Chamber of Commerce of Macerata, created with the scope to encourage a culture of innovation in the local productive system through the technology and scientific knowledge transfer process adopted by Tecnomarche and through the capacity of dialogue of the Chamber of Commerce with the enterprises.

Of course the tool of information seems to be an instrument which is lacking in supporting innovation. The creation of a single central technical information point, such as the Medossic pilot structure, is widely recognised to be very useful to systematize the activity of information regarding all concerning eco-innovation.

Part 6.  
**STRATEGIC LINES**

## 6. STRATEGIC LINES

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

The first information arising from the preparational one-to-one meetings and the local workshops confirm the indicative findings of the ESA and give some further indications on what are the needs, from a technological point of view and in terms of eco-innovation, of the productive sectors identified in the ESA and involved in this step of the survey. Such information has been very useful to identify the strategic lines of the SOP. New productive sectors have been identified and will be involved in further activities; namely they are Shutter Producers (within wood sector) and packaging producers (within chemical and paper sectors). For each sector they are outlined below:

#### **Construction-Sustainable Building-Energy Efficiency:**

Despite industrial polices strong efforts of eco-innovation action towards construction of eco-buildings, individually the productive systems seem to be less active in this sense: it can be shown by the few environmental certifications requested (only one EMAS) and no eco-patents. Even though only a small sample was analysed for the sector it:

- shows interest in
  - LCA
  - Eco-Design and Eco-development of products
  - Environmental sustainable models
  - Construction Energy Efficiency
  - Pollution management
- recognises that introduction of eco-innovation presents extra sales
- believes environmental protection is important for company's competitiveness
- believes introducing an environmental innovation could help in response to existing or future environmental regulations

The laws that have recently regulated the construction sector regarding eco-innovation which take account of energy saving and reducing energy consumption, represent an encouragement towards facing environmental and energy issues.

The sector shows a great potential to adopt eco-innovations related to energy efficiency both for new and for old building.

Moreover during the establishment of the concertation tables promoted by Tecnomarche, the building sector of the territory of Ascoli Piceno showed and confirmed a strong interest in the energy efficiency themes and in the establishment of multi-sectorial work tables for planning activities in innovation, technology transfer and training concerning comfort, wellbeing, sustainable construction and energy efficiency.

Some other specific interest shown concerned the setting up of activities with particular reference to:

- definition of innovative materials
- development and innovation of materials technology
- sustainable design
- application of home automation technologies

### **Fashion (Footwear, Leather, Textile)**

The productive systems seems to be more active despite the lack of an eco-innovative industrial policy:

- Currently adopts:
  - environmental certification requested (six EMAS and two ISO 14001),
  - recycling systems
  - energy saving technology
  - pollution management technologies (emission reductions technologies)
  - Eco-efficiency systems for resource use
- Shows interest in the possibility to apply for:
  - Eco-certifications
  - Green products and services
  - Eco-efficiency systems for resource use
  - Environmental management schemes
  - Green Public Procurement
  - Green logistics
  - Corporate Responsibility Strategy
- Shows interest in
  - LCA
  - Green Chemistry
  - Materials Recycling
  - Eco-Design and Eco-development of products
  - Energy generation systems
  - Energy Efficiency on productive chain
- Shows awareness that introduction of eco-innovation presents extra sales
- Shows awareness that environmental protection is important for company's competitiveness
- Shows awareness that introducing an environmental innovation could help in response to existing or future environmental regulations

Some other specific interest shown concerned the setting up of activities with particular reference to:

- Eco-innovative Materials
- Eco-innovative production processes
- Eco- design projects
- Ergonomics, comfort and sustainability of the fashion product
- Systems for rapid and flexible design
- Systems for logistics and sustainable supply chain

### **Mechanics and Electronics**

In relation to the Fashion sector, Mechanics and Electronic sectors seems to be more active despite a lack of an eco-innovative industrial policy: it can be showed by:

- Adoption of
  - environmental certification requested (3 EMAS and 27 ISO 14001)
- Stimulation of eco-patents production (25)
- Interest in

- LCA
- Materials Recycling
- Eco-Design and Eco-development of products
- Energy generation systems
- Energy Saving
- Monitoring and Control of Energy sources of consumption
- Environmental sustainable models

It showed a strong interest to create synergies with other productive sectors, namely Building for the theme of Energy Efficiency and Domotics, and Energy Efficiency and Renewable Energies for the issue of energy production from renewable sources. The concertation table formed by Tecnomarche within the theme of Energy Efficiency would create a common base for discussion with other productive sectors interested in energy efficiency issues.

#### **Chemical/plastic/wood/shutters/packaging**

As for these sectors, they were still not involved directly in the one-to-one meetings, even though it can be said that they are being involved at the present time within the creation of the Material Point (the virtual and physical database of innovative materials) which is established in Tecnomarche's structure in collaboration with the Chamber of Commerce of Macerata. The sectors are showing interest in:

- Eco-innovative materials
- Eco-innovative materials' production process

Some other specific interest shown concerned the setting up of activities with particular reference to:

- LCA
- Materials Recycling
- Energy Saving
- Eco-Design and Eco-development of products

#### **Tourism**

Also for these sector no one-to-one meetings have been established to date, even though it's clear that this represents a very transversal service sector and, as it is, uses and adopts all the innovative technologies coming from the productive systems, both local and outside the Regional territory. In this way of course, because of its importance in the regional productive system, it can be recognised as a potential user of eco-innovation and, despite no longer having relevance in terms of economical indicators in our territory as the manufacturing sectors do, it represents a very important instrument for demonstrating the benefits and importance of eco-innovations.

The participation in the recent years of this sector to a wide range of projects related to sustainable tourism, energy efficiency, renewable energies clearly shows significant interest in eco-innovation issues.

## 6.2 IDENTIFICATION OF THE GLOBAL OBJECTIVE

The common global objective seems to be that to create a base for dialogue among the actors, both public and private, in order to improve the exchange of experiences, knowledge and needs. The pilot structure of the Medossic project would be the virtual and physical place from where information could be taken regarding the results of such concertation activities.

The overall aim is to overcome all the barriers and to eliminate all the threats that prevent eco-innovative investments; namely:

- Lack of human resources trained to a high-level (with academic degree) in SMEs
- Current low level of uptake of Eco-innovative activities
- Difficulty in transfer of technological knowledge process from research centres to SMEs
- Low percentage of human resources involved in R&D activities.
- Current know-how coming from traditional sectors with low technological content in SMEs
- Public funds related to eco-innovation were fragmented in many programmes and actions creating difficulties for SMEs to clearly identify eco-innovation improvement measures.
- SMEs are not easily persuaded to implement a strategic common project
- Still relatively low consciousness of potential importance of investing in eco-innovative product or the process innovation, because of low incoming perspective (eco-innovative products are not so frequently requested)

## 6.3 STRATEGIC SYSTEM

One of the main instruments to pursue the overall abovementioned objective is the concertation tables on which to discuss issues related to eco-innovation both related to technological aspects and supporting matters. This seems to be true for all the sectors investigated also in relation to the fact that some of them would be interested in participation of one or more multi-sectorial table.

The specific lines are then:

1. Identify/Confirm the candidate sectors for eco-innovations through the instrument of local workshops
2. Identify areas of interests (i.e. energy efficiency or innovative materials, etc.)
3. Establish a consultancy table for each sector or eventually for each area of interest involving more than one sector (for example the consultancy table for Energy Efficiency could involve Building, Mechanics/Electronics and Tourism sectors)
4. Create a common base of dialogue, scientific or technological, thus involving subjects able to adopt the instruments commonly used in the industrial research field and the knowledge transfer process methodology as well as subjects strictly related to the R&D sphere.
5. Identify specific technological needs also in relation to the possibility of implementing a common project within the Medossic region.

6. Identify needs in terms of supporting measures to eco-innovation actions in relation to the technical needs previously identified. Reports such needs to institutional stakeholders.
7. Build the Medossic Pilot Structure based on the result of the previous points

#### **6.4 FRAMEWORK OF THE OPERATIONAL OBJECTIVES**

The specific objectives are then to:

1. Identify the sectors with major potential impact on eco-innovation
2. Define which are the main technological areas of eco-innovation strictly related to the local territory development
3. Open a dialogue among the actors of the local productive system
4. Create the base to close the gap between industrial system (mostly SMEs) and research and scientific worlds
5. Create the base for the implementation of a project also at European level
6. Influence local policies
7. Create an output of the results of the abovementioned objects

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

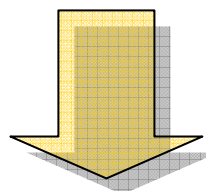
The present paragraph is turned to a first analysis of the coherence between the necessities and needs of intervention that emerged through SWOT analysis and the strategic lines that it is intended to pursue.

At this moment the strategic lines as well as the needs are the same for all the sector identified in the ESA. Thus the following Matrix 2 and 3 refers to all the sectors.

**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
<ul style="list-style-type: none"> <li>Increase rate of human resources trained to a high-level (with academic degree) in SMEs</li> </ul>	<i>All identified</i>	Create a common base of dialogue, scientific or technological, thus involving subjects able to adopt the instruments commonly used in the industrial research field and the knowledge transfer process methodology as well as subjects strictly related to R&D sphere.	<i>Universities/Research centres Training centres Science and Technology Parks</i>	3
<ul style="list-style-type: none"> <li>Create the base for applying the process of technological knowledge transfer from research centres to SMEs</li> </ul>	<i>All identified</i>	Create a common base of dialogue, scientific or technological, thus involving subjects able to adopt the instruments commonly used in the industrial research field and the knowledge transfer process methodology as well as subjects strictly related to R&D sphere.	<i>Chamber of Commerce Science and Technology Parks Universities/Research centres</i>	5
<ul style="list-style-type: none"> <li>Increase the percentage of human resources involved in R&amp;D activities.</li> </ul>	<i>All identified</i>	Create a common base of dialogue, scientific or technological, thus involving subjects able to adopt the instruments commonly used in the industrial research field and the knowledge transfer process methodology as well as subjects strictly related to R&D sphere.	<i>Universities/Research centres Training centres Science and Technology Parks</i>	4
<ul style="list-style-type: none"> <li>Increase the technological level of knowledge in the traditional sectors</li> </ul>	<i>All identified</i>	Create a common base of dialogue, scientific or technological, thus involving subjects able to adopt the instruments commonly used in the industrial research field and the knowledge transfer process methodology as well as subjects strictly related to R&D sphere.	<i>Universities/Research centres Training centres Science and Technology Parks</i>	4

<ul style="list-style-type: none"> <li>Involve institutional stakeholders in order to systematize the definition of programmes for public funds related to eco-innovation.</li> </ul>	<i>All identified</i>	Identify needs in terms of supporting measures for eco-innovation actions in relation to technical needs previously identified. Report such needs to institutional stakeholders.	<i>Marche Region Provinces Chamber of Commerce</i>	3
<ul style="list-style-type: none"> <li>Create the base to enable SMEs to implement a strategical common project</li> </ul>	<i>All identified</i>	Identify Areas of interests (i.e. energy efficiency or innovative materials, etc.) Establish a consultancy table for each sector or eventually for each area of interest involving more than one sector Identify specific technological needs also in relation to the possibility of implementing a common project within the Medossic region.	<i>Marche Region Provinces Chamber of Commerce Confederations of private subjects Science and Technology Parks</i>	4
<ul style="list-style-type: none"> <li>Show the real potential importance of investing in eco-innovative products or process innovation, despite the low incoming perspective</li> </ul>	<i>All identified</i>	Build the Medossic Pilot Structure based on the result of the previous points	<i>Chamber of Commerce Confederations of private subjects</i>	4



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

Global SOP objective	Strategic lines	Operational objectives	Possible identifiable actions
Create a base for dialogue among the actors, both public and private, in order to improve the exchange of experiences, knowledge and needs	Identify/Confirm the candidate sectors for eco-innovations through the instrument of local workshops	Individualuate the sectors with major potential impact on eco-innovation	<i>Workshops</i>
	Identify Areas of interests (i.e. energy efficiency or innovative materials, etc.)	Define which are the main technological areas of eco-innovation strictly related to the local territory development	<i>Workshops</i>
	Establish a consultancy table for each sector or eventually for each area of interest involving more than one sector (for example the consultancy table for Energy Efficiency could involve Building, Mechanics/Electronics and Tourism sectors)	Open a dialogue among the actors of the local productive system	<i>Consultancy tables</i>
	Create a common base of dialogue, scientific or technological, thus involving subjects able to adopt the instruments commonly used in the industrial research field and the knowledge transfer process methodology as well as subjects strictly related to R&D sphere.	Create the base to close the gap between industrial system (mostly SME) and research and scientific world	<i>Defining Methodology approach</i>
	Identify specific technological needs also in relation to the possibility of implementing a common project within the Medossic region.	Create the base for the implementation of a project also at European level	<i>Baseline for project implementation</i>
	Identify needs in terms of supporting measures to eco-innovation actions in relation to technical needs previously identified. Reports such needing to institutional stakeholders.	Influence local polices	<i>Consultation tables with institutional stakeholders</i>
	Build the Medossic Pilot Structure based on the result of the previous points	Create an output of the results of the abovementioned objects	<i>Pilot Structure</i>

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 ENVIPARK - Turin Environment Park

Good practice Title	<b>ENVIPARK - Turin Environment Park</b>
Promoting Subject	<b>ENVIPARK - Turin Environment Park</b>
Good practice description	<p>Turin Environment Park is primarily an eco-innovation support instrument providing a link between Research and the industrial system of the Piedmont Region.</p> <p>Firstly the Environment Park aims to provide small and medium-sized enterprises with advanced solutions and innovative technologies in the fields of energy and the environment, through partnerships, special projects, specific training activities and the organisation of thematic events. It represents an innovative experience in Europe because it is the first Technological and Scientific Park dedicated to environmental technologies.</p> <p>The Park wants also to promote the creation of innovative enterprises in the sectors linked to environment and to sustainable development, giving technical managerial and financial supports in the start-up period of the new enterprises. At the same time the Environment Park carries out activities, research and projects aimed at the improvement of environmental technologies, analysis and knowledge transfer at territorial, national and international levels.</p>
Info (website, contacts etc.)	<a href="http://www.envipark.com">www.envipark.com</a> , <a href="mailto:info@envipark.com">info@envipark.com</a>
Name of the MEDOSSIC project partner that analyzed the good practice and reference code of the Good Practices report of project partners (deliverable number)	TECNOMARCHE
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?	<i>It represents a good example of supporting eco-innovation actions because it is its own mission.</i>

## 7.2 PILOT PROJECT - ECO-SUPPORT IN MED-AREA

### 7.2.1. GENERAL DESCRIPTION

- **ACTION'S TITLE**

The action will be named **Eco-Support in Med-Area - The Window on Eco-Innovation.**

- **OPERATIONAL OBJECTIVES**

- Create a front office inside Tecnomarche's structure
- Create a new technological network focused on Eco-innovation on a transnational level (with Med partners) through the Medossic website portal access
- Enhance the exchange of experiences and good practices among enterprises in Med Area giving technical support and consultancy
- Offer consultancy activities for investors in finding resources for eco-innovation actions (at local, regional, national and European level with reference to Med Area)
- Capitalize potential capacities of researchers and innovators facilitating their entry in economic and productive spheres (consultancy activities)
- Create a Med platform (through the Medossic website portal) for exchanging request and offers on eco-technologies
- Give information on main technological areas of eco-innovation strictly related to the local territory development
- Canalize the local demand and offer of innovation on sustainable development channels
- Involve the productive sectors with major potential impact on eco-innovation through direct involvement (project proposals on R&D activities, one-to-one meetings, partnerships in international project with Med-area partners)
- Enlarge the participation of those sectors less active in eco-innovation matters (thematic meetings, conferences and workshops on eco-innovation matters)
- Open a dialogue among the actors of the local productive system (both private and public stakeholder) through the catalyzing action of Tecnomarche centre
- Influence local polices involving public stakeholder in programming new actions and fundings on eco-innovation issues.
- Promote local, regional, national and international event related to sustainable development and eco-innovation

- **INVOLVED SECTOR OR SUBSECTOR**

- Buildings - Sustainable building
- Mechanics/Electronics
- Fashion (Footwear, Leather, Textiles)
- Wood (furniture and shutters)
- Chemicals (Rubber, Plastic, New Materials)
- Packaging
- Tourism

- **INVOLVED ECO-INNOVATION TECHNOLOGY**
  - Energy Efficiency of Housing
  - Energy Saving Technology
  - Domotics
  - Sustainable Building
  - Energy efficiency and renewable energies
  - New production processes on manufacturing sectors
  - Pollution management technologies (emission reductions technologies)
  - Green logistics
  - Energy Efficiency on productive chain
  - Eco-Design and Eco-development of products
  - Innovative materials for fashion, buildings, packaging, mechanics
  - Recycling system
  - Materials Recycling
  
- **INVOLVED OR TO INVOLVE ACTORS/STAKEHOLDERS**
  - Marche Region
  - Provinces (Macerata, Ascoli Piceno, Fermo, Ancona, Pesaro-Urbino)
  - Chambers of Commerce (Macerata, Ascoli Piceno, Ancona, Pesaro-Urbino)
  - ANCE - National Association of Constructors (Marche Region district)
  - ITACA institute - "Institute for Innovation and transparency in procurement and environmental compatibility"
  - Universities (University of Camerino, University of Macerata, University Polytechnic of Marche, University of Urbino)
  - Elios Foundation - Pole for educational excellence for footwear in the Marche Region
  - Ministry of Economic Development and Innovation
  - The Ministry for the Environment and Territory
  - National Innovation Agency
  - National Agency for New Technologies, Energy and the Environment (ENEA)
  - AIRI, Italian Association for Industrial Research
  - RIDITT, The Italian Network for Innovation and Technology Transfer to SMEs
  - ITIA- CNR (Italian Institute for Industrial Technologies and Automation)
  - AIDA - "Association for innovation of the Apennine Ridge"
  - Confindustria - General Confederation of Italian Industry
  - CNA - National confederation for the craft sector and SMEs in Italy
  - Confapi - Italian Confederation of small and Medium sized Industry
  - Confartigianato - General Confederation of Italian Artisans
  
- **TARGET GROUPS**
  - SME and Artisans (from the identified sectors)
  - Researchers (students and graduated)
  - Designers
  - Engineers and Architects
  - Public entities
  - Research Centres (Universities, etc)

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

The main general purpose of the pilot Structure is to support information for the establishment of a contact point among actors of different sectors but with the same area of interest, in the local and Medossic area, in order to encourage the exchanging of experiences, good practices, ideas and potentially establish a starting point for further project implementation in a complementary and co-operational manner among different actors from different countries.

Such a purpose foresees the achievement of all the abovementioned operational objectives, so the pilot project actuation will be carry out through the following activities:

- Definition of a working group (two or three persons) with high leveled skills on technical issues as well as on management of innovation processes
- Creation of a front office inside Tecnomarche's structure (a stable office where the operators will work on all the activities foreseen)
- Implementation of the Medossic website as instrument for the creation of a new technological network focused on Eco-innovation on a transnational level (with Med partners) through the Medossic website portal access
- Creation of a newsletter instrument for diffusion of information on all the Pilot Structure activities and to promote local, regional, national and international event related to sustainable development and eco-innovation
- Creation of a database of experiences and good practices among enterprises in Med Area
- Creation of a consultancy table for investors in finding resources for eco-innovation actions (at local, regional, national and European level with particular reference to Med Area)
- Creation of a section inside the website dedicated to researchers and innovators (students mainly) to share opinions, ideas, curriculum vitae
- Creation of a consultancy working group dedicated to researchers and innovators (students mainly) to facilitate their entry in economic and productive spheres
- Creation of a Med platform (through the Medossic website portal) for exchanging request and offers on eco-technologies
- Organization of project proposals on R&D activities, one-to-one meetings, and partnerships in international project with Med-area partners in order to involve the productive sectors with major potential impact on eco-innovation through a direct involvement
- Organization of thematic meetings, conferences and workshops on eco-innovation matters in order to enlarge the participation of those sectors less active in eco-innovation matters
- Organization of thematic concertation tables involving both private and public stakeholder in order to open a dialogue among the actors of the local productive system through the catalyzing action of Tecnomarche centre
- Organization of one-to-one meetings with local public bodies and entities in order to plan local polices in programming new actions and fundings on eco-innovation issues.

### 7.2.2. ACTUATION AND MANAGEMENT MODALITY

- **PARTNERSHIP COMPETENCES AND THEIR ORGANIZATIONAL MODALITIES**
  
- Tecnomarche: Science a Technology Park
  - Contributing to research fields in the wide framework of "Key Enabling Technologies", which have a transversal character regarding Marche manufacturing industries and innovative industries.
  - Offers of knowledge with a network of expertise
  - Promotes and transfers science, technology and knowledge, with the aim to increase the competitiveness of the local productive system, especially SMEs, supporting research and innovation.
  - Participates in knowledge networks at national and European level.
  - 62 private subjects with about 40 SMEs are in the PSTMarche partnership operating in the following areas:
    - Manufacturing industry (household appliances, home furniture, plastics and wood, footwear and leather, shipbuilding and aviation industry, electronic device, textile, electrical vehicle)
    - ICT industry (building automation, automatic identification)
    - Energy & Environment services
    - Agroindustry
    - Construction industry
  - Extensive know-how in the field of innovation / eco-innovation
  - Knowledge of state of the art and ongoing projects regarding innovation/eco-innovation at national level
  - stimulate the emergence of innovation and research in the Small and Medium Enterprises in the Marche, identified as a priority target.
  
- Marche Region
  - Has autonomy in making policy and managing resources concerning innovation at regional level.
  - Outlines regional innovation strategy and objectives - "Building the system", "Promoting the diffusion of innovation"
  - Draws up the regional innovation plan - Framework agreement signed by the region, the central administration and other public/private actors to define strategies of common interest incl. the planning of resources allocation, etc
  - Implements the Regional Operational Programme (co-funded by Structural Funds)
  - Manages Regional incentives for the promotion of (eco) innovation
  - Manages Regional Programmes of Innovative actions (PRAI) - instruments co-financed by the ERDF
  - Management of financial resources

- Provinces (Macerata, Ascoli Piceno, Fermo, Ancona, Pesaro-Urbino)
  - Decision-making power at Regional level
  - Management of financial resources
  - Manages eco-innovation policy at local level
  - Manages communication of specific socio-economic needs and opportunities of the local territory
  - Manages communication to local citizens and SME's and other relevant actors (researchers, entrepreneurs, etc. )
  
- Chambers of Commerce (Macerata, Ascoli Piceno, Ancona, Pesaro-Urbino)
  - Provide services to enterprises and develop strategies and projects for innovation to favour the development of enterprises and the economic enhancement of the territory
  - Manage dissemination of innovation, providing enterprises with information, services and grants (e.g. environmental and quality certification)
  - Manage Technical Assistance and technology transfer, advanced services through agencies specialised in technological innovation
  - Provide Dissemination of information on technological legislation, training and the exploitation of R&D results.
  - Autonomously govern local economic processes
  - Provide enterprise demographics, business and structural analysis, provincial and regional economic statistics, estimates on added value and investments, labour and price trends in the various markets (business register, networks of enterprises)
  
- ANCE - National Association of Constructors (Marche Region district)
  - Wide capacity for dissemination of project results
  - Significant technological knowledge
  
- ITACA institute - "Institute for Innovation and transparency in procurement and environmental compatibility"
  - Regional and national bodies of reference with the aim of activating actions and initiatives shared by the regional system to promote and ensure effective technical coordination between the regions and autonomous provinces, thus providing the best coordination with state institutions, local authorities and business operators in the sectors.
  - Provides a shared working protocol (Protocol ITACA) which allows buildings to be allocated a score of eco-sustainability
  - Enables a detailed survey of the state of the art in various sectors and the exchange of information between those regions which have already gained experience in the area of Green Building, and Eco-sustainability of buildings to develop a cognitive synergy and common strategies in the field.
  - Manages Promotion and dissemination of good practice in services, supplies and public works for the urban quality and environmental sustainability.

- Universities (University of Camerino, University of Macerata, University Polytechnic of Marche, University of Urbino)
  - Higher education and research facilities in technology and Innovation
  - Existing dialogue with the productive sectors
  - Disseminate project results and influence students and young researchers - future generation of innovators
  
- Elios Foundation - Pole for educational excellence for footwear in the Marche Region
  - Collaboration with 30 of the Regions largest companies in the footwear sector and industry associations
  - Directs design of training courses. Promotes contacts and exchanges with Training Centres, Schools, Universities and Research Centres at home and abroad to promote and enhance the culture, the level of knowledge and training of students.
  - Analyses training needs expressed by companies
  - Designs and supports research and monitoring of the economic and social issues of the footwear district
  - Monitors funding sources.
  
- Ministry of Economic Development and Innovation
  - Central government - responsible for innovation (eco-innovation) policy and guidelines
  - In charge of the definition and implementation of policies, regulations and programmes which give innovation policy direction in Italy
  - Controls financial instruments at national level - Fund for Technological Innovation (FIT), which supports pre-competitive development projects
  - Guides Regional policy through the National Operative Programme (PON)
  
- National Agency for New Technologies, Energy and the Environment (Ente per le Nuove tecnologie, l'Energia e l'Ambiente, ENEA)
  - Italian Government sponsored research and development agency devoted to innovative initiative and specifically to eco-innovation (energy, environment and new technologies)
  - Promoter of innovative initiatives/projects and economic development through (eco) innovation.
  
- AIRI, Italian Association for Industrial Research
  - Dialogue with enterprises, public bodies and universities
  - Supports industrial research
  
- RIDITT, The Italian Network for Innovation and Technology Transfer to Small and Medium-sized Enterprises
  - Improves the competitiveness of the productive system by strengthening and integrating the available supply of services for innovation
  - Network at national level which brings together actors in innovation (incl.) eco-innovation.

- Confindustria - General Confederation of Italian Industry
  - Italy's largest organisation representing the manufacturing and service industries.
  - Disseminates project results at national level
  - Manages an extensive networks of partners and local actors
- CNA - National confederation for the craft sector and SMEs in Italy
  - Represents craft businesses and their entrepreneurs, small and medium sized enterprises and related associations.
  - Disseminates project results at national level
  - Manages an networks of partners and local actors
- Confapi - Italian Confederation of small and Medium sized Industry
  - Supports the aims and interests and to enhance SME's in Italy.
  - Disseminates project results at national level
  - Manages an networks of partners and local actors
- Confartigianato - General Confederation of Italian Artisans
  - Provides associated enterprises with a wide range of services, information and representation of their general interests
  - Disseminates project results at national level
  - Manages an networks of partners and local actors

- **MANAGEMENT SUBJECT AND/OR MODEL**

The Pilot Structure will be completely managed by Tecnomarche. Tecnomarche will act as a catalyst of the innovation processes in the field of eco-innovation in the sense that will operates as an interface between local productive system and public stakeholders as well as Med and European context. Technical and operational needs of productive system, mainly SME, will be analyzed, interpreted and synthesized in order to bring them to the decision makers.

The organizational model will be structured as follow.

- Technical team: a working group will be dedicated to the analysis of the local productive system needs trough interviews, distribution of questionnaires, organization of one-to-one meetings and thematic workshops. Moreover they will manage meetings with local stakeholders in order to propose them policy lines to foster eco-innovation actions. All the technical staff of Tecnomarche will cooperate beside this working group to support the interpreting and the analysis of all technical aspects. One person will be dedicated in a part-time contract to the front office (half a day).
- Communication team: a working group will be dedicated to the information and communication activities (newsletter, conferences, press release on main results)
- Financial and management team: finally a working group will be dedicated to financial control system in order to evaluate all the achieved results, difficulties, actual and further economical investment

- **ACTUATION PROCEDURES**

All the activities planned for the implementation of the Pilot Structure are divided into phases as follows:

**1. PHASE 1: ORGANIZATION OF THE STRUCTURE**

- 1.1. Definition of a working group (two or three persons) with high levelled skills on technical issues as well as on management of innovation processes
- 1.2. Definition of a working group (one or two persons) for communication activities
- 1.3. Definition of a working group (one person) for financial and management activities
- 1.4. Creation of a front office inside Tecnomarche's structure (a stable office where the operators will work on all the activities foreseen)

**2. PHASE 2: IMPLEMENTATION OF THE PILOT STRUCTURE**

- 2.1. Implementation of the Medossic website as instrument for the creation of a new technological network focused on Eco-innovation on a transnational level (with Med partners) through the Medossic website portal access
- 2.2. Creation of a newsletter instrument for diffusion of information on all the Pilot Structure activities and to promote local, regional, national and international event related to sustainable development and eco-innovation
- 2.3. Creation of a database of experiences and good practices among enterprises in Med Area
- 2.4. Creation of a consultancy table for investors in finding resources for eco-innovation actions (at local, regional, national and European level with particular reference to Med Area)
- 2.5. Creation of a section inside the website dedicated to researchers and innovators (students mainly) to share opinions, ideas, curriculum vitae
- 2.6. Creation of a consultancy working group dedicated to researchers and innovators (students mainly) to facilitate their entry in economic and productive spheres
- 2.7. Creation of a Med platform (through the Medossic website portal) for exchanging request and offers on eco-technologies

**3. PHASE 3: QUALIFICATION OF THE STRUCTURE**

- 3.1. Organization of project proposals on R&D activities, one-to-one meetings, and partnerships in international project with Med-area partners in order to involve the productive sectors with major potential impact on eco-innovation through a direct involvement
- 3.2. Organization of thematic meetings, conferences and workshops on eco-innovation matters in order to enlarge the participation of those sectors less active in eco-innovation matters
- 3.3. Organization of thematic concertation tables involving both private and public stakeholder in order to open a dialogue among the actors of the local productive system through the catalyzing action of Tecnomarche centre
- 3.4. Organization of one-to-one meetings with local public bodies and entities in order to plan local policies in programming new actions and fundings on eco-innovation issues.

#### 4. PHASE 4: EVALUATION OF RESULTS

- 4.1. Monitoring of indicators
- 4.2. Evaluation of results
- 4.3. Implementation of new further actions improving results obtained

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

The action meets all the strategic lines adopted in the creation of the collaboration with the Chambers of Commerce of Macerata to create a physical and virtual database of innovative materials available for all those business entities that have the need to develop a product or production process innovation in key eco-sustainable fields. This fits into the broader context of joint action to support and encourage innovation in the province of Macerata and thus allows to maintain an open dialogue with important stakeholders such as local government and the Chamber of Commerce of Macerata.

The pilot structure will perform consultancy activities in accordance with Tecnomarche purpose on the creation of a technical consultation among local development actors with the objective of defining strategies and actions for regional development with specific reference to the theme of energy efficiency. It therefore creates an additional opportunity for open debate on an issue specifically related to the concepts of eco-innovation.

Moreover the close cooperation between Tecnomarche and the Provinces of Macerata and Ascoli Piceno which allow for an open discussion regarding policy of regional development will be continued with a more focused approach to eco-innovation arguments within the Pilot Structure activities.

Finally all the Tecnomarche skills and capacities in technical issues and transfer of knowledge will be focused on eco-innovative solutions in order to meet all the required and foresaw objectives within the Medossic Pilot Structure.

### 7.2.3. PILOT STRUCTURE'S ACTIVITIES

The pilot project actuation will be carry out through the following activities during and after Medossic project life:

- Definition of a working group (two or three persons) with high leveled skills on technical issues as well as on management of innovation processes
- Creation of a front office inside Tecnomarche's structure (a stable office where the operators will work on all the activities foreseen)
- Implementation of the Medossic website as instrument for the creation of a new technological network focused on Eco-innovation on a transnational level (with Med partners) through the Medossic website portal access
- Creation of a newsletter instrument for diffusion of information on all the Pilot Structure activities and to promote local, regional, national and international event related to sustainable development and eco-innovation
- Creation of a database of experiences and good practices among enterprises in Med Area
- Creation of a consultancy table for investors in finding resources for eco-innovation actions (at local, regional, national and European level with particular reference to Med Area)
- Creation of a section inside the website dedicated to researchers and innovators (students mainly) to share opinions, ideas, curriculum vitae
- Creation of a consultancy working group dedicated to researchers and innovators (students mainly) to facilitate their entry in economic and productive spheres
- Creation of a Med platform (through the Medossic website portal) for exchanging request and offers on eco-technologies
- Organization of project proposals on R&D activities, one-to-one meetings, and partnerships in international project with Med-area partners in order to involve the productive sectors with major potential impact on eco-innovation through a direct involvement
- Organization of thematic meetings, conferences and workshops on eco-innovation matters in order to enlarge the participation of those sectors less active in eco-innovation matters
- Organization of thematic concertation tables involving both private and public stakeholder in order to open a dialogue among the actors of the local productive system through the catalyzing action of Tecnomarche centre
- Organization of one-to-one meetings with local public bodies and entities in order to plan local polices in programming new actions and fundings on eco-innovation issues.

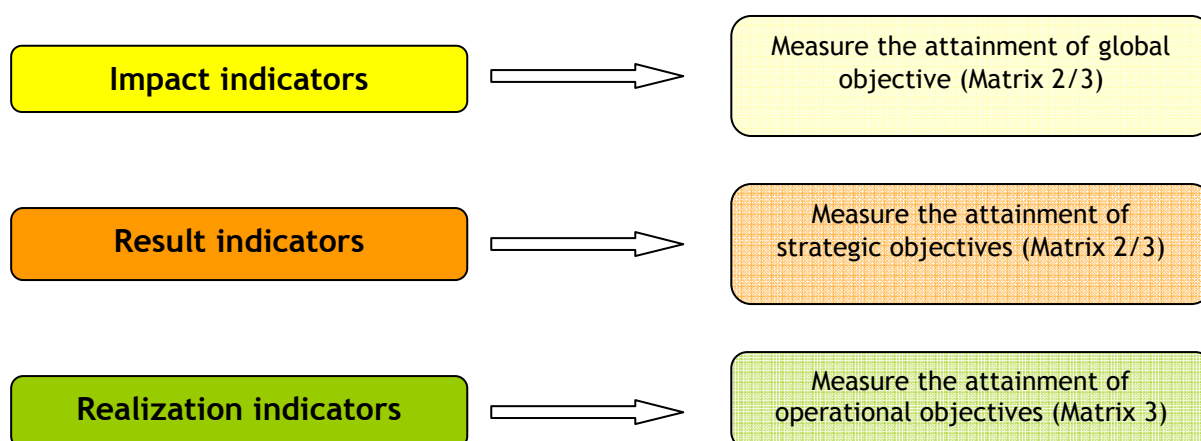
### 7.2.5. THE MONITORING AND THE EVALUATION

The follow up and the monitoring are crucial for the evaluation of a project implementation. An indicator generally intends to furnish the measure of the objective to reach, giving elements for the quantitative and/or qualitative evaluation in order to evaluate - in our case - the pilot project and its results in the framework of MEDOSSIC project.

It is proposed a system of monitoring in line with the principles of the Project Cycle manager allowing the individuation of an evaluation system based on a general set of indicators for the evaluation of the Strategic and Operational Plan, and on the individualization of indicators of impact, of result and of realization.

Obviously the indicators will be different on the according to the typology of pilot project that each partner will effect in its area.

Generally an indicator must be: easy to identify, clearly defined and without ambiguity and congruous, able to furnish indications easily communicable and understandable; and able of reflecting the real degree of attainment of objectives.



## IMPACT INDICATORS

They are identified and evaluable indicators at the level of the strategic and operational plan (SOP) in its whole and then with reference to the capacity to pursue the general/global defined objective.<sup>1</sup>

Global objective	Impact indicator/indicators	Actual value, if identifiable	Expected value
Increase rate of human resources trained to a high-level (with academic degree) in SMEs	HUMAN RESOURCES TRAINED TO A HIGH-LEVEL		200
Create the base for applying the process of technological knowledge transfer from research centres to SMEs	Sme involved		60
Increase the percentage of human resources involved in R&D activities.	HUMAN RESOURCES INVOLVED IN R&D ACTIVITIES		80
Involve institutional stakeholders in order to systematize the definition of programmes for public funds related to eco-innovation.	Stakeholders involved		10

## RESULT INDICATORS

They are identified and evaluable indicators at the level of the strategic objectives/strategic lines of the SOP and they refer to possible direct and indirect effects, qualitative and/or quantitative produced from the implementation of the same SOP.<sup>2</sup>

Global objective	Result indicator/indicators	Actual value, if identifiable	Expected value

## REALIZATION INDICATORS

They are identified and evaluable indicators with reference to the actions and activities realized to carry out pilot project/projects. They are measured in numerical terms as physical (n.) or financial (€) unities.<sup>3</sup>

<sup>1</sup> For example impact indicators could be the % or the increasing environmental benefits that could occur after a specific action (i.e. in renewable energies impact is qualitatively evaluable as reduction of use of energies from traditional sources in a territory).

<sup>2</sup> For example result indicators could be in terms of % of enterprises that benefit of services or consultancy activity of a Desk in comparison with the total of the enterprises in the area.

<sup>3</sup> For example realization indicators could be the number of activated information desks, the number of realized pilot projects, the number of enterprises that benefitted of the activities or services of a Desk.

Operational objectives	Realization indicator/indicators	Actual value, if identifiable	Expected value
Create a new technological network focused on Eco-innovation on a transnational level (with Med partners) through the Medossic website portal access	Members of the network		200
Enhance the exchange of experiences and good practices among enterprises in Med Area giving technical support and consultancy	Good practices exchanged		100
Offer consultancy activities for investors in finding resources for eco-innovation actions (at local, regional, national and European level with particular reference to Med Area)	NUMBER OF INVESTORS INVOLVED		80
Capitalize potential capacities of researchers and innovators facilitating their entry in economic and productive spheres (consultancy activities)	RESEARCHERS AND INNOVATORS ENTERED PRODUCTIVE SYSTEM		20
Create a Med platform (through the Medossic website portal) for exchanging request and offers on eco-technologies	ECO-TECHNOLOGIES REQUESTS AND OFFERS		200
Involve the productive sectors with major potential impact on eco-innovation through direct involvement (project proposals on R&D activities, one-to-one meetings, partnerships in international project with Med-area partners)	PROJECT PROPOSALS		40
	ONE-TOONE MEETINGS		200
	PARTNERSHIPS		10
Enlarge the participation of those sectors less active in eco-innovation matters (thematic meetings, conferences and workshops on eco-innovation matters)	THEMATIC MEETINGS		20
	CONFERENCES AND WORKSHOPS		15
Open a dialogue among the actors of the local productive system (both private and public stakeholder) through the catalyzing action of Tecnomarche centre	ENTERPRISES INVOLVED		200
	STAKEHOLDER INVOLVED		6
Influence local polices involving public stakeholder in programming new actions and fundings on eco-innovation issues.	REGIONAL ECONOMIC FUNDINGS DEVOTED TO ECO-INNOVATIONA ACTIVITIES		N.D

**PART 8.**  
**SYNOPTIC SYNTHESIS FRAMEWORK**

**Matrix 4 - SYNOPTIC SYNTHESIS FRAMEWORK**

Global objectives	Sector/sub sectors and technologies for eco-innovations  Project Pilot	Strategic Operational Plan				All sectors						
		Environmental technologies	Organisational Innovation	Product and Service Innovation	Green system innovations	Environmental technologies	Organisational Innovation	Product and Service Innovation	Green system innovations			
Development of strategic and operational plans for establishing the pilot structures in Marche Region	Eco-Support in Med-Area											
	A Window on Eco-Innovation											
Pilot structure will be information point for potential innovators, SME's with innovation potential. With stated activities partners will encourage cooperation among institutions in regions, which will contribute to economy excellence and competitiveness.	Consultation and information for stakeholders											
	All MEDOSSIC Partner											
	Cooperation on different sector											
	Communication plan											

## ANNEX

- *SOP\_Questionnaire for enterprises*
- *SOP\_Power Point presentation for local Workshops*
- *SOP\_Power Point presentation for Transnational Conference.*