FRIULI-VENEZIA GIULIA AUTONOMOUS REGION

CENTRAL DIRECTORATE FOR INFRASTRUCTURE, MOBILITY, TERRITORIAL PLANNING AND PUBLIC WORKS

TERRITORIAL PLANNING SERVICE

STRATEGIC ENVIRONMENTAL ASSESSMENT

OF THE

TERRITORIAL GOVERNMENT PLAN

As per Article 1 of Regional Law 22/2009

PRELIMINARY REPORT

As per Article 13, comma 1 of Legislative Decree 152/2006

January 2012

INDEX

1 INTRODUCTION

1.1 THE PRELIMINARY REPORT: THE *SCOPING* PHASE

The strategic environmental assessment (SEA) has represented for several years now an important tool to integrate considerations of an environmental character into the formation of a plan or programme that might have a significant impact on the environment and on cultural assets, guaranteeing that the effects of those tools on the environment are taken into consideration during all their formation phases (development, adoption and approval) as well as during the later phases of implementation and monitoring.

In the context of sustainable and long-lasting development, the planning policies and choices must be based upon the principal of precaution, to achieve those objectives of safeguarding, defending and improving the quality of the environment, the protection of human health and the rational and intelligent use of natural resources.

This preliminary report constitutes the first step in the process of SEA that will accompany the formation of the planning tool and has a function of support for the activity of consulting through which a definition of the sphere of influence of that plan will be achieved. In English this phase is called "scoping". The environmental report is designed to put the relative subjects in a condition to be able to propose their contributions and/or express an opinion on the topics addressed.

The phase of scoping, which began with the drafting of the preliminary report and which concludes with the inclusion of the contributions proposed by the subjects involved in the consulting phase, is designed to put attention on all the essential elements of the basis of fundamental knowledge to the achievement of the Plan, that is to say, in general: the territorial context to which the Plan refers, the actors and subjects involved, the objectives of environmental sustainability at various levels, the methodologies for the evaluation of the coherence with other planning and programming tools and for the evaluation of the effects of the Plan on the environment.

Within the context of the SEA process, then, scoping represents the launching of a strategy aimed at reaching agreement on the inclusion criteria of the environmental dimension in the Plan, underlining the identification of the sphere of influence of the Plan, defining in advance the information to include in the environmental report and the level of detail while suggesting the indicators to be used to analyse the context.

This is a dialogue phase which envisions the involvement of the Public Administrations and agencies considered (for their specific competence and responsibilities in the environmental sector) as having an impact on the environment as a result of the implementation of the Plan. The list of these *subjects competent in environmental matters* – as per article 6, comma 1, letter s) of legislative decree 152/2006 – has been defined by a deliberation of the Regional Council and is published in the relative chapter of this document.

The consulting activity, an essential element for the coherence and completeness of the entire planning process, allows for a correct definition of the sphere of influence of the Plan and to that end, in this report:

- the establishment of the SEA process has been described, completing it with the list of actors and subjects involved;

- a frame work of the regional territorial strategies and the relative strategic axes in general, that is to say, a planning methodology linked to the development of the TGP, has been presented;

- a basis has been established for the definition of an assessment of the coherence between the objectives proposed by the Plan under consideration and those contained in other normative, strategic and planning instruments, both at a regional level (horizontal external coherence), and at an international, Community or national level (vertical external coherence);

- a list of environmental topics has been identified from which to extract in a shared fashion those judged suitable to describe and reconstruct the environmental context on which the Plan may have significant effects. Each environmental topic is accompanied by a proposal for indicators, described in a summary fashion that may be used to support the monitoring phase of the plan implementation. Then the report goes on to describe the evaluation methodology that will be used in the context of the environmental report, also in relation to the TGP planning choices relative to the study of local territorial systems;

- a proposed index for the environmental report has been developed, as per article 13, comma 1 of legislative decree 152/2006, including a brief description of what might be the maximum content of the single chapters.

It is appropriate to emphasise here that – in accordance with the contents of article 10, comma 3 of legislative decree 152/2006 – the SEA includes an incidence assessment, which on that basis will include in the environmental report the elements foreseen by regulation in the sector concerning incidence (attachment G to Presidential decree 357/1997).

2 THE *SEA* PROCESS FOR THE TERRITORIAL GOVERNMENT PLAN

2.1 THE REGULATORY REFERENCE FRAMEWORK FOR THE EVALUATION PROCESS

The environmental evaluation of Plans and Programmes that may have significant effects on the environment was introduced by **EC Directive 2001/42** *(Directive of the European Parliament and Council concerning the evaluation of effects of particular plans and programmes on the environment*). Its objective is to guarantee a high level of protection for the environment and contribute to the integration of environmental considerations to the process of development and adoption of plans and programmes to promote sustainable development, ensuring that, as per this directive, an environmental evaluation of particular plans and programmes that may have significant effects on the environment is performed.

The basic points that characterise the assessment process proposed in the SEA directive are, fundamentally:

- the importance of the application of the process right from the preparatory phase and especially during the decision phases of the formative strategies of the Plan or Programme;

- the drafting of a special environmental report within the context of the project development for the Plan or Programme;

- recourse to forms of consultation and sharing of the Plan or Programme proposal and the relative environmental report;

- the continuity of the process, which is not ended with the approval of the Plan or Programme, but rather continues during the monitoring phase, so as to control the significant environmental effects, recognise immediately unforeseen negative effects and manage to adopt any appropriate remedial measures.

At a national level the SEA directive was incorporated in the second part of **Legislative Decree 152/2006** (Regulations in environmental matters) which disciplines and reorganises the majority of national regulation in the environmental sector, later modified and integrated with legislative decree 4/2008 (Further corrective and integrated dispositions of Legislative Decree no. 152 of 3 April 2006 concerning regulation in environmental matters).

National legislation, as per article 6, comma 2, identifies the Plans and Programmes that must be subject to the SEA, without needing to perform a verification of subjectability, that are:

a) plans and programmes that present both of the following pre-requisites:

1. they regard the agricultural, forest, fishing, Energy, industrial, transportation, waste and water management, telecommunications, tourist, territorial planning or soil-use sectors;

2. they contain the definition of the reference frame work for approval, authorisation, location area or anyhow the performance of construction and actions whose projects are subject to assessment of environmental impact on the basis of applicable regulation;

b) the plans and programmes concerning sites designated as special protection areas for the conservation of wild birds and those classified as sites of Community importance for the protection of natural habitats and of wild flora and fauna.

With the specification, in comma 4 of the article cited, that the plans and programmes listed above that determine the use of small areas at a local level, as well as the modifications of plans and programmes listed above that are already approved, are subject to SEA only if they may have significant effects on the

environment and therefore require a preventive phase of verification for subjectability, the so-called "screening" phase.

As per article 11, comma 1, the SEA process, very briefly, includes:

a) performance of a verification of subjectability;

b) development of the environmental report;

c) performance of consultations;

d) assessment of the environmental report and the results of consultations;

e) the decision;

f) information on the decision;

g) monitoring.

The governmental territorial plan is subject to SEA without needing to proceed on to screening, insofar as it is an instrument of territorial planning and constitutes the reference frame work for actions whose projects will be subject to assessment of environmental impact, as per article 6, comma 2, letter a) of the decree cited above.

It is appropriate therefore to emphasise the principal subjects mentioned in the decree and involved in the SEA process, which are:

- the **proceeding authority**, which begins the SEA process contextually with the formative procedure of the Plan or Programme and then develops or integrates, adopts or approves the Plan or Programme itself;

- the **competent authority**, which, to promote the integration of the environmental sustainability objectives with sectorial policies and the observance of the objectives, of the national and European plans and programmes:

a) expresses its own opinion on the subjectability of the proposals of the Plan or Programme of strategic environmental assessment whenever necessary;

b) collaborates with the proposing authority to define the forms and subjects of public consultation, as well as the outlines and contents of the environmental report and monitoring strategies;

c) expresses, taking into consideration public consultation, the opinions of the competent subjects in environmental matters, its own opinion motivated upon the proposal of the Plan and the Programme and the environmental report;

- the **proposing subject**, which develops the Plan or Programme on behalf of the proceeding authority;

- the **subjects responsible for environmental matters**, which are the public administrations and agencies that, according to their specific competence or responsibility in the environmental field, may be interested in the environmental impacts resulting from implementation of the Plan or Programme.

At a regional level the SEA regulation was integrated into regional law 11/2005, promulgated even before adoption of legislative decree 152/2006. That regional law required successive implementation regulations – not published – and further dispositions relative to environmental assessment and verification procedures, as well as the types of Plans to subject to those procedures.

With the coming into force of legislative decree 4/2008, the Regions that had already promulgated regulations disciplining the SEA were granted twelve months from the adoption of the decree itself – and therefore until 13 February 2009 – to adopt dispositions coherent with the national regulation:

during that period of harmonisation the enforcement of regional reference regulations remained possible. After that date the regional dispositions concerning SEA in contrast with the legislative decree 152/2006 and later modifications were no longer applicable[1].

During the transition period, at a regional level, in keeping with traditions of implementation regulation of regional laws, the local legislature proceeded with the application of article 11, which allowed the Regional Council to express its opinion through its own deliberation in relation to the effects on the environment of the regional Plans and Programmes in respect of legal dispositions and on the basis of the opinion expressed by the competent administrations. That rule was no longer applicable after 13 February 2009.

Following the coming into force of regional law 13/2009 also in the regional context the SEA procedure for plans and programmes having effects on the environment follow the indications contained in legislative decree 152/2006.

It is interesting, finally, to emphasise a novel aspect introduced by legislative decree 4/2008, and that is the competent authority, whose functions are fundamental to and inseparable from the assessment process envisioned by the corrections of the single act in environmental matters. The national act describes the functions of the competent authority, and yet does not identify that single authority, opening up the possibility, at the national level, for multiple interpretations that have been faced in varying ways by the different Regions and local agencies. The Friuli-Venezia Giulia Region has not yet provided for the identification of the single competent authority for all Plans and Programmes at the regional level.

2.2 THE SEA FOR THE TERRITORIAL GOVERNMENT PLAN

The SEA process for the territorial government plan (TGP) is structured according to the indications of legislative decree 152/2006.

The subjects involved in the assessment process for the Plan, as per article 13, commas 1 and 2, are listed in the table below:

SUBJECTS INVOLVED IN THE SEA PROCESS FOR THE TGP	
PROCEEDING AUTHORITY	**Regional board**
PROPOSING SUBJECT:	**Territorial planning office of the central directorate for infrastructure, mobility, territorial planning and public works**
COMPETENT AUTHORITY:	**Regional board**
TECHNICAL SUPPORT STRUCTURE FOR THE COMPETENT AUTHORITY:	**Assessment nucleus SEA – TGP**

[1] Article 35 of legislative decree 4/2008, correcting legislative decree 152/2006, sets forth in comma 1 that "the Regions shall harmonise their own legislation with the dispositions of this decree, within twelve months from its promulgation. Lacking any applicable regional legislation, the regulations contained herein shall be directly applicable". At comma 2 it sets forth that "At the end of the term indicated in comma 1, the dispositions contained herein shall be directly applicable, that is the regional regulation in force insofar as it may be compatible".

COMPETENT SUBJECTS IN ENVIRONMENTAL MATTERS:	**Friuli-Venezia Giulia Region:**
	CD Environment, energy and mountain policies
	CD infrastructure, mobility, territorial planning and public works
	CD health, socio-health integration and social policies
	CD forest, agro-food and rural resources
	Regional agency for environmental protection - ARPA
	Authority for the Friuli-Venezia Giulia regional basin
	Health Service Agencies:
	Ass. n. 1 "Triestina" (Trieste)
	Ass. n. 2 " Isontina" (Gorizia)
	Ass. n. 3 " Alto Friuli" (Upper Friuli)
	Ass. n. 4 " Medio Friuli" (Central Friuli)
	Ass. n. 5 " Bassa Friulana" (Lower Friuli)
	Ass. n. 6 " Friuli Occidentale" (Western Friuli)
	Provinces:
	Trieste
	Gorizia
	Udine
	Pordenone
	National Association of Italian Municipalities (ANCI)
	National Union of Mountain Municipalities, Communities and Agencies (UNCEM)
	Friuli Venezia Giulia Fishing Agency
	Park agencies:
	Natural Park of the Friulian Dolomites
	Natural Park of the Julian Pre-Alps
	Ministry for the Environment and Protection of Land and Sea
	Ministry of Cultural Heritage and Activities
	Emergency Commissioner for the Lagoon of Grado and Marano
	Veneto Region
	Republic of Austria

So as to supply the competent authority with technical-scientific support and adequate, multi-sector skills, as envisioned in article 7, comma 6 of legislative decree 152/2006, and to guarantee the feature of scientific independence with respect to the proceeding authority, it has been decided to establish the "SEA-TGP Assessment Nucleus" made up of representatives from the following regional central directorates:

- CD infrastructure, mobility, territorial planning and public works;
- CD environment, energy and mountain policies;
- CD health, socio-health integration and social policies;
- CD agricultural, natural and forestry resources.

The Nucleus also includes a representative of ARPA FVG, one from the University of Trieste and one from the University of Udine, as well as a representative of the Council of Local Autonomies.

This Nucleus was introduced by commas 136, 137 and 138 of article 6 of regional law 18 of 29 December 2011, "Dispositions for the formation of the multi-year and annual budget of the Region (Financial Law 2012)". The heterogeneous composition of the SEA-TGP Nucleus responds in this way to the need for the necessary multidisciplinary character of the assessment of an instrument featuring a high level of complexity such as the TGP, interpreting in this way the concept of "environment" in both a simple and overall sense, including also socio-economic aspects which are especially fundamental in the current historical economic context.

The nucleus has the task of supplying adequate technical-scientific support to the Regional Council, in particular for the development of a motivated opinion that precedes and characterises in a fundamental fashion the final decision concerning the approval procedure for the planning instrument.

The assessment strategy, in harmony with national regulation, is composed – briefly – of the following phases:

PHASE 1
- verifies the subjectability of the SEA process plan. Should the SEA be necessary for the TGP, insofar as this is a planning instrument that falls under article 6, comma 2 of legislative decree 152/2006.

PHASE 2
- development of the preliminary SEA report on the plan.

PHASE 3
- performance of consultation on the preliminary report by the proposing subject and the subjects competent in environmental matters.

PHASE 4
- arrangement by the proposing subject of a TGP proposal, of the environmental report, according to the contents of attachment VI of the legislative decree 152/2006, and of a non-technical summary of the environmental report.

PHASE 5

- acknowledgement of the TGP proposal and the environmental report by the Regional Board (proceeding authority);
- communication of the plan documents to the Council of Local Autonomies and the appropriate Regional Council Commission;

PHASE 6
- adoption of the TGP proposal and the environmental report by the Regional Board (proceeding authority);
- publication in the Official Bulletin of the Region of the notice containing the information as under article 14, comma 1 of legislative decree[2].
- deposit and availability of the TGP proposal and the environmental report for public consultation at the offices of the Central Directorate for infrastructure, mobility, territorial planning and public works, and the Provinces;

PHASE 7
- start of consultations with the public and the subjects competent in environmental matters on the TGP and the environmental report by the proposing subject: these consultations should be concluded within 60 days of publication of the notice indicated in the preceding phase;
- beginning of the review investigation and assessment of the environmental report by the technical support structure of the competent authority;

PHASE 8
- forwarding of the plan documents to the competent Regional Council Commission;
- expression of motivated opinion by the competent authority as per article 15, comma 1 of the legislative decree 152/2006;

PHASE 9
- if needed revision of the TGP proposal by the proposing subject, in light of the motivated opinion of the competent authority.

PHASE 10
- forwarding of the TGP, of the environmental report, of the motivated opinion and the documentation acquired during the consultation phase to the competent agency for approval of the plan.

PHASE 11
- approval of the TGP by decree of the President of the Region, after deliberation by the Regional Board;

PHASE 12
- publication of the TGP in the Official Bulletin of the Region
- publication of the TGP on the internet site of the Region, together with the opinion of the competent authority, the summary declaration as per article 17, comma 1, letter b) of the decree mentioned above, of the monitoring measures managed by the competent authority.

PHASE 13

[2] As per article 14 of legislative decree 152/2006, the proceeding authority effects the publication of a notice in the Official Gazette of the Italian Republic or in the Official Bulletin of the Region. The notice must contain: the title of the Plan proposal, indication of the proposing subject, the proceeding authority, the offices where the Plan and the Environmental report may be examined and the offices where a non-technical summary may be consulted.

- monitoring of the significant impacts on the environment deriving from implementation of the TGP and verification of the achievement of established objectives;
- publication on the web of the monitoring performance methods, results and remedial measures adopted.

3 GENERAL FRAMEWORK OF THE PLAN

Regional law no. 22/2009 "Procedures to begin reform of the territorial planning of the Region" sets forth a reform for the government of the regional territory and a reorganisation of urban planning and territorial planning. The Region, as per article 1, comma 3 of the above mentioned law, performs the function of territorial planning through the Territorial Government Plan (TGP) which is made up of the Regional Strategic Territorial Document (RSTD) and the Charter of Values (COV).
The TGP represents a combination of the instruments activated by the Friuli-Venezia Giulia Autonomous Region, to translate throughout the territory the programmatic guidelines that denote the political action of the legislature, also in relation to the supra-regional context. In this context the instruments and methods with which to implement the regional strategic plan are defined, to guarantee the defence of identity, orientate the territorial transformations to ensure that the relative actions occur in the context of development and sustainability of resources.
The RSTD shall have the task of developing the strategic framework of sustainable territorial development to construct the initial relations and cooperation with other Italian and cross-border regional realities, and then orientate the actions of the government and the territorial choices of the sub-regional context.
The Charter of Values (COV) shall consist of the acknowledgement of significant elements and context which, for their quality and vulnerability, as well as their vocation and potential, will constitute a common reference for the drafting and compatibility of territorial planning instruments.
The combination of the two instruments and the introduced reorganisation of planning by regional law shall lead to the achievement of a new territorial governance that will identify the broader area of an optimum territorial basin for territorial planning and will represent the strategic element of the plan. The introduction of that intermediate planning, between that at a regional and municipal level, should reduce the diseconomies and duplication of territorial services and permit, furthermore, the beginning of a critical assessment process of the complexities, vocations and specific potentials aside from the formal definition of the single municipal administrative entity.

3.1 THE STRATEGIC COMPONENT OF THE TERRITORIAL GOVERNMENT PLAN

The strategic component of the TGP is identified as that political-technical action designed to achieve an understanding, developed along several administrative level and with the various territorial subjects, on specific shared strategies.
In this new vision of the regional territorial government instrument, envisioned in law no. 22/2009 and delineated in the guidelines of the Deliberation of the Regional Board 563/2010, the TGP assumes less and less the role of a comprehensive plan with which the local communities must harmonise their actions, but is rather identified as an open, comprehensive planning process that encapsulates territorial vocations, reflects the exigencies of various territorial subjects and favours the composition of territorially coherent interests.
Functions of coordination and adaPPWtion of the plans at all levels are attributed to the strategic component of the TGP (both local levels and within sectors) as well as the verification of its consonance with the instruments of regional planning.
The TGP should therefore attempt to assess choices under the profile of their sustainability and economic, social, cultural and environmental coherence, and is proposed as a coordinating instrument to select from among competing transformation exigencies and as a "space" for the composition of the needs and interests present in the regional territory.

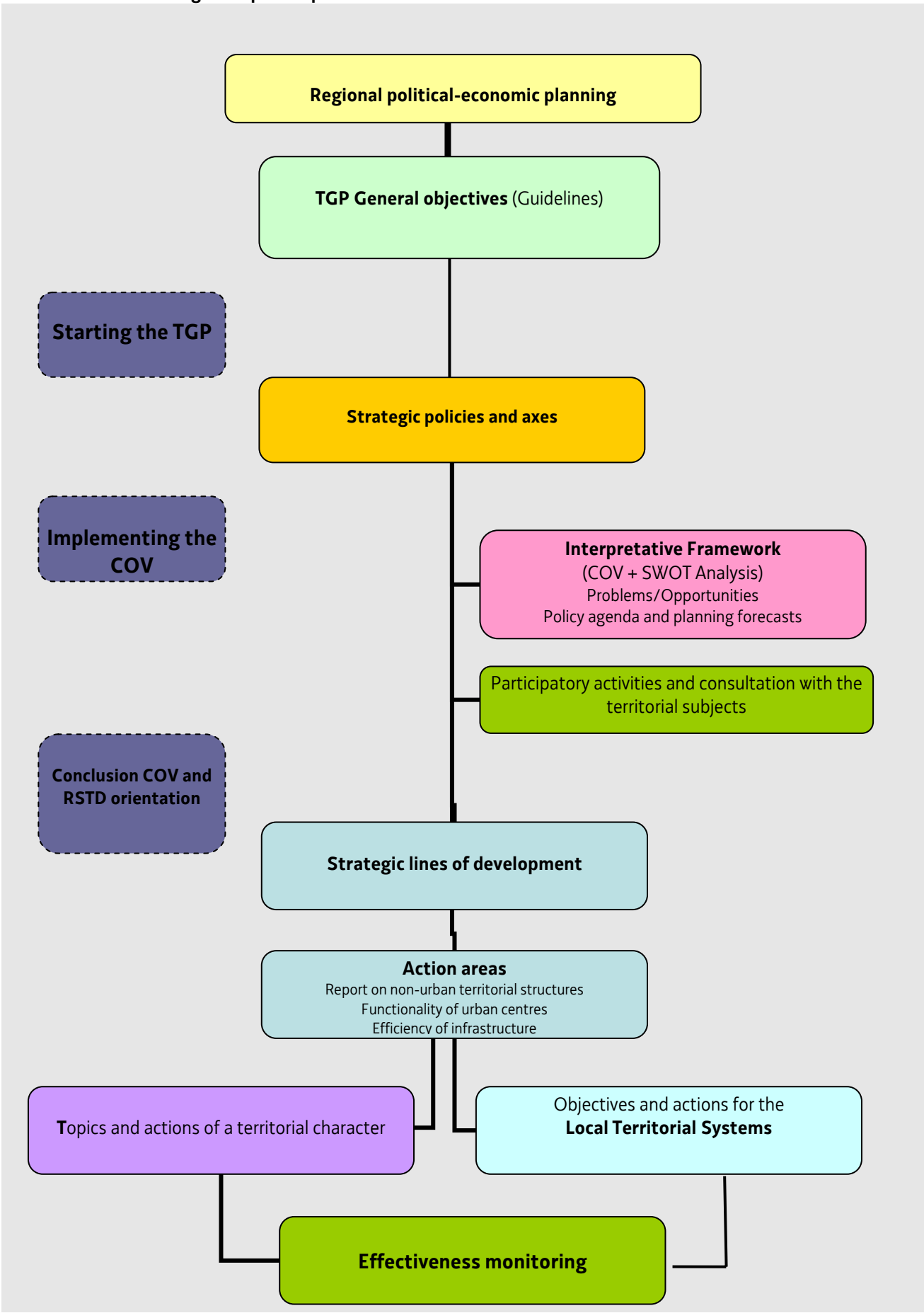
The strategies of the TGP reflect in particular the important territorial choices of a supra-local nature for which there is in any case a definable performance time horizon of a medium long period to be monitored constantly to assess its effectiveness.

In summary, the objectives the strategic component of the TGP must necessarily include regard the following points:
- pay attention to physical resources in terms of value and vulnerability;
- have a vision of the broader territorial strategies;
- search constantly for consensus on the objectives and actions to undertake with different institutional levels and with other territorial subjects involved;
- have a vision of the plan as a dynamic process that defines several priorities for constant monitoring;
- pay attention to financial resources and the ability to promote private investment.

During the general development phase of the TGP and in particular, as concerns the strategic component, objectives and aims are specifically defined that are internal to the plan process that will especially put attention on:
- planning territorial transformations by identifying physical-functional systems of the territory;
- verifying territorial coherence, coordinating plans, programmes and project at a regional level and building the territorial reference framework in which to collocate the economic-financial planning of the Region;
- dictating guidelines for the planning of broader areas and for sector plans;
- proposing an overall vision of the regional territorial transformations by observing at the same time economic development and environmental protection;
- guaranteeing the cohesion of the territory intended as a global resource also for the development of Local Territorial Systems (broader area);
- searching for new forms of cooperation with the various subjects present around the territory (both institutional and not).

Following the structural interpretation activity of the components of the regional territory (in their environmental, natural and socio-economic evolution) and of the selection and protection of territorial vocations, we arrive at the definition of a strategic Vision for the development of the regional territory.
The strategic Vision therefore establishes the specific objectives and actions for regional territorial policies and programmes, defines the reference framework for planning at a local level and guides the choices at a regional level while performing the function of coordination with sector planning.
Following the participatory activities of local communities and the shareholders in the objectives and actions of the plan, jointly submitted to a verification of their sustainability through the SEA strategy, the strategic development actions to adopt are divided according to their action area within the broader territory. In the context of specific objectives and on topics of pre-eminent regional strategic interest the themes and actions of a territorial character are defined, to be implemented using instruments and procedures that require a guarantee of decisional certainty as well as participation and protection.
The possible effects of actions envisioned by the TGP are assessed under the profile of their environmental sustainability through the process of SEA but also under the socio-economic, cultural, territorial and institutional profile.
Here below a flow chart that identifies the development of the components that will characterise the plan strategy:

Flow chart of the strategic component process of the TGP



3.2 THE REGIONAL STRATEGIC TERRITORIAL DOCUMENT (RSTD)

Methodology

The RSTD proposes to develop a territorial policy strategy aimed at guaranteeing balanced development and a more effective economic competitiveness of the territory by pursuing contemporaneously the socio-economic policies and orientations defined by the European Union. That objective is pursued through implementation of the following principles:

- Sustainable development, a principle by which development that satisfies the needs of the present must not compromise the possibility of future generations to satisfy their own needs;
- Polycentrism, intended as a positive model of balanced and rational distribution throughout the territory of centres of economic-functional interest, where implementation of territorial cohesion also enhances the specific qualities and differences of the territory.

The planning of the RSTD therefore takes place based upon the two principles cited above with the aim of developing a territorial policy that must define the settled network of the Region (principal junctions) to support the definition of the broader area system in which the regional territory is developed to support in a balanced fashion the new strategic choices of regional interest. The broader area will be determined by the Local Territorial Systems (LTS) that shall identify: the structural elements, the vocations and sector objectives for development. The Local Territorial Systems (LTS) therefore represent the basic units for planning in the broader area and for implementation local development policies in the context of which to favour activation of the supra-municipal planning processes and territorial strategies able to reinforce community cohesion. In addition, with the identification of the LTS and the design of the regional polycentric network, the basic structure of the urban system, made up of urban areas and arches that link them, will be defined, and it will be necessary to begin a rational and hierarchical distribution of the services in the territory to create incentives for a competitive economy among the urban activities.

3.2.1 Strategic territorial policies

The strategic policies upon which the TGP is based are the following:

1. Development of competitiveness and territorial cohesion.
2. Promotion of the integrated development of regional infrastructure.
3. Support for the development of the region and its welfare in social, economic and productive terms according to criteria of sustainable planning.
4. Defence of the regional polycentric system.

Development of competitiveness and territorial cohesion

In the competitiveness development policy there is an inherent concept by which to achieve development it is necessary to support market competition, but, if we speak of "territorial competitiveness", then to that concept there must also follow environmental, economic, social and cultural sustainability, based upon organisation into a network, that is to say envisioning the creation of a system with all these four exigencies. Therefore, to achieve a result, the institutional subjects must acquire four types of capabilities: the capacity to defend the environment, to act together, to create points of contact between different sectors yet maintain the added value determined by that action within one's own territory, and to enter into contact with the "external" network, the rest of the world, and find the right collocation.

This is a brief explanation of the European policy of development of territorial competitiveness that promotes above all the capacity to create systems, in a context of social cohesion, as the only way to face a global economic crisis (to share and face together both the territorial opportunities and threats).

Such a capability is principally about creating relations between local institutions and those external. As concerns planning policies, cohesion is represented also by the capacity to achieve an integrated system between the networks that make up the overall territorial system: the system of inhabited areas, that of infrastructure and that of the natural environment to create among these a sustainable balance. Therefore the planning policy is to face in an integrated fashion:

a. the protection and promotion of the natural and environmental system;
b. the growth of the economic network and the relative points of excellence;
c. the recognition of the city-promoters of the future;
d. social cohesion as reconstruction of a new community.

Promotion of the integrated development of regional infrastructure

The strategic policy of integrated development of infrastructure is strictly linked to that of the sustainable polycentric system of the region. Recognising a polycentric system with a rational distribution of functions on the territory, the system of infrastructure and mobility become a fundamental base.

It is believed necessary to promote integrated development of infrastructure essentially for the following reasons. The first is that of sustainable development, therefore seeking to limit the construction of new infrastructure and rather creating systems that will better exploit the relational possibilities of existing structures. Integration of infrastructure therefore in the context of savings of soil use and savings of resources, following the European directives. The objective is that of directing the planning of urban transformation toward a model of a compact city that will be more functional and efficient from an energy point of view.

The second reason is that proposed by the above mentioned study by economists[3] that sees the context of transportation infrastructure in Europe as behind compared to Asia while in particular the situation of the infrastructure in the FVG Region is backward, as in the last twenty years it has not managed to bridge the historic gap with the border to the East.

From this brief consideration of an economic nature it is clear that reflection on how much and how to push infrastructure development is indispensable.

To arrive at these choices support for decisions is of great importance, at a European level, with insertion of priority projects that should bring to the foreground the importance of the Adriatic-Baltic corridor, already partially built. In addition, the situation of our national port infrastructure is of primary importance, where a new hierarchy of national ports might change the current situation and push the port development in the north-east of Italy.

These are therefore the first ideas of sustainable development for the regional transportation infrastructure. Perhaps the "environmental" demand for a reduction of soil use and the lack of resources, will force us to see that system as an integrated system of transport that must mainly privilege the railway infrastructure and seek to render it more accessible to all citizens of the region and for the merchandise arriving from around the world. It is therefore necessary to improve the travel time through an overall improvement in the transport system to guarantee its environmental integrity.

Support for the development of the region and its welfare in social, economic and productive terms, according to the criteria of sustainable planning

This policy of development intended as the increase of well-being and assistance for all citizens of a region or state, taken within the context of territorial planning, reflects the concept of cohesion and the building of a network of relations and functions throughout the territory. The first objective is to guarantee fundamental services, such as education and health, for all citizens and seek to distribute

[3] "2010-2015: toward a new normality", McKinsey study.

them throughout the territory so that everyone can access and use them. This result is possible by putting the services into a system and therefore developing also in this case a network of services supported by a polycentric system based upon an inhabited-relational network well distributed in the territory that arrives to everyone and does not create disparity among the citizens. Development is achieved in fact in the context of production and sustainable consumption, following the logic of limits, of social responsibility, of a rational use of resources, of the promotion of research and knowledge at the service of man. This is the model of the green economy which, after the world crisis of the last three years, offers the preservation of the environment by use of "clean" energy, exploiting renewable energy sources and energy savings.

Promotion of the regional polycentric system

As already mentioned in the introduction, the TGP will aim the majority of its actions at creating a rational polycentric system that clearly defines the hierarchy of the functions of the inhabited areas and the fair distribution of services on the territory. This strategic policy should bit by bit eliminate the phenomenon of the generalised diffusion in the territory, seeking to block the horizontal expansion of the city and contain the urban growth to the intermediate area of the region. Such negative phenomena render the urban structure and infrastructure of inhabited areas inefficient and even provoke waste of material and temporal resources. All this renders the urban system unsustainable and near collapse.

The rational distribution of functions, services and infrastructure should therefore re-balance the system and render it more efficient. The basis for this process is to put into relation in a balanced fashion the three principal territorial systems: the natural system, the urban system and the infrastructure. Only by respecting the territory and its resources is it possible to place the "human activity" system in the correct relation with the environmental-natural system. The solution of the TGP is therefore to recognise not only the network of infrastructure and inhabited areas, but also the natural-environmental system. Such a network should not be the result of free areas and therefore of the other two systems, but the construction of a recognisable environmental and sustainable network, not "pressed" by anthropic pressures in the territory, but inserted as a new element of reconversion of the model of productive economic development aimed at developing a green economy in Friuli-Venezia Giulia.

The strategic axes

From the territorial strategic policies the strategic axes are developed that will give support to regional actions strictly linked to the composition and the characteristics and vocations of the LTS.

In the following table the details of regional territorial strategic policies are highlighted summarily in strategic axes.

REGIONAL TERRITORIAL STRATEGIC POLICIES	STRATEGIC AXES
1. Development of territorial cohesion and competitiveness	1.a Promotion, re-launching and development of the regional supply chain in respect and support of the territorial vocations
	1.b Sustainable development of the regional tourist network through recognition of the identity of the places and other territorial contexts
	1.c Promotion of the territory through integration with the territories beyond the border
2. Promotion of integrated development of regional infrastructure	2.a Upgrading of the links with the surrounding regions and the networks of relations at all levels, reinforcing internal territorial cohesion
	2.b Development of energy corridors and promotion of alternative energy sources
3. Support for the development of the region and its welfare in social, economic and productive terms according to the criteria of sustainable planning	3a. Improvement of the quality of life and quality of the environment
	3.b Defence of the territory through the mitigation of risk, the increase of ecological efficiency and protection of the habitats
	3.c Decreasing soil consumption
4. Promotion of the regional polycentric system	4.a Reinforcing the principal and secondary urban centres through specialisation and hierarchy

3.3 CHARTER OF VALUES (COV)

Regional law no. 22/2009, article 1, comma 6, identifies the Charter of Values as a document in which the fundamental values of the Region are contained, the elements of the territory (nature, history, culture, peculiarities of the landscape, manifestations of human activity that obtain value from the environment, etc.) that must be disciplined, promoted and developed by the subjects territorially competent insofar as they constitute, by their vocation and potential, the heritage of the Region whose recognition is taken as fundamental for the correct government and care of the territory.

The Charter of Values (COV) consists of a process of recognition in the territory orientated primarily toward the recognition of significant elements and contexts that, by their quality and vulnerability, as well as by vocation and potential, will constitute a common reference for the drafting and compatibility of all the instruments of territorial planning. Together with the COV there will be directives for use, action criteria and recommendations.

The COV will supply technical support elements for the Regional strategic territorial document (RSTD).

Thus the necessity to identify and define a common concept of value: the concept of Value is inherent in the heritage that is a regional resource, to be understood and considered in the framework and in relation to the environmental areas involved. Not only, therefore, natural peculiarities, but also sets and relations where the natural component is accompanied by the human activity, including the safeguarding of place identities with a strong connotation, in addition to the elements already emerged and identifiable for their rareness, representation and physical integrity.
The COV, by recognising the identity heritage of the regional territory, supports the RSTD in particular in the proposal of territorial projects and Local Territorial Systems (LTS).

It is worth clarifying that the values which are the object of the COV will be of a different nature and developed substantially into functional values, sustainability and place identity.

The Charter of Values is a multi-thematic instrument, at the same time coherent with the interpretations of the landscape, but should not substitute the functions that will be exercised by the envisioned Regional Landscape Plan (RLP).

The Charter proposes as elaborated aligned with the sector planning instruments, in the sense of a relation of horizontal level with the sector objectives already established by the Region.

With respect to the strategic role of the RSTD, the Charter of Values has the objective of guarantee insofar as, identifying the territorial values recognised as non-negotiable, it proposes itself in terms that are complementary by functioning as a “counterweight” in the overall activity of territorial government. The COV therefore has a dual purpose: on one hand, it preserves those primary goods of the territory, regulating their use and transformation, while on the other it highlights vocations and takes advantage of opportunities, so that through the instruments of territorial planning to be developed “beneath” the TGP, it will be possible to cooperate and develop the potential identified.

The territorial values will be a consequence of the final synthesis of the entire assessment process and will be divided into the following classes:

- resources and heritage with a strong connotation of identity;

- inhabited contexts of excellence, quality places and those with vocations;

- risky situations and cases of vulnerability.

Within these classes there will be:

- value areas that are predominantly naturalistic, morphological or landscape;

- value areas predominantly historical;

- value areas of functional and sectorial excellence;

- value areas to increase;

- potential value areas;

- value areas at risk.

The directives, policies, criteria and recommendations, to be defined in relation to the results of assessment, will also orient the strategic actions of the TGP, in addition to the formation of instrument of territorial planning.

3.3.1 Elaboration methodology

The drafting of the Charter of Values envisions its application in two phases.

Phase 1 will use information and databases and will allow a drafting of the thematic documents making up the technical framework.

Phase 2, which will first interpret the territory using a contextual consideration of its existing assets, of the forecasts and strategies under way, will progressively more forward on an assessment programme that will end with the territorial identification of the fundamental values of the region.

PHASE 1 *(technical framework)*

THE TECHNICAL AREAS: nature and morphology, the landscape and culture, inhabited areas and infrastructure, the status of planning, forecasts and associative forms.

The technical areas (substantially inherent to abiotics, biotics, cultural anthropics, production, environmental and infrastructure anthropics) are the basis for the development of the formative strategy of the TGP, which will lead to a definition of the Values of the region of which hereunder are listed the principal technical areas:

a) Nature and morphology;

b) Landscape and culture;

c) Inhabited areas and infrastructure;

d) Status of planning, forecasting and associative forms.

PHASE 2 *(interpretative framework, territorial assessment and definition of the Charter of Values)*

Phase 2 includes the following passages:

A) Drafting of the documents of the territorial components and the Systems.

The territorial components do not correspond to the simple description of the region, and they also regard the lines of evolution and the dynamics, the projects under way, the limits to territorial

transformations, the consolidated functional relations destined to last over time and for this reason conditioning organisational changes.

The territorial components regard both the assets are stable and rooted in the territory such as a common heritage under the physical, morphological, historical-environmental-landscape, infrastructure and productive profile, as well as the regulatory characteristics of the processes of transformation and renewal (plans and forecasts).

Concerning this last aspect, it should be emphasised that the transformational limits that follow from certified forms of geological risk, from the vulnerability of natural resources and pollution must be taken into account. In addition, limitations on the use of territory derive from prevention activated in defence of the soil and the objective of safeguarding the quality of the landscape, culture and nature.

The territorial components are the integrated sum of resources consolidated and recognised on the territory, with areas that create synergies based upon their aptitude for generating and developing useful opportunities to render the region more competitive and attractive.

The territorial components acquire substance:

- in the ecological network and the landscape, in the historical-cultural aspects of the extra-urban contexts;

- in the infrastructural links and the transportation corridors;

- in the composition of the built-up areas in strict relation with the activities and supply chains of the socio-economic system;

- in the supra-municipal services and territorial infrastructure,

all this related to the regime of territorial restrictions and represented not in separation from the planning instruments actually under way (discipline of the uses and transformations under way), from operational programmes and projects of an integrated level developed and deriving from the “grass roots”.

The topics thus delineated will allow the production of a concept of the territory according to two basic systems, a natural system and one of inhabited areas, the latter more articulated than the former.

The degree of incidence of the inhabited areas compared to the natural component conditions the level of ecological and environmental quality of the territory.

The two systems will highlight the existing and potential relations with the areas adjacent and beyond the border.

Through the two preceding systems, the “synthesis” of the territory will lead to the emergence of macro-environments with:
- situations that are more central than others (multi-modal and integrated centres, particularly attractive);
- networks made up of small inhabited centres;
- dominant presences of natural, landscape, historical and cultural resources.
The outline of the infrastructural and transport system will permit, with different degrees, the connection between these distinct macro-environments.

B) The assessment process.

The process of assessment of the territorial components and systems, becomes necessary to be able to pass from a "territorial synthesis" to the Charter of Values as conceived by Regional Law LR 22/2009 and designed by the guidelines of urban reform: the COV must in fact be developed to express the various levels and degrees of identity, quality and functionality of the regional territory.

The achievement of drafting the Charter requires a priori the definition of a gamma of criteria, associated with performance intervals, so as to make possible proceeding to a "weighing" of the territory, as well as obtaining from the procedure itself results that are as reliable as they are significant.

The evaluation is performed in order of functionality and territorial vocation (assuming as reference territorial unit the macro-environments contained in the systems), to the sustainability and identity of places.

Assessment of territorial functionality

The criteria for the assessment of functionalities will permit reading situations of greater complexity and specificity within the territory, and those in which there is a propension to strike up new synergies. The terminologies with which the first two criteria indicated below are evoked (role and hierarchical level) collocate the same in a sphere of theme of the territorial structure, while in the second two criteria (entity and relation) a strategic nature is more noticeable. The distinctive signs of the landscape, perceptible in those contexts identified by the Regional Administration and in the relative constitutional elements that provide a background to the assessment moment, relative to their quality level represent and produce for the reference territorial units and for the entire region the enrichment of the degree of specialisation, reinforcement in terms of potential/opportunity, incentive for refinement of functional relations.

Assessment of sustainability and identity of places

To delineate the criteria for the assessment of sustainability and identity of places it is appropriate to proceed toward the definition of several fundamental concepts.

Sustainability is defined as:

- competitiveness/economic stability;
- social cohesion;
- eco-system functionality, referred not only to the single habitat, but in terms of eco-landscape.

Competitiveness/economic stability is articulated in areas with intense occupation and areas with high economic productivity that usually coincide, but that might also be configured in a differentiated fashion.

Social cohesion may be expressed as effectiveness of the system of services and their correction sizing with respect to the real needs of the society.

Eco-system functionality may be intended as a high degree of biodiversity and effectiveness of eco-system services.

The elements of identity of places are identified as among those:

- establishing a community;

- that signal the historic passages of a territory (or places of "turning points"). They might be places that testify to a change or are themselves profoundly modified by a total and rapid transformation with regard to the past;
- that represent continuous management (examples of better synthesis between environment, society, economy);
- of nature, primary or secondary, where nature is recognised as a social expression.

On the topic of identity of places it will be necessary to proceed with a system of criteria linked to those of the guidelines for urban reform indicated in the Deliberation of the Regional Board of Friuli-Venezia Giulia, no. 563/2010. These are:

1. uniqueness and rarity (frequency) – place that is unique at a supra-regional or regional level, network of places that constitute a single group <-> serial and standardised place;
2. physical integrity (state of maintenance) – place that is perfectly preserved in its physical aspect or meaning <-> place that is decayed or transformed and is no longer recognisable;
3. vulnerability (risk of loss) – place at risk of disappearance or loss of its own meaning <-> common or reproducible place;
4. representativeness (symbolic or monumental character) – place with a foundational meaning, ritual or collective acknowledgement, territorial element of widespread representativeness <-> common place without symbolic meanings;
5. vocation (natural predisposition) – place in which physical conditions and attributed meanings exalt their symbolic nature in uniformity <-> place that is indifferent or in unconstructive contrast with the symbolic element.

With respect to the assessment of territorial functionality, the examination aimed at defining the degree of sustainability and the identity level of the places is performed assuming as reference unit a territorial context that is lesser under a dimensional profile and the entity of functions under way.

It is believed in fact that the exam in question, to be constructive, exhaustive and relevant in terms of the aspects to investigate, must be performed observing the territorial facts and those of inhabited areas according to the single and principal use "families" that constitute them and the territorial morphologies associated with them.

To arrive at the definition of this smaller context, which we call "territorial context", various hypotheses for landscape units or contexts as emerged in the varying regional planning proposals of Friuli-Venezia Giulia in the last decade: in them such elaborations have been discerned that are sufficient to permit an overall reading of the territory in its sub-groups identified by their relative multi-thematic characteristics.

The territorial context to subject to assessment "operations" is therefore tied to surfaces and places that are distinguished on the basis of their prevalent functions.

Having constructed a reference system for the analysis of sustainability of each territorial context, we proceed by bringing out for each type of territorial context those that respond more to the criteria of sustainability, those that do not manifest such characteristics and those that present critical situations.

As may be noted, with each type of territorial context performance intervals are related that express the level of sustainability, determining an ordering that will go from the contexts in which sustainable practises are more accentuated to those that do not manifest such characteristics, to those that highlight even critical situations.

The identity criteria are instead valid for all types of territorial contexts, but the values of the place identity must belong both to the territorial context, and connected to the presence in that context of particular facts such as buildings or inhabited areas. Also in this case, knowledge of the landscape through documents and analyses already in possession of the regional administration of Friuli-Venezia Giulia supply support to the formative strategy of the Charter of Values.
For the management of this assessment based upon criteria, the method of multi-criteria analysis weighting each criteria and an interval of values within which to define the characteristics of each territorial context will be used.

4 RELATION TO OTHER PLANS AND PROGRAMMES

This chapter represents a first contribution to the construction of the panorama of planning instruments at a regional level – or at other equally ordered levels – that may be pertinent to the subject treated by the Territorial government plan.

In this phase the planning/programming documents are identified that constitute the so-called *planning and programming framework* and are supplied by elements that are preliminary to the assessment of coherence between the objectives of the already existing instruments at a regional level and the strategic axes of the instrument whose creation is under way.

The coherence analysis, called *horizontal external coherence*, will be developed in the environmental report and will be useful for the verification of the possibility of co-existence of various strategies within the same territory, identifying possible positive synergies to promote or possible negative interferences or conflicts to eliminate.

This type of analytical process is fundamentally finalised to obtain a dual result: on one hand to obtain a complete compendium of the environmental objectives already assumed based upon existing instruments at a regional or equally ordered level, on the other hand to verify the existence of environmental considerations, already effected in other planning/programming instruments, that might constitute a basis of study for the assessment process under way, so as to avoid duplication.

Herein are listed plans and programmes considered at a regional level, divided into two categories: the first includes the instruments, possibly already approved, being possibly pertinent to the subjects treated by the TGP and with which to proceed to a more detailed analysis of coherence, the second category contemplates instruments that are cited to allow the supply of a technical framework of the planning context at a infra-regional context also, but that are considered in more general terms, both for the type of instrument and in the case in which such instruments have not yet finished their formative procedure.

The instruments of planning/programming with which it is believed possible to proceed to a coherence assessment are the following:

- Regional energy plan;
- Rural development programme 2007-2013;
- Regional plans for waste management;
- Air quality improvement plan;
- Management plan of the watersheds of the eastern Alps;
- ROP Erdf 2007 - 2013 – Objective regional competitiveness and employment;
- Regional infrastructure plan for transport, mobility of merchandise and logistics.

The planning/programming instruments that are intended to be considered in terms of the technical framework are the following:

- Regional development plan;
- Regional action plan (to contain and prevent acute episodes of atmospheric pollution);
- Regulation for the discipline of the agronomic utilisation of nitrogen fertilisers in ordinary zones and zones that are nitrate vulnerable (RFA);
- Water protection plan.

Such lists may be implemented or modified during the process of dialogue and consultation of the SEA.

For the first verification of the existence of relations between the territorial government plan and the framework instruments of planning and programming, we take into consideration the strategic axes of the TGP, divided according to specific regional territorial strategic policies and developed according to the following table:

REGIONAL TERRITORIAL STRATEGIC POLICIES		STRATEGIC AXES
1	Development of competitiveness and territorial cohesion	**1.a** – Promotion, re-launching and development of the regional productive chain in respect and support of territorial vocations
		1.b – Sustainable development of the regional tourism network through recognition of the identities of places and their territorial contexts
		1.c – Promotion of the territory through integration with territories beyond the border
2	Promotion of the integrated development of regional infrastructure	**2.a** – Upgrading of the connections with the surrounding regions and of the relational networks at all levels, reinforcing the links of internal territorial cohesion
		2.b – Development of energy corridors and promotion of alternative energy sources
3	Support for the development of the region and its welfare in social, economic and productive terms according to the criteria of sustainable planning	**3.a** -. Improvement of the quality of life and the environment
		3.b – Defence of the territory through mitigation of risk, increase in ecological efficiency and protection of habitats
		3.c – Reduction of soil consumption
4	Promotion of the regional polycentric system	**4.a** – Reinforcement of the principal and secondary urban centres through the specialisation and hierarchy of the principal territorial realities.

As a first step the strategic axes of the TGP are compared with the objectives of the above mentioned instruments, so as to identify the levels of coherence and any critical points.

4.1 ANALYSIS OF HORIZONTAL EXTERNAL COHERENCE

In this paragraph the results of the assessment of horizontal external coherence of the strategic axes of the TGP are presented, together with the objectives of the planning/programming instruments that are believed to be pertinent, more or less directly, with the study context of the TGP.

It is important to clarify that such assessments represent a first moment of comparison with other instruments of planning at a regional level that will be followed, in the context of the environmental report, by a more precise analysis based upon the definitive project choices of the TGP: in this context the following coherence matrices must not be read as definitive judgments, but rather represent a synthesis of points upon which during the environmental assessments it will be appropriate to take under greater consideration. Where indications of "non-coherence" are found in relation to an objective, we wished to highlight the presence of a possible critical point and therefore the necessity to investigate further, during the TGP planning phase and the development of the SEA, a comparative and assessment analysis on that specific objective.

4.1.1 Regional energy plan

The Regional Energy Plan (REP) is the principal and fundamental instrument of planning and policy for the regional energy policies, through which an overall project is outlined for the development of the entire energy system, coherent with the socio-economic and productive development of the regional territory.

The objectives of increase and development of renewable sources and a more rational use of energy are flanked by attention toward questions relative to the promotion and safeguarding of the environment, to sustainable development and the themes of the Kyoto Protocol. The REP, as a consequence, is configured as a strategic and inter-disciplinary programming instrument.

The REP, approved by Regional Presidential Decree no. 0137/Pres. of 21 May 2007, finds foundation in the objectives of the regional energy policy, called "strategic objectives".

For each single strategic objective there are identified the relative operational objectives and for each of these actions are identified.

To implement the Plan according to the objectives indicated and according to the actions selected specific operating programme sheets are envisioned.

The REP quantifies in the end the impact of the planning choices relative to polluting emissions and climate alterations imputable to the programmed energy activities.

The strategic objectives of the REP are the following:

A. The REP envisions, also in a temporal horizon of medium-long term, to contribute to ensuring al the energy necessary to families and companies in the territory to maintain and improve the economic growth rates of a rich and advanced European region like Friuli-Venezia Giulia. Falling under the objectives of regional policy are also the infrastructures connecting energy systems of different countries, finalised at increasing the safety and efficiency of the national system, and therefore also that of Friuli-Venezia Giulia, which the Region judges environmentally sustainable.

B. The REP envisions the increase of the efficiency of the energy system of Friuli-Venezia Giulia, reducing the absorption per unit of service through a general increase in technological and managerial innovation,

and favouring the reduction of energy consumption and rational use of energy in the transport, productive, civil and tertiary sectors.

C. The REP envisions that each action useful toward the reduction of energy costs both for business and household use. To that end it is believe essential to contribute to the maximum development of competition. Falling within this context are policies aimed at favouring the diversification of sources of gas supply. Likewise falling within this context are the infrastructures, even cross-border ones, considered capable of reducing the purchase cost of energy destined for the regional production system. The REP programmes the organisation of consumers in purchase groups so as to permit them to take advantage of liberalisation processes in a truly beneficial way.

D. The REP is designed to minimise the environmental impact of production, transport, distribution and energy consumption, as well as sustainable environment and the harmonisation of each energy infrastructure with the landscape and territory. The Plan, which is not a programme of localisation because that task is performed in a more consonant and cogent fashion by the Regional Territorial Plan, achieves the purpose of this point D) by:

a) programming the rationalisation of production and infrastructure networks;

b) favouring, also through incentives, technological and management solutions aimed at sustainability;

c) favouring the development of production and consumption of renewable and eco-compatible energy.

E. The REP favours the development of innovation and technological and managerial experimentation for the production, transport, distribution and consumption of energy. The REP pursues innovation in the energy field by supporting the activity of companies and research centres, such as universities in the first instance, using European, national and regional regulations.

F. The REP envisions the promotion of energy production from renewable sources also to contribute to national objectives deriving from the Kyoto Protocol. The plan envisions in particular the exploitation of biomass, hydro-electric sources, thermal and photoelectric solar power, geothermal energy, wind power and wastes.

The operating objectives which descend from those strategic, are:

A1. Favour the development of distributed generation (micro-generation plants of electrical energy or co-generation power not above 1 MWe) so as to reduce the environmental impact and increase the efficiency of the energy system;

A2. Favour the installation of new plants and energy deposits of mineral oils, natural gas, etc.;

A3. Favour the installation of new production power plants from conventional sources, keeping into account the criteria of diversification of the sources, of the minimisation of the impact and maximum contribution to economic consequences for the region;

A4. Create incentives for energy production from renewable sources identified by the Plan, also for the improvement of the environment, the diversification and security of supply sources and economic and social growth;

A5. Create a database for the monitoring of demand and supply of energy and a relative informational system that gathers news and data and represents a point of reference for energy topics;

A6. Favour interventions of development and rationalisation of linear energy infrastructure, with particular attention to electricity;

B1. Favour the progressive substitution of existing energy plants with newer constructions offering greater efficiency and less consumption, with upgrading and renovation interventions, also taking into consideration the criteria of diversification of the sources;

B2. Favour the construction of new energy plants with better and more innovative technologies and managerial methods, characterised by high yields, low consumption and reduced environmental impact;

B3. Favour interventions of development and rationalisation of linear energy infrastructure, with particular attention to electricity;

B4. Favour the development of the generation distributed (micro-generation plants or co-generation plants not exceeding 1 MWe) to reduce environmental impact and increase the efficiency of the energy system;

B5. Favour the implementation of campaigns of information, training, awareness and energy savings promotion as support measures for projects under Ministerial Decrees of 20 July 2004;

B6. Promote the reduction of energy consumption by final users by 1% annually, also in relation to specific intervention sectors for energy savings as indicated in the REP and the two Ministerial Decrees of 20 July 2004;

C1. Favour the construction of cross-border linear infrastructures for the importation of energy from bordering countries to contribute to the reduction of energy costs for productive activities and regional companies;

C2. Favour the installation of new plants and energy deposits of mineral oils, natural gas, etc.;

C3. Favour the installation of new production centres from conventional sources, keeping into account the criteria of diversification of the sources, minimisation of impact and maximum contribution to the economic effects on the region;

C4. Create incentives for energy production from renewable sources identified by the Plan, also for the improvement of the environment, diversification and security of supply sources and economic and social growth;

C5. Favour the creation of associations for the purchase of electrical energy and gas for companies and citizens;

D1. Formulation, update and revision of guidelines, criteria and regulatory requirements for sector energy interventions;

D2. Create incentives for energy production from renewable sources identified in the Plan, also for the improvement of the environment, economic and social growth and the diversification and security of supply sources;

E1. Favour links with the universities and with research centres in the region for the development of scientific and technological research on energy matters;

E2. Promote the design and implementation of innovative research programmes and pilot projects relative to energy production plants, in particular from renewable sources;

F1. Create incentives for energy production from renewable sources identified by the Plan, also for the improvement of the environment, diversification and security of supply sources and economic and social growth;

F2. Promote information and public opinion awareness to the themes of renewable energies and environmental improvement;

F3. Favour the development of distributed generation (micro-generation plants or co-generation electrical plants of power output not exceeding 1 MWe) to reduce the environmental impact and increase efficiency of the energy system.

The table below shows the horizontal coherence analysis among the strategic axes of the TGP and the strategic objectives of the REP. From a reading of the table a substantial coherence between the two instruments in highlighted.

TABLE OF HORIZONTAL EXTERNAL COHERENCE WITH THE STRATEGIC OBJECTIVES OF THE REGIONAL ENERGY PLAN										
		STRATEGIC AXES OF THE TGP								
	STRATEGIC OBJECTIVES OF THE REP	1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
A.	**Ensuring all the energy necessary to families and companies in the territory in an environmentally sustainable fashion**	-	-	-	-	C	C	-	-	-
B.	**Increasing throughout the territory technological and managerial innovation, favouring the reduction of energy consumption and the rational use of energy in the transport, production, civil and tertiary sectors**	C	C	-	-	C	C	-	-	-
C.	**Reducing energy costs**	-	-	-	-	C	-	-	-	-
D.	**Minimising the environmental impact of the activities of production, transport, distribution and consumption of energy, as well as the environmental sustainability and harmonisation of all energy infrastructure with the landscape and territory**	-	C	C	-	C	C	-	C	-
E.	**Support the activity of companies and research centres, especially the universities**	-	-	-	-	-	-	-	-	-
F.	**Promote the production of energy from renewable sources, in particular the exploitation of biomass, hydroelectric sources, solar and photovoltaic power, geothermal power, wind power and use of waste.**	-	-	-	-	C	C	-	-	-

LEGEND	
C	Coherence between strategic axis and objective
NC	Non-coherence between strategic axis and objective

-	Unrelated strategic axis and objective

4.1.2 Rural development programme 2007-2013

The Rural development programme 2007-2013 (RDP) of the Friuli-Venezia Giulia Autonomous Region, approved by the Regional Council with Deliberation no. 643 of 22/03/2007, is a planning document aimed at supporting rural development by the European Agricultural Fund for Rural Development (EAFRD) as per EC regulation no. 1698/2005 emanated by the European Union Council on 20 September 2005.

The RDP takes into account the general regulations that discipline Community support as defined by the Regulation, establishes the objectives that the Region's rural development policies intend to pursue, as well as the priorities and measures of rural development to be implemented.

The European Commission, with their decision C(2007) 5715 of 20 November 2007, has formalised the approval of the Rural development programme 2007-2013 and the Regional Board has formally acknowledged this with its deliberation no. 2985 of 30 November 2007.

The RDP is divided into 4 axes, and for each one there are priority objectives identified, in turn divided into specific objectives from which 27 overall measures descend, divided in their turn into actions aimed at the structural upgrading of agricultural and forestry enterprises, at a generational change, at the improvement of the quality of products, infrastructure serving production, entrepreneurial and professional abilities, at the maintenance of activities in the mountain area, at the diffusion of agro-environmental practises, at the development of renewable sources of energy production, at the diversification of income in rural areas, at the reinforcement of social capital and the ability to govern local development processes.

The RDP is a planning instrument that envisions a specific financial organisation for the performance of its actions.

The objectives of the RDP are shown in the following table, in relation to the four axes.

RURAL DEVELOPMENT PROGRAMME OBJECTIVES 2007-2013		
AXES	**PRIORITY OBJECTIVES**	**SPECIFIC OBJECTIVES**
Axis 1 - "Improvement of the agricultural and forestry sector competitiveness"	- Promotion of the modernisation and innovation of enterprises and integration of the production chain - Consolidation and development of the quality of agricultural and forestry production - Upgrading of the physical and telematic infrastructure equipment - Improvement of entrepreneurial and managerial capacity of the technicians of the agricultural and forestry sector and support for generational change	A. Upgrading of structural equipment for the requalification of agricultural enterprises, forestry properties and enterprises in the sector, to harmonise production with new market exigencies, increase efficiency, introduce innovation, reinforce integration of the regional demand in vertical and territorial production chains as well as increase environmental compatibility B Improvement of the quality of agricultural and forestry products and their promotion to reinforce relations with consumers C. Rationalisation of infrastructures at the service of production D. Improvement of entrepreneurial and professional abilities in the

		agricultural and forestry sectors and integration of young operators in the field.
Axis 2 - "Improvement of the environment and rural space"	- Defence of the territory - Conservation of biodiversity and defence and diffusion of the high natural value agricultural and forestry systems - Qualitative and quantitative defence of surface and underground water resources - Reduction of greenhouse gases	E. Maintenance of the agricultural activity in the mountain areas to guarantee the function of environmental protection F. Increase of the environmental value of the territory, especially through the protection of biodiversity, with a consolidation of the Network Nature 2000 and an increase of the areas with extensive agriculture and forestry in the plains areas. G. Reduction of the pressure of productive, agricultural and forestry activities in particular on the water resources, through the diffusion of productive practises capable of favouring sustainable management of the territory H. Enlargement of the contribution of the primary sector to the problem of climate change, especially to the reduction of greenhouse gases.
Axis 3 - "Quality of life in rural areas and diversification of the rural economy"	- Improvement of the attractiveness of rural territories for enterprises and the population - Maintenance and/or creation of employment opportunities and income in rural areas	I. Development of innovative economic activities beginning with the flow of goods and services generated in the rural areas. K. Increase of the attractiveness of the population for the enterprises, especially in the areas with a lower population density
Axis 4 - "Leader"	- Reinforcement of local planning and managerial abilities - Promotion of endogenous resources of the territory	L. Reinforcement of the social capital and the capacity of government in local development processes M. Promotion of the endogenous resources of the rural territories

For the assessment of the vertical external coherence the priority objectives of the RDF are taken into consideration, which are the following:

OP1.1 – Promotion of modernisation and innovation in the enterprises and integration of the production chain

OP1.2 – Consolidation and development of the quality of agricultural and forestry production

OP1.3 – Upgrading of the physical and telematic infrastructure equipment

OP1.4 – Improvement of the entrepreneurial and professional capability of the agricultural and forestry technicians and support for a generational change

OP2.1 – Defence of the territory

OP2.2 – Conservation of biodiversity and defence and diffusion of the agricultural and forestry systems with high natural value

OP2.3 – Qualitative and quantitative defence of the surface and underground water resources

OP2.4 – Reduction of greenhouse gases

OP3.1 – Improvement of the attractiveness of the rural territories for the enterprises and population

OP3.2 – Maintenance and/or creation of employment opportunities and income in rural areas

OP4.1 – Reinforcement of local planning and managerial abilities

OP4.2 – Promotion of the territorial endogenous resources

The analysis of the horizontal external coherence between the strategic axes of the TGP and priority objectives of the RDP is shown in the table below: between the two instruments a substantial coherence is noticed.

TABLE OF HORIZONTAL EXTERNAL COHERENCE WITH THE PRIORITY OBJECTIVES OF THE RURAL DEVELOPMENT PROGRAMME 2007-2013										
		STRATEGIC AXES OF THE TGP								
PRIORITY OBJECTIVES OF THE RDP		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
OP1.1	Promotion of modernisation and innovation in the enterprises and integration of the production chain	C	C	-	-	-	-	-	C	C
OP1.2	Consolidation and development of the quality of agricultural and forestry production	C	C	C	-	-	C	C	C	-
OP1.3	Upgrading of the physical and telematic infrastructure equipment	C	C	C	-	-	C	C	C	-
OP1.4	Improvement of the entrepreneurial and professional ability of the agricultural and forestry sector technicians and support for generational change	C	C	C	-	-	-	-	-	-
OP2.1	Defence of the territory	-	-	-	-	C	C	C	C	-
OP2.2	Conservation of biodiversity and defence and promotion and diffusion of agricultural and forestry systems of a high natural value	C	C	-	-	-	C	C	C	-
OP2.3	Qualitative and quantitative defence of the surface and underground water resources	-	-	-	-	-	C	-	-	-
OP2.4	Reduction of greenhouses gases	C	-	-	-	-	C	-	-	-
OP3.1	Improvement of the attractiveness of rural territories for enterprises and the population	C	C	C	C	-	C	C	C	C
OP3.2	Maintenance and/or creation of employment opportunities and income in rural areas	C	C	C	-	-	C	C	-	-

LEGEND	
C	Coherence between strategic axis and objective
NC	Non-coherence between strategic axis and objective

-	Unrelated strategic axis and objective

4.1.3 Regional plan of special waste management

The Regional plan of waste management – Section of special, non-hazardous waste, special hazardous waste and hazardous urban waste was approved by Decree of the Regional President no. 0357/Pres. on 20 November 2006 and provides for a series of general objectives and a series of specific objectives (priority).

The **general objectives** of the plan are the following:

OG1 – prevention and reduction of the quantity and hazardous nature of waste

OG2 – reduction of the final disposal of waste

OG3 – respect of the principle of proximity: to limit and contain the movement of waste aimed at managerial within the regional territory

The **specific objectives** of the plan are the following:

OS1 – reduction of the conferment of waste in dumps

OS2 – favour the re-use, recycling and other forms of waste recovery, as well as the use of secondary raw materials, of combustibles or products obtained from the recovery of waste

OS3 – close the management circle of several priority types/special categories of waste

OS4 – resolution of vicious circles of the same types of incoming and outgoing waste from the regional territory

OS5 – prevention and reduction of the production of the hazardousness of the waste

The substantial coherence between the two instruments is possible to read in the following table, even though characterised by aims that are hardly related:

TABLE OF HORIZONTAL EXTERNAL COHERENCE WITH THE SPECIFIC OBJECTIVES OF THE REGIONAL PLAN FOR THE MANAGEMENT OF SPECIAL WASTE										
		STRATEGIC AXES OF THE TGP								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
OS1	**Reduce the conferment of waste in dumps**	-	C	-	-	-	C	C	C	-
OS2	**Favour the re-use, recycling and other forms of recovery of waste, as well as the use of secondary raw materials, of combustibles or products obtained from the recovery of waste**	C	-	-	-	-	C	-	C	-
OS3	**Close the management circle of several priority types/particular categories of waste**	C	-	-	-	-	C	C	C	-
OS4	**Resolve the vicious circle of the same types of incoming and outcoming waste from the regional territory**	C	-	C	-	-	-	-	-	-
OS5	**Prevent and reduce the production and danger of waste**	C	C	-	-	-	C	C	C	-

LEGEND	
C	Coherence between strategic axis and objective
NC	Non-coherence between strategic axis and objective
-	Unrelated strategic axis and objective

4.1.4 Regional plan for air quality improvement

The Regional plan for air quality improvement, approved by regional law 16/2007 with a Decree of the Regional President no. 0124/Pres. of 31 May 2010, is based upon the assessment of the air at a local scale in the regional territorial context and contains measures aimed at guaranteeing observance of limit values of pollutants within the terms established by legislative decree 351/1999, by ministerial decree 60/2002, by the legislative decree 152/2007, by legislative decree 120/2008 and the achievement, through adoption of specific measures, of target values of the levels of ozone, as per legislative decree 183/2004.

The plan, with special attention at specific areas of the regional territory, promotes measures aimed at the resolution of critical points relative to atmospheric pollution deriving from diffuse fixed sources, from sources localised in points. Such measures are declined in temporal arches of short, medium and long terms.

These are measures of a prevalently general character, aimed at:

- Achieving or tending to achieve, observance of the air quality objectives established by the most recent regulation;
- Beginning a process of verification of respect for the limits in the case of nitrogen dioxide through updating of the technical framework of the plan and if necessary recalibration of the actions undertaken in future years;
- Contributing to the respect of national limits for emission of sulphur oxides, nitrogen oxides, volatile organic and ammonia compounds;
- Achieving a considerable reduction of the emission of the precursors of nitrogen and set the basis for the respect of air quality standards for that pollutant;
- Contributing, through energy savings initiatives, electrical energy production using renewable sources and through the production of electrical energy from plants with greater energy efficiency, to achieve the percentage reduction of emissions envisioned for Italy in application of the Kyoto Protocol.

The objectives of the PRMQA, divided in general and specific objectives, are the following:

General objectives:

OG1 – recycling, improvement and maintenance of air quality

OG 2 – decrease of vehicle traffic

OG 3 – energy savings

OG 4 – technological renewal

OG 5 – application of the plan according to criteria of overall sustainability

OG 6 – application and verification of the plan

Specific objectives:

OS1 – reduction of emissions

OS 2 – travel reduction of private autos

OS 3 – reduction of port emissions

OS 4 – sector technical training

OS 5 – involvement of the social actors and the public

OS 6 – verification effectiveness of the plan actions

OS 7 – monitoring of concentrations of pollutants

The actions of the PRMQA are the following:

1 – Development of a sustainable mobility of merchandise and persons in the regional territory

2 – Incentives to renew the public fleet of vehicles

3 – Introduction of a generalised system of periodic verification of exhaust gases (blue seal) of vehicles, motorcycles and motor vehicles similar to what is already in force in the City of Trieste

4 – Introduction of "car pooling" "car sharing" and public bicycle sharing systems ("bike sharing")

5 – Introduction of limits on the use of combustibles in ports by ships

6 – Limits on circulation by private heavy vehicles (capacity >7,5 t) inside urban areas

7 – Construction of car parks outside the urban area equipped with a system of fast and frequent links with the city centre in degraded areas, areas already used and by now unused, polluted sites compatible with that function

8 – Extension of the pay parking areas and increase of tariffs in the critical sectors

9 – Increase of pedestrian and/or limited circulation streets

10 – Actions in favour of increasing city bike paths

11 – Extension of a pedestrian accompaniment service for students during home-school travel

12 – Actions to reorganise public transport to improve the flexibility of the service in terms of routes, paths and stop schedules

13 – Optimisation of merchandise loading/unloading services in urban centres

14 – Definition of limits and the criteria of use for combustible oil for heating

15 – Use of biomass and solar energy, for the generation of electricity and heat, in line with the Rural development programme 2007-2013 and the Regional energy plan of the Friuli-Venezia Giulia Region

16 – Awareness campaigns regarding the substitution of household appliances and illumination systems with low energy efficiency

17 – Incentives for the installation of combined generation plants of electrical energy and heat and wind power

18 – Support for the penetration in the tertiary sector of combustion plants using wood that are high efficiency with low emissions, in line with the objectives of the Energy Plan

19 – Programme of reconversion of the steel factory of Servola also considering the construction of a new combined-cycle thermo-electric power plant

20 – Flanking medium and large companies through the institution of technical tables for the introduction in their productive cycle of technologies with lesser impact of air quality

21 – Development of an energy efficiency programme in public buildings, through an energy diagnosis and the successive application of effective technologies

22 – Institution of training courses for administrators and technicians on the theme of energy savings and use of alternative energy

23 – Organisation of conferences, studies and publications concerning environmental protection

24 – Verification and periodic updating of the inventory of emissions

25 – Verification and updating of modelling instruments used for the plan

26 – Updating and reorganisation of instruments and measurement points of the regional network for air quality control

27 – Organisation of specific measurement campaigns to verify the analysis of the plan relative to zoning

From a reading of the following table we note the substantial coherence between the two instruments.

TABLE OF HORIZONTAL EXTERNAL COHERENCE WITH THE ACTIONS OF THE REGIONAL PLAN FOR AIR QUALITY IMPROVEMENT										
		STRATEGIC AXES OF THE TGP								
	ACTIONS OF THE PRMQA	1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
1	Development of a sustainable mobility of merchandise and persons in the regional territory	C	C	C	C	-	C	C	C	C
2	Incentives to renew the public vehicle fleet	C	C	C	-	-	C	C	-	-
3	Introduction of a generalised system of periodic verification of exhaust gases (blue seal) of vehicles, motorcycles and motor vehicles similar to what is already in force in the City of Trieste	-	-	-	-	-	C	C	-	-
4	Introduction of "car pooling" "car sharing" and systems of public bicycle sharing ("bike sharing")	C	C	C	-	-	C	C	-	-
5	Introduction of restrictions on the use of combustibles in ports by ships	-	-	-	-	-	-	-	-	-
6	Prohibition of circulation of heavy private vehicles (capacity >7,5 t) inside urban areas	-	-	-	-	-	C	C	-	-
7	Construction of car parks outside urban areas, equipped with a system of fast and frequent link to the city centre in degraded areas, already used areas and those by now not in use, or polluted sites compatible with that function	-	-	-	C	-	C	C	C	C
8	Extension of the pay parking areas and increase of tariffs in critical sectors	-	-	-	-	-	C	-	-	-
9	Increase of pedestrian and/or limited circulation streets	-	C	-	-	-	C	C	-	C
10	Actions in favour of increasing city bicycle paths	-	C	C	C	-	C	C	-	C
11	Extension of pedestrian accompaniment service for students during home-school travel	-	-	-	-	-	C	-	-	-
12	Actions to reorganise public transport to improve the flexibility of the service in terms of routes, paths and schedule stops	-	C	C	C	-	C	C	-	C
13	Optimisation of merchandise loading/unloading services in urban centres	-	-	-	-	-	C	-	-	-

TABLE OF HORIZONTAL EXTERNAL COHERENCE WITH THE ACTIONS OF THE REGIONAL PLAN FOR AIR QUALITY IMPROVEMENT										
		STRATEGIC AXES OF THE TGP								
	ACTIONS OF THE PRMQA	1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
14	Definition of limits and criteria for the use of combustible oil for heating	-	-	-	-	-	C	-	-	-
15	Use of biomass and solar energy for the generation of electricity and heat, in line with the Rural development programme 2007-2013 and the Regional energy plan of the Friuli-Venezia Giulia Region	C	C	-	-	C	C	C	-	-
16	Awareness campaigns for the substitution of household appliances and illumination systems with low energy efficiency	-	-	-	-	-	C	C	-	-
17	Incentives for the installation of combined generation plants for electrical energy and heating and wind power	C	C	C	-	C	C	C	C	-
18	Support for the penetration in the tertiary sector of combustion plants using wood featuring high efficiency and low emissions, in line with the objectives of the Energy Plan	C	C	C	-	C	C	C	-	-
19	Reconversion programme of the steel factory of Servola also considering the construction of a new combined-cycle, thermo-electric power plant	C	-	C	-	C	C	C	-	-
20	Flanking the medium and large companies through the institution of technical tables for the introduction in their productive cycle of technologies with less impact on air quality	-	-	-	-	-	C	-	-	-
21	Development of an energy efficiency programme in public buildings, through an energy diagnosis and the successive application of effective technologies	-	-	-	-	C	C	C	-	-
22	Institution of training courses for administrators and technicians on the energy savings theme and the use of alternative energy	-	-	-	-	C	C	-	-	-
23	Organisation of conferences, studies and publications concerning environmental protection	-	-	-	-	C	C	C	-	-

TABLE OF HORIZONTAL EXTERNAL COHERENCE WITH THE ACTIONS OF THE REGIONAL PLAN FOR AIR QUALITY IMPROVEMENT										
ACTIONS OF THE PRMQA		STRATEGIC AXES OF THE TGP								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
24	**Verification and periodic updating of the inventory of emissions**	-	-	-	-	-	C	C	-	-
25	**Verification and updating of modelling instruments used for the plan**	-	-	-	-	-	-	-	-	-
26	**Updating and reorganisation of instruments of measurement points for the regional network for air quality control**	-	-	-	-	-	C	C	-	-
27	**Organisation of specific measurement campaigns to verify the analyses of the plan relative to zoning**	-	-	-	-	-	C	-	-	-

LEGEND	
C	Coherence between strategic axis and action
NC	Non-coherence between strategic axis and action
-	Unrelated strategic axis and action

4.1.5 Management plan of watersheds of the eastern Alps

The Management Plan (MP) represents the operational instrument through which European states must implement the contents of EC Directive 2000/60/EC at a local level, according to the guidelines set forth in Attachment VII the directive itself.
The principal objectives of that directive on water are inserted in the overall environmental policy directives of the European Community that envisions contributing to the protection and improvement of the environment, as well as the intelligent and rational use of natural resources. The European sustainability policy is founded on the principles of precaution and preventive action, on the principle of reduction, especially at the source of damage caused to the environment and on the principle "those who pollute, pay". The basic objective of the directive on water consists of maintaining and improving the water environment within the Community, through measures that regard quality, integrated with measures regarding quantitative aspects.

The Friuli-Venezia Giulia Region is interested in the elaboration strategy of the Management plan of watersheds of the eastern Alps, whose principal contents are summarised below:
1. general description of the characteristics of the hydrographic district;
2. summary of the pressures and significant impact exercised by human activities on the status of surface and underground waters;
3. specification and cartographic representation of the protected areas (among which the areas vulnerable to nitrates of agricultural origins are included);
4. map of the monitoring networks;
5. list of environmental objectives for surfaces waters, underground waters and protected areas;
6. summary of the economic analysis on water use;
7. summary of the programme or programmes of measures adopted (including those adopted for the implementation of directive 91/271/CEE);
8. repertoire of any more detailed management plans or programmes.

The MP was adopted by the Institutional Committees of the Adige Basin Authority and the Authority for the basins of the Upper Adriatic rivers, reunited in a joint hearing on 24 February 2010 with Deliberation no.1: approval of that plan will occur through decree of the President of the Council of Ministers, currently being perfected.

The objectives upon which the MP is based are four, each divided into two sub-objectives:

OB1 – Uses of water resources
- OB1.a – Qualitative use of water resources
- OB1.b – Quantitative use of water resources

OB2 – Requalification of the ecosystems
- OB2.a – Protection of ecosystems
- OB2.b – Improvement of the functionality of ecosystems

OB3 – Emergency management and risk prevention
- OB3.a – Emergency management
- OB3.b – Risk prevention

OB4 – Sustainable use of water resources

OB4.a – Cost management of resources
OB4.b – Development and management of productive activities linked to the resources

The MP includes the following obligatory basic measures:

1 – Application of the minimum quality criteria for swimming waters, that is the physical-chemical and microbiological parameters, the absolute value limits and approximate values of these parameters, the minimum frequency of sampling and analysis method or inspection of those waters. Containment measures of microbiological pollution, through activation of obligatory disinfection.

2 – Institution of the Network Nature 2000, made up of protected areas, for the conservation and management of natural and semi-natural habitats of wild flora and fauna, through the adoption of measures intended to favour the conservation of priority natural habitats and priority species of Community interest.

3 – Measures aimed at ensuring the requisite drinking quality and cleaning of drinking waters; the establish the parametric values corresponding at least to values established by the directive and fix value limits for parameters that are not included in the directive; they envision the obligation of performing regular inspections on waters destined for human consumption by respecting analysis methods specified in the directive or by using equivalent methods.

4 – Measures aimed at preventing and controlling pertinent accident risks connected to particular hazardous substances (obligation to establish a management system of security, setting forth an appropriate plan for the use of the territory, obligation of the active involvement of the population).

5 – Application procedure of Environmental Impact Assessment and projects and actions that may determine impact on the environment.

6 – Protection measures for public health and the environment from toxic effects deriving from the uncontrolled use of depuration muds on agricultural terrain.

7 – Measures aimed at the reduction of pollutant loads through limits on nitrogen and phosphorus in outflows of urban waste water.

8 – Measures for the prevention of negative impacts on the environment deriving from phytosanitary products (regulations on the assessment, authorisation, market sale and control of phytosanitary products; identification of areas vulnerable to phytosanitary products and relative restrictive regulations).

9 – Measures for the protection of waters against nitrates of agricultural origin (identification of surface and underground waters contaminated by nitrates or at risk of contamination; identification of vulnerable areas that contribute to pollution; voluntary codes of good agricultural practises).

10 – Measures for the prevention and integrated reduction of pollution involving the industrial and agricultural activities that present a significant pollutant potential (obligation to obtain authorisation; obligation to engage useful measures to fight pollution; prevention, recycling or elimination of waste with the least polluting techniques).

11 – Measures to protect fresh waters that require protection and improvement to be appropriate for fish life. They establish the minimum quality criteria that must be satisfied by those waters, that is to say, the physical, chemical and microbiological characteristics, the restrictions on value limits, the minimum frequency of sampling and the reference methods for the analysis of those waters.

12 – Measures aimed at avoiding the dumping of toxic, persistent or bio-accumulative substances in underground waters.

13 – Measures aimed at preventing and fighting pollution of underground waters (identification of criteria for the assessment of the chemical status of underground waters; identification of criteria to identify significant and long-lasting tendencies toward the increase of pollution levels; actions to prevent and limit indirect dumping of polluting substances into underground waters).

14 – Measures aimed at the assessment and reduction of flood risk.

15 – Regulations for the protection and prevention of pollution provoked by dumping of those hazardous substances into the water environment (these are in particular specific measures to fight water pollution produced by single pollutants or groups of pollutants that represent a significant risk for the water environment or originating from the water environment, including risks to the waters destined for the production of drinking water).

16 – Monitoring measures concerning the market sale, aimed at their use, of biocides.

17 – Measures for the protection of the quality of waters destined for the cultivation of molluscs, (bi-valve and gastropod molluscs).

18 – Application of procedures of strategic environmental assessment for plans and programmes that might have significant effects on the environment.

19 – Measures to protect the environment from toxic effects relating to the collection, transport, treatment or storage of waste.

20 – Definition of environmental quality standards (EQS) for priority substances and for several other pollutants to reach a good chemical status of surface waters.

21 – Measures aimed at achieving or maintaining a good ecological status of the marine environment, preserve its quality, prevent its decay and, where possible, recover the ecosystems of damaged areas.

22 – Measures adopted in application of the principle of recovery of water use costs, including environmental costs and those relative to resources.

23 – Measures adopted to identify and protect waters destined for human use.

24 – Measures adopted for the inspection of extraction of surface and underground fresh waters and the embankment of surface fresh waters, including the compilation of one or more extraction registers and the obligation of a preventive authorisation for extraction and embankment.

25 – Measures to inspect drainage in source points that may cause pollution (prohibition to introduce pollutants in the water; obligation of a preventive authorisation for drainage; obligation of registration

on the basis of general and restrictive regulation, any exceptions to the prohibition on direct drainage of pollutants into underground waters).

26 – Measures aimed at guaranteeing that the hydro-morphological conditions of the bodies of water permit achieving the prescribed ecological status or a good ecological potential for the bodies of water designated as artificial or strongly modified. The measures include, in particular, those aimed at satisfying the minimum environmental flow.

27 – Measures adopted for the prevention and control of accidental pollution aimed in particular at avoiding significant loss from technical plants and to avoid and/or reduce the impact of accidental pollution episodes, also through systems of detection or alarm to verify such events.

28 – Measures adopted to avoid an increase in the pollution of marine and coastal waters.

29 – Measures adopted as implementation of the protection objectives of the Special Law for Venice and specific regulations concerning the lagoon environment and its drainage basin.

The assessment of coherence has been developed between the strategic axes of the TGP and the basic actions of the MP. The results of that assessment are summarised in the following table, from which we can see the coherence between the two instruments.

TABLE OF COHERENCE WITH THE BASIC ACTIONS OF THE MANAGEMENT PLAN FOR HYDROGRAPHIC BASINS OF THE EASTERN ALPS										
		STRATEGIC AXES OF THE TGP								
	BASIC ACTIONS OF THE MP	1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
1	Application of the minimum quality criteria that swimming waters must respect, that is to say, the physical, chemical and microbiological parameters, the absolute value limits and values indicating these parameters, the minimum sampling frequency and the method of analysis or inspection of those waters. Measures of containment of microbiological pollution through the adoption of obligatory disinfection.	C	C	C	-	-	C	C	-	-
2	Institution of the Network Nature 2000, made up of protected areas, for the conservation and management of natural and semi-natural habitats and wild flora and fauna, with the adoption of measures intended to favour the conservation of priority natural habitats and priority species of Community interest	C	C	C	-	-	C	C	C	-
3	Measures aimed at ensuring the requisite drinkability and cleaning of drinking waters; they establish parameter values corresponding at least to the values established by directive and they fix value limits for the parameters that do not appear in the directive; they envision the obligation of performing regular inspection of waters destined for human consumption in observance of the specified methods in the directive or using similar equivalent methods	C	C	C	-	-	C	C	-	-
4	Measures aimed at the prevention and control of significant accident risks connected to particular hazardous substances (obligation to establish a system of safety management, adoption of appropriate planning of use of territory, obligation to involve the population actively)	-	-	-	-	-	C	C	-	-
5	Application of the Environmental Impact Assessment procedure to projects and interventions that may have effects on the environment	-	-	-	-	-	-	-	-	-

TABLE OF COHERENCE WITH THE BASIC ACTIONS OF THE MANAGEMENT PLAN FOR HYDROGRAPHIC BASINS OF THE EASTERN ALPS										
		STRATEGIC AXES OF THE TGP								
	BASIC ACTIONS OF THE MP	1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
6	Measures of protection of public health and the environment from toxic effects deriving from the uncontrolled use of depuration muds on agricultural terrain	C	C	C	-	-	C	C	-	-
7	Measures aimed at the reduction of polluting loads through limits on nitrogen and phosphorus in the dumping of urban waste waters	C	C	C	-	-	C	C	-	-
8	Measures for the prevention of negative impact on the environment deriving from phytosanitary products (regulations on the assessment, authorisation, market sale and control of phytosanitary products; identification of the areas vulnerable to phytosanitary products and the relative restrictive regulation)	C	C	C	-	-	C	C	-	-
9	Measures for the protection of waters against nitrates of agricultural origin (identification of surface and underground waters contaminated by nitrates or at risk of contamination, identification of vulnerable areas that contribute to pollution; voluntary codes of good agricultural practises)	C	C	C	-	-	C	C	-	-
10	Measures for the prevention and integrated reduction of pollution involving the industrial and agricultural activities that represent a significant polluting potential (obligation to obtain authorisation; obligation to employ all useful measures to fight pollution; prevention, recycling or elimination of waste with less polluting techniques)	C	C	C	-	-	C	C	-	-
11	Measures to protect fresh waters that require protection and improvement to be appropriate for the aquatic life. They establish the minimum quality criteria that must be satisfied by those waters, that is to say, the physical, chemical and microbiological characteristics, the restrictions on value limits, the minimum sampling frequency and the reference methods for the analysis of those waters.	C	C	C	-	-	C	C	-	-

TABLE OF COHERENCE WITH THE BASIC ACTIONS OF THE MANAGEMENT PLAN FOR HYDROGRAPHIC BASINS OF THE EASTERN ALPS										
		STRATEGIC AXES OF THE TGP								
	BASIC ACTIONS OF THE MP	1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
12	Measures aimed at avoiding the dumping into underground waters of toxic, persistent and bio-accumulative substances	C	C	C	-	-	C	C	-	-
13	Measures aimed at preventing and fighting pollution of underground waters (identification of criteria for the chemical status of underground waters; identification of the criteria to identify significant and long-lasting tendencies in the increase of pollution levels; actions to prevent and limit the indirect dumping of polluting substances into underground waters)	C	C	C	-	-	C	C	-	-
14	Measures aimed at the assessment and reduction of flood risk	C	C	C	-	-	C	C	C	-
15	Regulations for the protection and prevention of pollution provoked by the dumping of those hazardous substances dumped into the water environment (in particular these are specific measures to fight water pollution produced by single pollutants or groups of pollutants that represent a significant risk for the aquatic environment or deriving from the aquatic environment, including the risks for the waters destined for the production of drinking water)	C	C	C	-	-	C	C	-	-
16	Measures concerning the subject of market sale, intended for use, of biocides	-	-	-	-	-	-	-	-	-
17	Measures for the protection of the quality of waters destined for the cultivation of molluscs (bi-valve molluscs and gastropods)	C	C	C	-	-	C	C	-	-
18	Application of strategic environmental assessment procedures for the plans and programmes that might have significant effects on the environment	-	-	-	-	-	-	-	-	-

TABLE OF COHERENCE WITH THE BASIC ACTIONS OF THE MANAGEMENT PLAN FOR HYDROGRAPHIC BASINS OF THE EASTERN ALPS										
		STRATEGIC AXES OF THE TGP								
	BASIC ACTIONS OF THE MP	1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
19	Measures to protect the environment from the toxic effects of the collection, transport, treatment, storage and deposit of waste	C	C	C	-	-	C	C	C	-
20	Definition of the standards of environmental quality (EQA) for the priority substances and for several other pollutants to achieve a good chemical status of surface waters	-	-	-	-	-	C	C	-	-
21	Measures aimed at achieving or maintaining a good ecological status of the marine environment, preserve its quality, prevent its decay and, where possible, recover the ecosystems of the damaged areas	-	-	-	-	-	C	C	-	-
22	Measures adopted in application of the principle of recovery of water use costs, including the environmental costs and those relative to resources	-	-	-	-	-	C	-	-	-
23	Measures adopted to identify and protect the waters destined for human use	C	C	C	-	-	C	C	-	-
24	Measures adopted for the inspection of the extraction of surface and underground fresh waters and the embankment of surface fresh waters, including the compilation of one or more registers of the extractions and obligation of preventive authorisation for extraction and embankment	C	C	C	-	-	C	C	-	-
25	Measures for the control of drainage in source points that might provoke pollution (prohibition to introduce pollutants in the water; obligation to obtain a preventive authorisation for drainage; obligation to register on the basis of general and	C	C	C	-	-	C	C	-	-

TABLE OF COHERENCE WITH THE BASIC ACTIONS OF THE MANAGEMENT PLAN FOR HYDROGRAPHIC BASINS OF THE EASTERN ALPS										
		STRATEGIC AXES OF THE TGP								
	BASIC ACTIONS OF THE MP	1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
	restrictive regulation, any exceptions to the prohibition of direct dumping of pollutants into the underground waters)									
26	Measures aimed at guaranteeing that the hydro-morphological conditions of the bodies of water permit achieving the prescribed ecological status or a good ecological potential for the bodies of water designated as artificial or strongly modified. The measures include, in particular, those aimed at satisfying the minimum environmental flow	-	-	-	-	-	C	C	-	-
27	Measures adopted to prevent and control accidental pollution aimed especially at avoiding significant losses from technical plants and to avoid and/or reduce the impact of accidental pollution episodes, also through systems of detection or alarm to verify such events	C	C	C	-	-	C	C	-	-
28	Measures adopted to avoid an increase in pollution of marine and coastal waters	-	-	-	-	-	C	C	-	-
29	Measures adopted as implementation of the protection objectives of the Special Law for Venice and the specific regulations for the lagoon context and its drainage basin	-	-	-	-	-	C	C	-	-

LEGEND	
C	Coherence between strategic axis and action
NC	Non-coherence between strategic axis and action

-	Unrelated strategic axis and action

4.1.6 Regional operating programme Erdf 2007 – 2013

The Regional operating programme Erdf 2007 – 2013 for Friuli-Venezia Giulia is collocated in the priority objective of the cohesion policy "Regional competitiveness and employment" and has its foundation within Community and national legislation relative to the planning period 2007-2013.

The Programme describes the strategic choices that, in coherence with Community policy, are functional to the pursuance of the overall objective "to create a lasting competitive advantage for the entire regional context".

The definition of the strategy to implement and the relative objectives is the result of an analysis of the socio-economic context which has led to the identification of the principal territorial needs the Programme intends to answer, in coherence with the policies already identified in the Preliminary Strategic Document (PSD).

The intervention contexts identified have led to the structuring of the ROP in 5 priority action axes, plus one relative to technical assistance, as defined in the regulation:

- Priority axis 1: Innovation, research, technological and entrepreneurial transfer;
- Priority axis 2: Environmental sustainability;
- Priority axis 3: Accessibility;
- Priority axis 4: Territorial development;
- Priority axis 5: Eco-sustainability and energy efficiency of the productive system.

Axis 1 – Innovation, research, technological transfer and entrepreneurship

The analysis of the context performed within the ROP highlights how the Friuli-Venezia Giulia Region possesses a significant competitive advantage with respect to other Italian regions as concerns the research and innovation system, testified to by the presence of numerous and valid scientific research infrastructures and by a level of qualified human resources able to develop and apply innovation.
The Programme seeks to remedy several weak points, among which:

- The fragility of the competitive model of the enterprises and their limited capacity for innovation;
- The existence of few sectors able to configure themselves as true clusters;
- The limited dimension of the companies and the prevalence of organisational assets that reduce the capacity for dimensional growth and innovation;
- Relations not fully qualified between research centres and SMB, the latter which still express very limited demand for services and products offered by scientific research;
- The low level of integration of the economic system, especially with reference to the relation between small and medium businesses.

With the new programming the Region therefore intends to reinforce the regional productive system by increasing its competitiveness through:

- Support for the development of the technological and scientific bases of the entrepreneurial fabric;
- Support for the processes of transformation and/or reinforcement of the productive structure.

Axis 2 – Environmental sustainability

The objective of the ROP Erdf is to be able to orientate social and economic development toward greater environmental sustainability and toward models of production, consumption and research able

to exploit the economic production and employment chain of environmental sectors and to enhance the resources of the Region's cultural heritage by operating in conjunction with the protection of the environment to fully exploit the potential they offer to develop tourism.
With the new programme the Region intends:

- To enhance the environmental and cultural resources and prevent natural and technological risks, with work aimed at the reclamation and/or recovery of the territory, to protect the environment and the improvement of the environment, restoring to collective use the areas compromised by pollution, breakdown or environment decay, promoting the opportunities for entrepreneurial development and sustainable tourism and guaranteeing, at the same time, the defence of public health and natural and cultural resources.

Axis 3 – Accessibility

The theme of accessibility represents a priority action of the ROP, in consideration on one hand, of the privileged position of the Region inside the Community territory including after EU enlargement to the East, and on the other hand, of the congested transport infrastructure that is not very functional for the economic development of the territory. At the same time, the regional productive system suffers from a lack of telecommunications infrastructure around the territory, which limits the capacity of companies to create a network and possibly widen their business.
The ROP therefore pursues the objective of promoting a more efficient use of infrastructure by acting within a framework of inter-modality and improvement of regional mobility, as well as the creation of infrastructure to favour the access of companies to new technologies.
With the new planning the Region intends:

- To improve the mobility system of the region through material and immaterial actions to favour an inter-modal system;
- Reinforce the use of immaterial infrastructure by companies to stimulate the adoption of new communication technologies.

The activities of the Programme will regard specific actions in the context of transportation infrastructure, the adoption of wide-band technology, especially inside industrial clusters, as well as the development of advanced IT services, to favour for example the tourism sector and merchandise transport.

Axis 4 – Territorial development

The context analysis has highlighted the persistence of significant imbalances within the regional territory, in particular between the mountains and the plains, and the existence of specific needs linked to the urban context and therefore worthy of attention.
The Programme assumes as an objective action to reduce economic imbalances and promote sustainable development, so as to guarantee better internal cohesion and more balanced growth in terms of competitiveness and attractiveness within the Region.
This objective is pursued by the ROP through:

- The creation, with reference to the urban territory, of synergies between sustainable economic growth in the long-term period and the promotion of the local patrimony to increase the local attractiveness and stimulate development through the efficient and effective use of resources;
- Actions undertaken in mountain areas to contribute to overcoming specific difficulties, also through use of natural and cultural resources;
- Actions undertaken in lagoon areas to contribute to overcoming specific difficulties by exploiting the patrimony they possess.

As concerns the promotion of the attractiveness of the urban territory, the programme envisions specific actions aimed at re-building decaying urban areas and able to support nearby and multifunctional services, to support sustainable tourism.

Axis 5 – Eco-sustainability and energy efficiency of the productive system

The ROP sustains the promotion of eco-sustainability over the longer term of economic growth, in line with the choices and objectives defined in the energy sector (Kyoto Protocol and European Council March 2007) and through wider strategic objectives called for in the document "New EU Strategy for Sustainable Development" of the European Council.
In particular, in light of the situation described in the context analysis, the strategy pursued focuses on greater efficiency and use of the regional system's energy sources.
Therefore, for the achievement of the specific objective the ROP intends to operate according to specific activity guidelines, so as:

- To reduce the intensive use of traditional energy sources through an increase in energy production from renewable sources and promote efficiency and energy savings in the production and consumption of energy, as well as reduce polluting emissions in the atmosphere.

The strategy of the ROP is developed into axes, specific objectives, operating objectives and activity guidelines. Together with the number assigned to each axis listed above, here below are shown the relative **objectives divided into specific (OS) and operative (OO) categories**.

OS 1 Reinforce the competitiveness of companies
- **OO 1.1** Support the development of scientific and technological bases of the entrepreneurial fabric;
- **OO 1.2** Support processes of transformation and/or reinforcement of the productive structure.

OS 2 Promote environmental sustainability
- **OO 2.1** Improve cultural and environmental resources and prevent natural and technological risks.

OS 3 Improve the accessibility of the regional system
- **OO 3.1** Improve the mobility system of the Region;
- **OO 3.2** Reinforce the use of immaterial infrastructure to stimulate the adoption of new communication technologies by local actors.

OS 4 Favour internal cohesion and balanced territorial growth
- **OO 4.1** Increase the attractiveness of the urban territory by stimulating development through an efficient and effective use of its resources;
- **OO 4.2** Contribute to overcoming the difficulties of the mountain areas;
- **OO 4.3** Economic and social revitalisation of the lagoon areas.

OS 5 Promote the longer term eco-sustainability of economic growth
- **OO 5.1** Support energy efficiency and the use of renewable sources;
- **OO 5.2** Support eco-compatible productive processes through the promotion of reductions in atmospheric emissions.

OS 6 Develop an activity of assistance for the regional technical and administrative structures, to guarantee an improvement in the efficiency levels of the process of implementation of the Programme and initiatives related to it
- **OO 6.1** Support the regional structure in terms of technical assistance for the implementation, monitoring and assessment of the programme;

- **OO 6.2** Identify and finance activities related to publicity, communication and exchange of experiences.

Assessment of coherence has been developed between the strategic axes of the TGP and the operating objectives of the ROP Erdf whose results are summarised in the following matrix, and from where the coherence of the two instruments at a regional level may be deduced.

TABLE OF HORIZONTAL EXTERNAL COHERENCE WITH THE OPERATING OBJECTIVES OF THE REGIONAL OPERATING PROGRAMME ERDF 2007-2013										
		STRATEGIC AXES OF THE TGP								
	OPERATING OBJECTIVES OF THE ERDF	1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
OO 1.1	Support the development of the scientific and technological bases of the entrepreneurial fabric	C	C	C	C	C	-	-	-	C
OO 1.2	Support processes of transformation and/or reinforcement of the productive structure	C	C	C	C	C	-	-	-	C
OO 2.1	Develop the environmental and cultural resources and prevent natural and technological risks	-	C	-	-	C	C	C	C	-
OO 3.1	Improve the mobility system of the Region	-	C	C	C	-	C	-	-	C
OO 3.2	Reinforce the use of immaterial infrastructure to stimulate the adoption of new communication technologies by local actors	C	C	C	C	-	C	-	-	C
OO 4.1	Increase the attractiveness of the urban territory by stimulating its development through an efficient and effective use of its resources	C	C	C	C	C	-	C	C	C
OO 4.2	Contribute to overcoming the difficulties of the mountain areas	C	C	C	C	-	C	-	-	C
OO 4.3	Economic and social revitalisation of the lagoon areas	C	C	-	C	-	C	-	-	C
OO 5.1	Support energy efficiency and the use of renewable sources	-	C	-	-	C	C	C	-	-
OO 5.2	Support eco-compatible productive processes through promotion of the reduction of atmospheric emissions	C	C	-	C	C	C	C	-	-
OO 6.1	Support the regional structure in terms of technical assistance for implementation, monitoring and assessment of the programme	-	-	-	-	-	-	-	-	-

OO 6.2	**Identify and finance activities relative to publicity, communication and exchange of experiences**	-	-	-	-	-	-	-	-	-

LEGEND	
C	Coherence between strategic axis and objective
NC	Non-coherence between strategic axis and objective
-	Unrelated strategic axis and objective

4.1.7 Regional plan of infrastructure for transport, mobility of merchandise and logistics

The subject of regional planning for the area of transportation has been innovated by regional law LR 23/2007, which introduced the concept of "planning of the regional transport system", on the basis of which the planning of the regional system of infrastructure for transport, mobility of merchandise and logistics has been developed jointly, converging in a single planning instrument articulated in a dedicated section of the regional system of infrastructure for transport and the other of the regional system of mobility of merchandise and logistics.

Regional law no. 16/2008 which modifies and integrates regional law no. 23/2007 "Implementation of legislative decree 111/2004 on local land regional public transport, transport of merchandise, motorisation, street circulation and road communications", in article 54, identifies and organises the regional system of infrastructure of transport, mobility and logistics through the drafting of planning instruments and article 57, that modifies regional law no. 41/1986, defines the modalities related to time frames for the drafting of the Plan.

At the basis of regional planning in the sector are specific guidelines, defined by the Deliberation of the Regional Board no. 1250 of 28 May 2009. From those guidelines were derived the general objectives and actions of the Regional Plan of infrastructure for transport, mobility of merchandise and logistics; the Plan was approved by Presidential Decree no. 300 of 16 December 2011 after approval of the Deliberation of the Regional Board no. 2318 of 24 November 2011.

The plan is aimed at collocating into a network the points and lines of the infrastructure as well as the relative services, in the framework of the promotion of an integrated logistical platform that guarantees modal and territorial balance, as well as establishes, as implementation of the integrated regional plan of merchandise transport and logistics, the three-year programmes for the use of financial resources that are in any case available.

The general objectives of the Plan considered a priority are the following:

OB1 Establish a programme framework for the development of all initiatives within the regional territory in the sector of transport of merchandise and logistics.
OB2 Establish a logistical platform at a supra-regional scale, defined by a complex system of infrastructure and services for the development of internal and local areas and for infra-regional mobility.
OB3 Promote the evolution of ports toward a model of regional port system in the context of a complementary nature, while respecting market rules to increase overall efficiency.
OB4 Promote the transfer of transportation of merchandise and persons from lorries to rail/water while respecting sustainable development, inter-modality and co-modality.
OB5 Pursue the rational utilisation of the infrastructure system of transport through the requalification of the existing network for the decongestion of the transportation system, in particular for industrial traffic.
OB6 Pursue the development of a regional network of motorways and roads that are "functional and high-quality" related to "sustainable development" and therefore able to ensure, while respecting the environment and context of the territory, an adequate level of service for traffic flows, and an increase in safety and the reduction of accidents.
OB7 Develop the polycentric nature of the regional inhabited network and its relations to the nearby territorial realities, including the construction of subsidiary networks that favour connectedness and social and economic services.

OB8 Establish a system of shared governance for skills in planning, programming, building and managing transportation infrastructure which is currently divided among various actors.

To draft the Plan, the Regional Board, in addition to having identified the general objectives of the planning instrument under exam, indicated the following guidelines:

- Render Friuli-Venezia Giulia a competitive territory that offers infrastructure and logistical services for the vast regional area made up of the Veneto region, Carinthia, Slovenian and Croatia also in virtue of the construction of new infrastructure foreseen by Community programming in the TEN networks (Project priority 6) and by the Adriatic-Baltic Corridor.
- Make Friuli-Venezia Giulia with its point and linear infrastructure the centre of exchange between central-eastern Europe, northern Europe, the Mediterranean and the Far East.
- Promote the strong re-balancing of transportation toward the maritime railway mode and in line with Community policies in the sector.
- Establish the programming framework for the development of all the initiatives of the Region and the companies that participate, in the field of transportation infrastructure and logistics.
- Establish the reference framework for the other public subjects that are operators of network and point infrastructure as well as for the private investments in the sector of transport of merchandise and logistics.
- Promote in general functional recovery, identify and remove the critical points as well as render the existing road system and railway infrastructure safer.
- Promote the development of the airport of Ronchi dei Legionari as inter-modal centre for merchandise and seek out potential partners among other airports for the development of passenger transport in a context of territorial airport integration, centred on the upgrading of road and railway infrastructure.
- Develop the role of the Region as a subject that plans the development of transportation infrastructure and logistics with the aim of attracting investors even with the formula of project financing and guaranteeing the necessary authorisations for the construction of programmed infrastructure.
- Coordinate the logistical centres and regional ports, also through integration and implementation of advanced telematic systems, aiming to create a system that supplies quality services to operators and whose activity would be in support of the entire productive fabric of the region.
- Promote a culture of integrated regional marketing in the field of logistics and transportation that will be adequate for the necessity of "remaining connected" also by promoting specialist training in new professions.
- Increase development of the existing regional infrastructure assets through innovative financial operations aimed at putting the logistic sector's actors, with the participation of the Region and which operate in Friulia-Venezia Giulia, in a condition to purchase shares in terminals of regional interest that are found throughout the national territory or abroad.
- Perform an infrastructural re-balancing role throughout the territory both at a regional and sub-regional level in the context of social cohesion to take into account local exigencies of an economic character.
- Promote a system of governance that considers road system a first priority.
- Upgrade the motorway network and improve its functionality.
- Overcome the infrastructure gap in sub-regional areas of strong productive value for the economic system of the Region through the acquisition of road infrastructure to link them to principle road arches from/toward metropolitan areas and other regions.
- Improve the functionality of the regional road system by completing and integrating its fundamental axes, also to re-balance the various territorial realities.

- Build a first-rate road network able to favour a rational distribution of traffic flows throughout the territory, in coherence with the forecasts of urban-planning instruments.
- Re-classify the road system in the context of transfers consequent to the implementation of legislative decree 111/2004 (national network/regional network/provincial network).
- Organise the monitoring of the regional road and motorway system and the development of action programmes through a single management centre.

The actions of the Regional plan for infrastructure of transport, mobility of merchandise and logistics that most represent the implementation of general objectives have been, relative to the drafting of the pertinent environmental report, divided into general and direction actions (the latter include those actions that might cause interference with the environment). The assessment of coherence with such actions will be addressed in the context of the drafting of the environmental report, centring on the comparative analysis with the project choices of the TGP.

As may be deduced from a reading of the matrix, we wished to highlight the presence of possible critical points between several strategic axes of the TGP and several objectives of the Plan for infrastructure and therefore the necessity to investigate, during the planning phase of the TGP and development of the SEA, a comparative and assessment analysis regarding a few specific objectives of the infrastructure (highlighted in red in the matrix). Such an assessment will be developed in the environmental report, considering the range and point definition of TGP actions.

TABLE OF HORIZONTAL EXTERNAL COHERENCE WITH THE OBJECTIVES OF THE REGIONAL PLAN FOR INFRASTRUCTURE OF TRANSPORT, MOBILITY OF MERCHANDISE AND LOGISTICS

OBJECTIVES OF THE REGIONAL PLAN FOR INFRASTRUCTURE OF TRANSPORT, MOBILITY OF MERCHANDISE AND LOGISTICS		STRATEGIC AXES OF THE TGP								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
OB1	Establish the programming framework for the development of all initiatives within the regional territory in the sector of transport of merchandise and logistics	C	-	C	C	-	-	-	-	C
OB 2	Establish a logistical platform at a supra-regional scale defined by a complex system of infrastructure for the development of internal and local areas and infra-regional mobility	C	-	C	C	-	-	-	-	C
OB 3	Promote the evolution of ports toward a regional system model of ports in the context of a complementary nature, but respectful of market rules to increase overall efficiency	C	C	C	C	-	C (*)	NC	-	C
OB 4	Promote the transfer of transport of merchandise and persons from lorries to rail/water in respect of the sustainable development policies, of inter-modality and co-modality	C	C	C	C	-	C	C	-	C
OB 5	Pursue the rational use of the infrastructure system of transport through the requalification of the existing network for the de-congestion of the road system, in particular of industrial traffic	C	C	C	C	-	C	-	NC	C
OB 6	Pursue the development of the regional network of road and motorway transport as "functional and of high quality" related to "sustainable development" and therefore able to ensure, while respecting the environment and the territory, in addition to an adequate level of service for traffic flows, and increase safety and reduce accidents	C	C	C	C	-	C (*)	-	C (*)	C
OB 7	Develop the polycentric nature of the regional inhabited network and its relations with the nearby territorial realities, also by building subsidiary networks that favour the connectedness of economic and social services	C	C	C	C	-	-	-	-	C
OB 8	Establish a system of shared governance for the planning, programming, implementation and management skills concerning transport infrastructure, currently divided among different actors	C	C	C	-	-	-	-	-	-

Note (*)
The comparison between the objective and the strategic axis presents aspects of coherence, but also aspects of a potentially critical nature: an investigation in that sense will be carried out, once the actions of the Plan have been defined, within the context of the Environmental report.

LEGEND	
C	Coherence between strategic axis and objective
NC	Non-coherence between strategic axis and objective
-	Unrelated objective and strategic axis

4.1.8 Regional action plan

The Regional action plan is introduced by regional law no. 16 of 18 June 2007, "Regulations in defence of atmospheric pollution and acoustic pollution", which incorporates the legislative decree no. 351 of 4 August "Implementation of directive 96/62/CE concerning the assessment and management of environmental air quality", ministerial decree no. 261 of 1 October 2002, "Regulation modifying the technical directives for the preliminary assessment of environment air quality, the criteria for elaboration of the Plan and the Programmes indicated in articles 8 and 9 of legislative decree no. 351 of 4 August 1999" and the legislative decree no. 183 of 21 May 2004 "Implementation of directive 2002/3/CE relative to ozone in the air".

The law envisions that the Region has responsibility for the development and adoption of such an instrument, as it contains the measures to implement in the short term of the area and conglomeration in which the levels of one or more pollutants involves a risk of exceeding the value limits of the pollutants themselves[4] and the threshold of alarm for ozone levels.

The RAP is based upon an assessment of local air quality within the regional territory and contains measures aimed at prevention, containment and control, in the short term, of the risk of exceeding the value limits of pollutants and the threshold of alarm for ozone levels.
In case of necessity, the plan envisions the suspension of activities that contribute to exceeding the value limits and threshold of alarm.

The Plan constitutes a point of reference and coordination for the instruments of municipal planning in the field and especially concerning Municipal action plans (MAP), which define both the areas in which the levels of one or more pollutants risk exceeding the value limits and the threshold of alarm as per applicable regulations, and the emergency actions to implement in those areas. In that sense the indications of the RAP are aimed at harmonising the actions of the MAP among the various Municipalities in emergency cases.

The measures proposed by the RAP, dedicated to specific risk situations, are put in relation to particular areas of the regional territory, in which the air quality constitutes an environmental risk. Following an assessment of air quality at a local level, based upon the detection of concentrations of specific pollutants and upon the statistical elaboration of the same, we proceed to the zoning of the regional territory.

The instrument was approved by Deliberation of the Regional Board no. 2596 of 29 December 2011.

The actions of the RAP used to assess coherence with that of the PPW, in summary form, are the following:

- A1. Informing the population;

- A2. Reducing by two degrees the average temperature inside buildings (where possible) with respect to the indications of Italian law no. 10 of 1991, exempting those buildings that enter category B or

[4] Here we refer to article 2, comma 1 of regional law 16/2007, to the pollutants indicated in attachment I of legislative decree 351/1999 and in legislative decree 183/2004.

above (A or Passive House) on the basis of the certificate of energy qualification or an equivalent procedure of energy certification the municipality;

- A3. Substitution of domestic combustion of wood (where possible), with other forms of combustion or heating except for those systems with specific minimum characteristics ***(*) (+)***;

Note (*) *: the minimum characteristics of systems that are exempt from action A.3 are the following:*

a. *EC certification*

b. *Total dust emitted by* ***wood products such as ovens, fireplaces and inserts*** *answering to regulation (UNI EN 13240 and UNI EN 13229), measured according to the Austro-German method, below 100 mg/Nm3 (measured at 13% of O2). Lacking that value certified by laboratories notified and reported in available documentation, the value of the CO must be below 0.2% (measured at 13% of O2);*

c. *Total dust emitted by* ***wood products such as kitchens and thermo-kitchens*** *answering to regulation (UNI EN 12815), measured according to the Austro-German method, below 100 mg/Nm^3 (measured at 13% of O_2). Lacking such a value certified by laboratories notified and reported in the available documentation, the value of the CO must be below 0.3 % (measured at 13% of O_2);*

d. *Total dust emitted by* ***pellet products such as ovens and fireplaces*** *answering to regulation (UNI EN 14785), measured according to the Austro-German method, below 60 mg/Nm^3 (measured at 13% of O_2). Lacking such a value certified by laboratories notified and reported in the documentation available, the value of CO, must be below 0.04% (measured at 13% of O_2).*

Note (+) *: measure A.3 does not include,* ***smoke fan ovens (kachelofen)*** *and* ***co-generation power plants*** *functioning with wood-product biomass, while it does include a prohibition to lighting open-air fires, except for those at Epiphany.*

- A4. Actions to reduce traffic and limit the circulation of vehicles pre-EURO IV burning diesel or petrol, including heavy commercial vehicles not used for loading and unloading merchandise in the time-period from 16.00 to 20.00 in those areas identified by the Municipal action plans;

- A5. Reduction by 10% of emission from plants identified in the application period of the measure and with respect to the daily emissions of normal functioning, as declared by the inventory of emissions (INEMAR) relative to 2005.

The coherence evaluation was developed between the strategic axes of the TGP and the actions of the Regional action plan. The results of that assessment are summarised in the following table, from which we deduce the coherence between the two instruments limited to axis "3.a Improvement of quality of life and environmental quality" within the TGP.

TABLE OF HORIZONTAL EXTERNAL COHERENCE WITH THE STRATEGIC OBJECTIVES OF THE REGIONAL ACTION PLAN										
		STRATEGIC AXES OF THE TGP								
	ACTIONS OF THE RAP	1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
A1.	Informing the population	-	-	-	-	-	C	-	-	-
A2.	Reducing two degrees the average temperature set inside buildings (where possible) with respect to the indications of law 10 of 1991, exempting those buildings that fall under category B or above (A or Passive House) on the basis of a certificate of energy qualification or an equivalent procedure of energy certification established by the municipality	-	-	-	-	-	-	-	-	-
A3.	Substitution of the domestic combustion of wood (where possible) with other forms of combustion or heating, except for those systems with specific minimum characteristics (*)(+)	-	-	-	-	-	C	-	-	-
A4.	Actions to reduce traffic or limit circulation for vehicles pre-EURO IV burning diesel or petrol, including heavy commercial vehicles not loading or unloading merchandise in the time-period from 16.00 to 20.00 in the areas identified by the Municipal action plans	-	-	-	-	-	C	-	-	-
A5.	Reducing by 10% emissions of factories identified in the period of application of the measure and with respect to daily emissions of normal functioning, as declared in the inventory of emissions (INEMAR) relative to 2005	-	-	-	-	-	-	-	-	-

Note (*) : the minimum characteristics of the systems exempted from action A.3 are the following:

e. EC certification

f. Total dust emitted by **wood products such as ovens, fireplaces and inserts** answering to regulation (UNI EN 13240 and UNI EN 13229), measured according to the Austro-German method, below 100 mg/Nm3 (measured at 13% of O2). Lacking that value certified by laboratories notified and reported in available documentation, the value of the CO must be below 0.2% (measured at 13% of O2);

g. Total dust emitted by **wood products such as kitchens and thermo-kitchens** answering to regulation (UNI EN 12815), measured according to the Austro-German method, below 100 mg/Nm^3 (measured at 13% of O_2). Lacking such a value certified by laboratories notified and reported in the available documentation, the value of the CO must be below 0.3 % (measured at 13% of O_2);

h. Total dust emitted by **pellet products such as ovens and fireplaces** answering to regulation (UNI EN 14785), measured according to the Austro-German method,

below 60 mg/Nm^3 (measured at 13% of O_2). Lacking such a value certified by laboratories notified and reported in the documentation available, the value of CO, must be below 0.04% (measured at 13% of O_2).

Note (+) : measure A.3 does not include, **smoke fan ovens (kachelofen)** and **co-generation power plants** functioning with wood-product biomass, while it does include a prohibition to lighting open-air fires, except for those at Epiphany.

LEGEND	
C	Coherence between strategic axis and action
NC	Non-coherence between strategic axis and action
-	Unrelated strategic axis and action

4.2 OTHER INSTRUMENTS THAT MIGHT BE RELATED TO THE TGP

This chapter proposed several further details concerning the planning/programming instruments that might have points of contact with the TGP, but which not yet seen the end of their approval process, or exist in a more specialised dimension.

4.2.1 Regional management plan of urban waste

In the Friuli-Venezia Giulia Region there exists a regional planning instrument for the field of urban waste that is based upon an analysis of actual status of the sector and regulations at the end of the last century: this is the "Regional management plan of waste – urban waste section", approved in 2001.

Currently a new instrument is being developed: the Regional management plan of urban waste (RMPUW). The SEA procedure for that instrument began with a training procedure for the Plan itself with the Deliberation of the Regional Board no. 245 of 5 February 2009.

The procedure that led to the development of the Plan, in any case, already began before that deliberation, with a process of participatory recognition characterised by a collection of proposals, contributions and observations at various levels: with experts in the sector, with stakeholders and citizens there was an open dialogue that led to the production of shared documents making up the fundamental departure point for the construction of a new planning instrument. This important moment of participation took place in the context of a Conference held in Udine in the autumn of 2008.

The reference for the training procedure of the plan is regional law 30/1987, but the complex regulatory references in continuous change and the recently existing technological solutions constitute a new and current background.

Following a shared procedure at the Council of Local Autonomies and the competent Regional Council Commission, with deliberation of the Regional Board no. 2536 of 22 December 2011 an RMPUW was adopted, together with the relative environmental report, so as to start SEA consultations.

4.2.2 Regulation for the disciplining of agronomic use nitrogen fertilisers in ordinary areas and in areas vulnerable to nitrogen (RFA)

The Regional administration is developing the RFA, an instrument envisioned by national incorporation of EC directive 91/676/CEE (the so-called Nitrates Directive), that is to say Ministerial Decree of 7 April 2006, incorporating "General technical regulations and criteria for the regional disciplining of agronomic use of animal-raised effluents, as per article 38 of legislative decree no. 152 of 11 May 1999".

The Nitrates Directive finds various points of contact with the so-called Water Framework Directive (Dir. 2000/60/CE) and in fact also the RFA has various points of contact with the PPW, aimed at the protection of water resources.

The RFA under development seeks to discipline:

- The activities of agronomic use of nitrogen fertilisers in ordinary areas, as implementation of article 20 of regional law no. 16 of 5 December 2008 (Urgent regulation on the environment, territory,

reconstruction, anti-seismic harmonisation, transport, maritime domain and tourism) and in conformance with article 112 of legislative decree no. 152 of 3 April 2006 (Regulation on the environment) and with the decree of the Ministry of agricultural and forestry policies of 7 April 2006 (General technical regulations and criteria for the regional disciplining of agronomic use of animal effluents, as per article 38 of legislative decree no. 152 of 11 May 1999);
- The obligatory action programme for the defence and reclamation of waters from pollution caused by nitrates of agricultural origin in vulnerable areas, as implementation of article 19 of regional law no. 17 of 25 August 2006 (Intervention on agricultural, natural, forestry and mountain resources, and on the environment, territorial planning, hunting and fishing) and in conformance with article 92 of legislative decree 152/2006 and with the decree of the Ministry of agricultural and forestry policies of 7 April 2006.
- The limits of use of depuration muds as implementation of article 3, comma 28 of regional law no. 24 of 30 December 2009 (Budget law of 2010).

The RFA regulates the use of muds in depuration and agricultural whenever this is not disciplined by the regional regulation, currently under development, which implements article 3, comma 28 of regional law no. 24 of 30 December 2009.

Effectively, the RFA, by its nature and for its own objectives, proposed to protect the environment, in particular water; therefore its effects on the environment are necessarily positive.

Currently, having concluded the SEA consultations, the regulation and relative environmental report are in their definitive development phase.

4.2.3 Regional plan for the protection of water

Among the instruments of regional planning that might have points of contact with the TGP, there is the Regional plan for the protection of water (PPW), whose formative procedure, based upon the indications of article 13 of regional law 16/2008, was begun in the context of the SEA process with Deliberation of the Regional Board no. 246 of 5 February 2009.

Currently, following consultations on the preliminary environmental report, a PPW document is being drafted together with a relative environmental report. The assessments performed during the the SEA procedure of the PPW and the TGP will be developed so as to optimise the potentially synergic aspects of the two instruments.

4.2.4 Regional landscape plan

The Regional administration is drafting a Regional landscape plan (RLP) an instrument aimed principally at protecting and managing the territory in its entirety with the goal of integrating the defence of the landscape and the processes of territorial transformation.

The RLP is formed based upon the indications of legislative decree no. 42 of 22 January 2004 (Code of the cultural and landscape assets, as per article 10 of laaw no. 137 of 6 July 2002) and on the basis of an agreement of 22 November 2006 that envisions the drafting of such an instrument to occur jointly with the Ministry for Architectural and Cultural Assets and with the Ministry for the Protection of Land and Sea.

An elaboration of the gradual RLP is envisioned, either in any case for portions of the territory or for types of assets subject to protection, rendering operational the single phases so as to work in the context of a global vision: this so as to allow the formation of consensus around the choices made. It will then be appropriate, in a gradual fashion, to identify strategies of improvement of the landscape and management of the processes that determine its transformation, shared as much as possible and implemented by local government.

The Regional landscape plan will be developed into two levels:

The first level refers to the entire territory of the region in its articulation of "landscape contexts" (article 135 of legislative decree 42/2004);

- The second level refers to the "landscape assets" (article 134 of legislative decree 42/2004):, that is to say real estate or areas declared as of notable public interest; areas protected by law; further real estate and areas identified in the plan.

The first level already exists, deriving from preceding planning activities performed in concert with the MIBAC, so that only its revision is envisioned.

The second level follows a strategy in successive phases that allows for the progressive integration of regulatory content of existing restrictions and envisions the following activities:

- Recognition, delineation and integration of the contents of declarations of notable public interest (article 141 bis of legislative decree 42/2004);
- Recognition, delineation and determination of specific prescriptions for the use of protected areas by law.

To permit a gradual operation, before reaching adoption of the RLP, it is envisioned to proceed, as per article 133, comma 2 of legislative decree 42/2004, with the emanation of policies and criteria defined in concert with the MIBAC.

Currently, in summary, the landscape contexts have been delimited and recognition of landscape assets has begun, therefore the technical sub-strata to which it refers in the context of the preliminary analyses for the drafting of the TGP, are in fact the landscape contexts cited above.

It is important to highlight the autonomy of the RLP with respect to the instrument of regional territorial planning, highlighting how the TGP (in particular the Charter of Values) is a multi-thematic instrument, at the same time coherent with the interpretations of the landscape, but not substituting the functions that are exercised by the envisioned RLP.

5 ENVIRONMENTAL SUSTAINABILITY OBJECTIVES

This chapter lists the environmental sustainability objectives taken from European and world-wide documentation, in order to provide a base reference for evaluating what is known as *vertical coherence*, which shall be developed in the environmental report.

It is useful to note how the European Union has broadly interpreted the concept of sustainable development, considering not just environmental objectives but also economic and social ones.

They are objectives that will be taken into consideration in the process of developing the TGP: the environmental plan will address the evaluation of whether the sustainability objectives are coherent with the individual objectives under the TGP through using matrices in which it is possible to gauge the level of interaction and criticality between such objectives. It involves identifying which objectives in the Plan have a link with the sustainability objectives and subsequently assessing which of inter-related objectives, from a quality perspective, are in greater agreement or disagreement. To define the coherence level, a scale is established using quality values, which can be used to evaluate coherence. Specific attention is given to evaluating possible cross-border aspects.

The table below, which is broken down according to subjects, sets out the sustainability objectives and the relevant documentation used to source them.

Subject	General objectives	Specific objectives	Source
Population and health	Contribute to a better quality of life and social well-being for citizens through having an environment where pollution levels are not harmful to human health or the environment and through sustainable urban development	Urban environment: promote an approach that is consistent with EU policies and in general improve the quality of the urban environment (higher use of public transport, trains, internal roads, travel on foot and by bike, regarding public transport the need to promote the use of vehicles with reduced levels of emissions, *etc.*).	Sixth Framework Programme relating to environmental action [Dec 1600/2002/EC]
		- Contributing to a better quality of life by taking an approach focussed on urban areas; - Reducing the impact of pesticides on human health and the environment and more in general, achieving a sustainable use of them and a significant global reduction in the risks and the use of pesticides, together with the necessary protection of harvests. Pesticides used that are persistent, bio-accumulated or toxic or which have other ingredients for concern must all be replaced to the extent possible by other, less harmful pesticides.	Dec 1600/2002/EC setting down the Sixth Framework Programme relating to environmental action
		Reduce illness levels in particular in vulnerable sections of the population, which are due to environmental factors such as heavy metals, dioxins and PCBs, pesticides, substances that alter the endocrine system, and atmospheric, water, land and acoustic pollution, ionizing and non-ionizing radiation.	European strategy for environment and health COM (2003) 338
		Contribute to a better quality of life through an integrated approach and pollution levels that are not harmful to the human health or the environment.	EU – urban environment strategy
		Strengthen social cohesion and integration, sense of belonging, cohabitation and suitability of urban areas.	Environmental action strategy for sustainable development in Italy
		Improve social quality and democratic participation.	Environmental action strategy for sustainable development in Italy
	Minimise the impact of hazardous chemical substances on the environment and on health by 2020		World summit on sustainable development Johannesburg 2002
Agriculture	Exploiting the environment and natural areas sustaining the management of the areas	- Conserving biodiversity and protecting and diffusing highly valuable agro-forestry systems; - Qualitative and quantitative protection of surface and underground water resources; - Reduction of greenhouse effect; - Territorial protection.	Reg. (CE) 1698/2005 relating to sustainable rural development by the European agricultural fund for rural development (EAFRD)
			National Strategic Plan for Rural Development 2007-2013, Ministry for Agricultural and Forestry Policies, 31 October 2006
	Reducing water pollution caused directly or indirectly by nitrates from agricultural sources		Dir. 91/676/EEC relating to the protection of waters from pollution caused by nitrates from agricultural sources.

Subject	General objectives	Specific objectives	Source
Fishing	- Apply a preventive strategy in adopting measures aimed at protecting and conserving aquatic resources and marine ecosystems, and to guarantee a sustainable use; - Promote management plans for fishing activities aimed at increasing selectivity regarding equipment, reducing throw back and containing the fishing effort		Regulation (EC) 1967/2006 "Measures for managing sustainable fishing in the Mediterranean"
	Contribute to the conservation of fish stocks, conserving professional fishing activities at a European level and in non-EU and internationals waters		European Best practice Code for sustainable and responsible fishing European community, 2004
Industry	Provide measures aimed at avoiding or if not possible, reducing, emissions from industrial activities polluting the air, water and land, including measures relating to refuse, in order to obtain a higher level of environmental protection overall.	- Adopt suitable preventive measures against pollution, specifically applying the best techniques available; - Avoiding generating waste, otherwise have waste recovered and if that is technically or economically not possible, the waste is destroyed avoiding and reducing the environmental impact; - Efficient use of energy; - Adopting necessary incident prevention measures and mitigating consequences; - In order to avoid any risk of pollution when activities are definitively halted, procure that the site is suitably restored.	Dir 2008/1/EC relating to preventing and reducing integrated pollution (codified version)
Energy	Promote a rational use of energy in order to contain energy use	Reduce energy use in the transport sector and industrial, housing and service sectors.	Environmental action plan for sustainable development in Italy
		Improve energy use throughout the EU and sustain research, demonstrations and instructions of new and promising technologies to the market.	European Commission "Keep Europe moving - Sustainable mobility for our continent" [COM(2006) 314]
	Develop competitive renewable energy sources and other sources of energy and vehicles with low carbon emissions, in particular alternative fuel for transport	Increase the production of renewable energy (biomass, wind, solar, geothermal, hydroelectric, refuse, biogas).	Environmental action plan for sustainable development in Italy
		Reduce energy use by 20% by 2020: this is the EU's objective under the energy efficiency action plan (2007-2012).	Green Paper: a European strategy for sustainable, competitive and safe energy [COM(2006) 105] and Communication "Energy policy for Europe" [COM(2007)]
Transport	A single European transport area	A single European transport area must assist transport of people and goods, reduce costs and improve sustainability for transport throughout Europe. A sector that is continuing to stall is the internal railway market, and its completion is a priority in order to create a single European railway system.	White Paper: a competitive and sustainable transport policy [COM(2011) 144]
		The essential network has to guarantee efficient and multi-optional transport methods between EU	

Subject	General objectives	Specific objectives	Source
		capital cities and other cities, ports and main airports and also through borders and other main economic areas. Specific attention is needed with regard to the completion of the incomplete sections (especially cross-border and bottlenecks/ring roads) in order to improve existing infrastructure and develop multi-method terminals in maritime and river ports and points of logistical consolidation within cities. As regards lengthy travel routes, connections with railway stations and airports must be improved. Main waterways will form the maritime part of the essential travel system.	
	Growth in transport and sustaining mobility with the objective of reducing emissions by 60%	It is necessary to confirm new transport methods in order to reach greater destinations in terms of goods and increased numbers of passengers using the most efficient transport methods (or a combination of methods).	
	Efficient essential network for multi-optional interurban transport	Consolidating high volume travel over long distances, or increased use of travel by bus, rail and air by passengers and for goods, multi-optional travel based on maritime or rail travel.	
		Improved integration between travel options: airports, ports and railway stations, buses, underground metros must be connected and transformed into multi-optional connection platforms for passengers. Multi-optional travel integration must be aided by providing information online and having electronic booking and payment systems integrated with all methods of transport. A major use of collective transport methods must be developed simultaneously with an adequate definition of passengers' rights.	
	Guarantee that transport systems are consistent with economic, social and environmental needs of society, minimising any adverse effects on economy, society and the environment	Achieve sustainable levels of energy use in transport and reduce greenhouse effects due to transport.	New EU strategy relating to sustainable development. European council, DOC 10917/06, 2006
		Reduce polluting emissions due to travel minimizing adverse effects on human health and/or the environment.	
		Reduce noise pollution due to transport both directly from the source and using mitigation measures in order to guarantee that global exposure levels minimize negative effects on health.	
	Integrating various urban mobility policies in a single strategy through the promotion of exchanging best practices at all levels: local, regional, national and European	As regards built-up areas, there is a trend for development in suburban areas and growth in inhabited areas. If the transport network does not follow that trend, some areas risk social isolation so it is necessary to: improve the quality of collective transport; coordinate urban and semi-urban transport using the territory's structure; better integrate passenger and goods travel in town planning	Green paper: towards a new urban mobility culture [COM(2007) 551].
Tourism	Managing tourism so as to guarantee the respect of all base resources and the capacity of such resources to regenerate, ensuring also commercial success	- Integrate sustainable development of tourism in general development strategies for the economy, society and the environment; - Pursuing the integration of sector policies and general consistency on all levels; - Development and adoption of tools for gauging companies' social responsibility and sustainability in the private and public sectors; - Use of Local Agenda 21 for tourist destinations, including at a regional level; - Use of indicator and monitoring systems for developing chains for tourist deals and destinations.	Base guidelines relating to sustainable European tourism COM(2003) 716

Subject	General objectives	Specific objectives	Source
Waste	Guarantee greater efficiency in resources and better waste management for the purpose of moving on to more sustainable production and use models, disassociating the use of resources and the production of waste from the economic growth rate	Avoid the generation of waste and increase the efficiency in how natural resources are used in terms of life cycles, promoting reuse and recycling.	New EU strategy relating to sustainable development. European council, DOC 10917/06, 2006
		Significantly reducing the overall quantity of waste generates through prevention measures in the sector, an increased efficiency in how resources are used and moving on to production and use models that are more sustainable.	Dec 1600/2002/EC implementing sixth EU framework programme relating to the environment
		Significant reduction in the quantity of waste for elimination and the quantity of hazardous waste generated, avoiding an increase in air, water and land emissions.	
		Incentivize reuse as regards all waste generated.	
Noise	Avoid, prevent or reduce according to the relevant priorities, any harmful effects including annoyance from exposure to environmental noise.		Dir 2002/49/EC relating to establishing and managing environmental noise
	Reducing noise pollution due to transport both at the source and using mitigation measures to guarantee that global exposure levels minimize any adverse effects on health	Reducing the percentage of the population exposed to excessive noise levels.	New EU strategy relating to sustainable development [European council, DOC 10917/06, 2006] Environmental action plan for sustainable development in Italy [ICEP resolution 57/2002] Strategic issues relating to urban environment [COM(2005) 718]
	Reducing noise pollution and the population exposed to the same	- Reduce the percentage of the population exposed to excessive noise levels - New transport and engine technologies with low noise emissions; - New technologies in active and passive systems for controlling noise.	ICEP resolution 157/2002 Environmental action strategies for sustainable development in Italy
Air and climate change	Restricting climate change, its cost and the negative repercussions on society and the environment	Reducing greenhouse effects.	New EU strategy relating to sustainable development. European council, DOC 10917/06, 2006
	Achieving air quality levels that do not incur risks or material negative effects on human health or the environment	Reducing polluting atmospheric emissions in particular SO_2, NOx, COVNM, NH_3, CO_2, benzene, PM_{10} and maintain the concentrations of pollutants under limits to the extent they are not harmful to human health, the ecosystem or monuments.	Environmental action plan for sustainable development in Italy
		Reducing tropospheric ozone concentrations.	
		Limiting risks deriving from exposure to $PM_{2.5}$ and reducing exposure of people to fine particles in particular in urban areas.	Strategic issues relating to atmospheric pollution
	Stabilize concentrations of greenhouse effects to a level that excludes harmful interference of anthropogenic activities on the climate	Protecting and extending forest areas for the purpose of absorbing Co_2 emissions.	Environmental strategy and action plan for sustainable development in Italy

Subject	General objectives	Specific objectives	Source
Waters	Guaranteeing an elevated level of internal and coastal waters preventing pollution and promoting a sustained use of water resources	Achieving quality levels in underground and above-ground waters which do not impact or significantly risk human health or the environment, guaranteeing that the extraction rate of water resources is sustainable in the long term.	Dec 1600/2002/EC implementing sixth EU framework programme relating to the environment
		Guarantee an elevated level of protection of coastal waters.	
		Reduce water use levels and promote recycling/reuse of water.	Environmental action plan for sustainable development in Italy
		Reduce water leakages in the civil and agricultural sectors.	
		Reduce the B.O.D. load on water supply for the civil sector and in industry.	
		Reduce the levels of fertilizers and anti-parasite products in agriculture.	
		Promote a sustainable use of waters.	Strategic EU issues – Policies on marine environment
Land	Promoting a sustainable use of land with specific attention on preventing erosion, deterioration or contamination	Reducing land use, particularly in areas that are more sensitive and coastal areas, from production, infrastructural or construction activities.	Environmental action strategy for sustainable development in Italy
		Restoring residential and urban developed areas.	
		Re-naturalize non-developed urban areas.	
		Control the pressure of tourism on vulnerable areas.	
		Restore from an environmental perspective any polluted areas.	
		Protect the land from natural and anthropogenic phenomena.	
		Protect land from erosion and pollution.	Dec 1600/2002/EC implementing sixth EU framework programme relating to the environment
	Protecting territories exposed to hydro-geological and seismic risks	Render areas most at risk from hydro-geological and seismic events safe.	Environmental action strategy for sustainable development in Italy
Biodiversity and conservation of natural resources	Protect, conserve, restore and develop the use of natural systems, natural habitats and wild flora and fauna in order to stop the loss of biodiversity	Appropriate conservation and restoration and a sustainable use of humid areas.	Dec 1600/2002/EC implementing sixth EU framework programme relating to the environment
		Conservation of species and habitats preventing in particular fragmentation.	
		Promoting the expansion of the ecological network "Nature 2000".	
		Protecting and restoring the structure and the use of natural systems.	
		Managing protected area systems in order to guarantee and promote – using a coordinated approach – the conservation and the valorisation of natural assets.	National framework legislation on protected areas
		Sustaining and maximizing the sustainable management and multi-use of forests.	European action plan relating to forests

Subject	General objectives	Specific objectives	Source
		Conservation and defence against forest fires.	National framework legislation on forest fires
		Conserving the marine ecosystem.	Strategic EU issues – Policies on marine environment
		Preventing the loss of biodiversity.	New EU strategy relating to sustainable development
		Protecting and where necessary, restoring the structure and the use of natural systems.	Dec 1600/2002/EC implementing sixth EU framework programme relating to the environment
	Improve the management and avoid the overuse of natural resources, acknowledging the value of the ecosystem services	Improve the efficient use of resources to reduce the overall use of natural non-renewable resources and the connected environmental effect generated from the use of raw materials, using also renewable natural resources to a compatible extent with their regeneration capacity	New EU strategy relating to sustainable development. European council, DOC 10917/06, 2006
		Improve management so as to avoid the overuse of renewable natural resources, such as fish, biodiversity, water, air, land and the environment and the restoration of deteriorated marine ecosystems.	
Landscape	Promoting the protection, the management and the planning of landscapes for conservation or quality improvement	Appropriate conservation and restoration of areas of significant value in terms of landscape, including cultivated and sensitive areas.	Dec 1600/2002/EC implementing sixth EU framework programme relating to the environment
		Restoration of deteriorated landscapes due to anthropogenic causes.	Development Plan for European Areas
	Prudent management of natural and cultural assets	Requalification of environmental and historical-cultural assets and guaranteeing access to the same.	Environmental action strategy for sustainable development in Italy
		Promoting architectural quality of buildings.	Development Plan for European Areas

6 ENVIRONMENTAL ISSUES PLAN MAY IMPACT

6.1 METHODOLOGICAL APPROACH

Legislative Decree 152/2006 requires that the environment report has to identify, describe and value the significant impact the proposed Plan could have on the environment and cultural assets.

In order to do so, the initial strategic evaluation stage already seeks to identify the environmental issues of relevance for the Plan, the issues that the plan could have an impact on, so namely the approach aimed at identifying the influential scope of the Plan.

That approach, as indicated in the aforementioned decree, must consider the significant secondary, cumulative, synergetic affects in the short, mid and long term, both permanent and temporary, positive and negative, on all environmental aspects including biodiversity, the population, human health, flora and fauna, land, air, climate factors, material assets, cultural assets including architectural and archaeological, and landscape. In view of such, it was deemed appropriate at this preliminary stage, to create a list of the environmental issues and aspects usually included in an Environment Status Report (ESR).

Starting from that list and further to the outcome of the consultation stage on this preliminary report, a first definition will be drawn up of the influential scope of the Plan by excluding any environmental issues that are deemed not to be influenced by the Plan or otherwise the inclusion of others that were initially thought to not be relevant. The list, however, may be amended including whilst the plan and the environmental report are being drawn up, in the event any possible effects arise on the environment as a result of the actions under the Plan that had not been defined.

During the consultation stage, the selection of the most relevant issues is important as it allows the calibration of the level of detail and the scope of analysis of the environmental report, meaning at the same time that any excessive specific information is avoided on insignificant effects or on any irrelevant topics, thus making the environmental report difficult to implement or indeed irrelevant as regards other important information, which could be overlooked[5].

The Decree 152/2006 also establishes that in order to avoid any duplication in evaluation, if relevant, previous examinations and information can be used which were obtained as part of other decision-making levels or otherwise acquired through implementing other provisions. In virtue of the choice to rationalize the collection and the production of information, the decree positively values – for the purpose of drafting an environmental report – the use of relevant information already available from other sources.

For that reason, the table below sets out an updated list of the indicators in the Reports relating to environment by the regional environmental protection agency (ARPA) for FVG and in studies for the PTR Environment Report.

The topics and the indicators that are deemed to be relevant for the Plan will be used:

1. to describe the environmental context contemplated in the Plan;
2. to identify the positive and negative effects deriving from the implementation of the actions indicated in the Plan;

[5] European Commission Guide to implementation of Directive 2001/42/EC relating to the evaluation of the effects of certain environment plans, 2003

3. (in the monitoring stage) to check the achievement of the objectives and for checking any affects that had not been envisaged.

6.2 ENVIRONMENTAL TOPICS

The table below sets out a list of the environmental topics, together with indicators and specific descriptions of them. Certain indicators in the table will be defined in the environmental plan, others will be added during the environmental evaluation stage and the drafting of the Plan.

From all the environmental topics submitted, after the preliminary consultation stage of this document and when the Plan is being drafted, the topics that could be positively or negatively influenced by the implementation of the Plan's objectives will be chosen. For that reason, the list below should be used as a reference subject to change and for implementation during the entire evaluation and formative process.

Topic	Possible indicators	Description of indicators
Population	**Variations in population**	Comprising three components: births, deaths and migration. The amount of the resident population – for the relevant reference year – is obtained for each Municipality, and the resident population for the previous year of natural and migratory changes is added to the final data.
	Density of population	The density is derived from the ratio between the number of residents in a certain territory and the expansion of the same.
Climate	**Average annual temperature**	Temperature obtained from average of individual temperatures recorded 2m from ground level. In automatic weather stations the measurements are taken every minute.
	Average maximum annual temperature	Extreme temperature taken in the year 2m from ground level. In automatic weather stations the measurements are taken every minute.
	Monthly – annual rainfall	The rainfall throughout the entire year or divided according to months.
	Frequency and intensity of average wind (monthly - annual)	Average frequency and intensity of wind divided according to north octant.
	Number of days of ice per annum **Number of freezing days per annum** **Number of hot days per annum** **Number of hot nights per annum**	Number of days per year when the maximum or minimum air temperature rises or falls above or below determined thresholds.
	Hail	Monitoring hail using approximately 400 stations with hail pads (in essence panels in polystyrene that record the impact of hail stones) managed by volunteers in the months from April to September. The pads are replaced after every hail storm.
Agriculture	**Agricultural land used**	The extent of land used for agricultural production should be measured. The agricultural area used (SAU) is the area of land which is effectively used for agricultural activities (for crops, agricultural forests, orchards, permanent and meadows and pastures, fruit orchards). The total agricultural area (SAT) is the overall area of land of an agricultural establishment.
	Agricultural establishments	Analysis of the numerical, dimensional and structural variations over time of the agricultural establishments present in the area, considering establishments with and without agricultural land.
	Agricultural companies employing eco-compatible measures and that are organic	Provides an indication of the level of adoption by a regional agricultural system of agricultural processes deemed more suitable for maintaining environmental quality, the healthiness of the food and the fibre produced.

	Zootechnical assets	Makes it possible to evaluate the pressure of agricultural establishments in terms of zootechnical aspects on the environment by analyzing the development over time of the population of the various species of animals. It is assumed that said establishments generate different levels of pressure for example through creating flows and the compaction of land, on the physical and chemical quality of said land.
	Zootechnical load	A measurement of the anthropic impact of rearing activities, mainly connected to the distribution over cultivated land of the wastewater produced by zootechnical establishments.
Fishing	**Consistency of fishing**	Evidences the main fishing systems, the Gross Tonnage (GT), the potential vessels and the age of the same, and also the overall total production statistics and the economic profits.
	Classification of the quality of waters for producing molluscs	The regions appoint marine and brackish areas, natural banks and populations or cultivated bivalves and gastropods, requiring improvement and protection given that they are suitable for molluscs and for contributing to the good quality and healthiness of the shellfish produced.
Mining activities	**Number of active mines**	Means the number of active mines in a Region and their relevant location (disaggregated data by Municipality).
	Number of abandoned mines	Means the number of abandoned mines in a Region and their relevant location (disaggregated data by Municipality).
	Number of restored mines	Means the number of restored mines in a Region and their relevant location (disaggregated data by Municipality).
	Residual capacity	Means the residual capacity of mines in a Region and their relevant location (disaggregated data by Municipality).
Industry	**Industrial and services companies**	Companies in industrial and services sectors according to employee category and province
	Integrated environment authorization requests submitted in Friuli Venezia Giulia	Integrated environment authorizations **(**IEA) authorizes activities and sets down measures for avoiding or reducing air, water and land emissions in order to obtain a higher level of environmental protection overall.
	Number of establishments at risk of relevant incident	The number is determined according to the number of "notifications" that these kinds of companies have to make to the relevant Authorities in accordance with article 6 of legislative Decree 334/99 as amended.
Energy	**Production of electricity**	Evaluates and monitors over time the total production of electricity in the region
	Production of renewable energy	Provides information on the energy generated using renewable sources (solar, hydroelectric, wind, geothermal, biomass plants, *etc.*).
	Use of electricity according to economic sector	Evaluates trends in the use of electricity and the efficiency of mitigation policies.
	Use of energy according to type of fuel	Quantifies the development of the different energy sources and the corresponding levels of use.
Transport	**Km of motorway**	Movement that determines the request for mobility, over different routes that represent what is offered. Determining the quantity of roads and the most relevant from the transport system.
	Km of state roads	
	Km of railway	
	Km of bike lanes	
	Presence of freight terminals	Indicates the presence in the regional areas of Municipalities which have freight terminals.

	Presence of auto ports	Indicates the presence in the regional areas of Municipalities which have auto ports.
	Presence of tourist ports	Indicates the presence in the regional areas of Municipalities which tourist ports.
	Presence of commercial ports	Indicates the presence in the regional areas of Municipalities which have commercial ports.
	Cross border goods trains	Quantity of cross-border goods trains according to the number of carriages and quantities.
	Movement of goods in ports	Evaluation of incoming and outgoing vessels from ports in Friuli Venezia Giulia.
Tourism	**Hotels**	Sets out the main information relating to tourism offers, examining the capacity of the relevant hotel structures in terms of number of establishments, beds and average stay.
	Number of beds	
	Average stay	
	Tourism rate according to Municipality	Indicates the percentage of tourists for every 100,000 inhabitants.
	Index of tourist function	Indicates the existing ratio between the number of beds available and the population resident there.
	Index of quality of hotels	Indicates the ration between the number of beds in 3, 4 and 5 star hotels and the number of beds in 1 and 2 star hotels.
	Index of density of hotels	Indicates the ratio between number of beds available and the area under consideration.
	Agro-tourism establishments according to municipality	Indicates the number of agro-tourism establishments present in each Municipality.
	Beach establishments	Indicates the presence of beach establishments located in each Municipality in the region.
Waste	**Total generation of urban waste per capita**	The total quantity is determined by the amount of national non-recycled and recycled waste in addition to the urban waste generated under each municipal regulation. The quantity of non-recycled is determined by subtracting the quantity of recycled waste from the total. The pro capita is calculated by dividing the total production of urban waste according to the number of inhabitants; doing so highlights the contribution of each citizen to the overall urban waste generated.
	Recycling and percentage of recycling	Recycled waste is calculated by adding the quantities of urban waste collected in fractions according to the same type or as aggregates of fractions of type (multi materials) effectively allocated for recovery and the quantity of hazardous urban waste collected separately and independently from their use (recovery and disposal) in order not to contaminate non-recycled waste. The percentage of recycled waste is calculated as a ratio between recycled waste (RW) and the overall quantity of waste generated (WG), namely: %RW = (RW)/(WG) x 100.
	Generation of special waste	The quantity is determined according to the amount of all the waste declared in the MUD declaration by special waste generators obliged to issue the declaration (art. 189 of Legislative Decree 152/06); the waste generated by management plants are kept separate from those quantities in order to avoid any duplication and any waste that does not have to be declared with a MUD.
	Number of inventory devices containing PCB	Measures the number of inventory devices containing PCB throughout the region. The figures are collected and elaborated by the regional section of the regional environmental protection agency's waste registration department for FVG which keeps all declarations of holders pursuant to art. 3 of Legislative Decree 209/99.

		Urban waste recovery and disposal	Represents the quantity of urban waste processed in plants in the region (bio-stabilization, composting and incineration) and active landfill sites.
		Special waste recovery and disposal	Represents the quantity of special waste in the Region net of all stocks and reserves which represent intermediate management.
Noise		**Controlled sources and percentages of the same exceeding limits at least once**	Provides an evaluation of the likelihood of exceeding the limits set out by law, using a phonometric measurement carried out further to the exposure of a specific activity. It also provides an indication of the period (night/day) and the type of limit exceeded [absolute/differential] where the major noise impact is recorded.
Radiation	**Ionising**	**Sources of anthropogenic emissions**	Activities and sites that use and store radioactive materials as potential sources of emitting radioactive waste and environmental radioactive contamination.
	Non-ionising	**Regular high frequency emission sources (radio electric plants)**	Estimate of area of region potentially affected by high frequency electromagnetic fields connected to the presence in the area of radio-television and mobile phone plants.
		Number of sites exceeding the limits under law for electromagnetic fields generated by radio-telecommunication plants, remedial action	The indicator shows the area within the region which has exceeded the limits provided for by law and where as a result there are reduction procedures underway to render the plants compliant.
		Length of power lines trace	Calculation of the main sources of pressure on the environment regarding low frequency electromagnetic fields generated by the transmission, distribution and/or use of electricity.
Air	**Quality**	**Nitrogen dioxide**	Mainly emitted by vehicle traffic; other sources are civil and industrial heating systems, energy plants and a wide range of industrial processes.
		Sulphur dioxide	The main sources of sulphur dioxide (SO_2) are heating systems, certain industrial processes and to a lesser extent, vehicle traffic, in particular diesel engines.
		Carbon monoxide	The main source is vehicle traffic and a minor contributor is diesel engines.
		Tropospheric ozone	Secondary pollution formed through photochemical processes in the presence of main pollutants such as mono-nitrogen oxides (NOX) and volatile organic compounds (VOC).
		Benzene	The main source is petrol-fuelled cars (exhaust gases and fumes from cars and motorbikes), fuel storage and distribution plants, combustion processes that use petrol derivatives and the use of solvents containing benzene.
		Particulate matter (PM10)	Vehicle traffic forms a relevant part of anthropogenic sources.
		Polycyclic aromatic hydrocarbons	Incomplete combustion products from industrial plants, heating and car emissions.
		Air quality monitoring stations	The distribution and the type of monitoring stations and analyzers for the main pollutants within the region.
		Bio-monitoring	Records air quality using live organisms (epiphytic lichen).
	Emissions	**Particulate matter emissions(PM10)**	To be defined
		Carbon monoxide emissions (CO)	To be defined
		Benzene emissions (C_6H_6)	To be defined
		Emissions of tropospheric ozone precursors (NOx and NMVOC)	To be defined
		Emissions of acidifying substances (SO_x, NO_x, NH_3)	To be defined

		Emissions of persistent organic pollutants (PAH, dioxins and furans)	To be defined
		Greenhouse emissions (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6)	To be defined
		Heavy metal emissions (Cd, Hg, Pb, As, Cr, Cu, Ni, Se, Zn, Mn)	To be defined
Waters	**Surface**	**Biological quality**	To be defined
		Chemical quality	To be defined
		Ecological quality	To be defined
		Dangerous substances	To be defined
	Underground	**Quantity**	To be defined
		Chemical quality	To be defined
	For specific use	**Suitable for bathing (coast and internal)**	To be defined
		Suitable for shellfish	Identifies the designated areas that in a 12 month period and with a minimum frequency sampling, are compliant with the values established as guidelines and mandatory values under law, for a group selected according to chemical and physical parameters.
		Suitable for fish	Identifies the routes and the areas that in a 12 month period and with a minimum frequency sampling from the same sample point, are compliant with mandatory limits for a group selected according to chemical and physical parameters.
	Pollution	**Plant protection products in waters**	Identifies the main plant protection products used in the region that could potentially contaminate water resources, on the basis of areas of effective use, envisaged territorial loads and the hazard to the environment by the substances.
		Nitrates in water	Evaluates the concentration of nitrates (average figures) deriving mainly from the continued use of nitrogen compounds and the use of spreading slurry on land for agricultural use.
	Management	**Number and type of sewage treatment plants**	Provides information regarding the regional capacity of sewage treatment plants.
		Coverage from sewage system	Provides information regarding the coverage of the sewage system within the area and thus the capacity to meet the collective demands of said area.
Land	**Quality**	**Capacity to mitigate land**	Evaluates the capacity of land to act as a barrier and filter with respect to potential pollutants and to protect underground and surface waters.
		Waterproofing	Describe the extension and the variation over time of the area of the region covered by artificial materials, namely urban areas and communication networks which constitute the main forms of irreversible loss of land.
		Hydro-geological requirements	Identifies for each Municipality, the areas subject to hydro-geological requirements pursuant to Regional Decree 3267/1923, implemented with Regional Law 9/2007.
	Pollution	**Polluted sites: number of proceedings**	Provides trend statistics on episodes of land and water pollution in Friuli Venezia Giulia.
Landscape		**Use of land**	Describes the type, the extent and the evolution over time of the use and the coverage of land within the region.
		Archaeological areas pursuant to national decree	Identifies for each Municipality the presence of areas qualified as archaeological areas under Decree.
		Archaeological areas whose landscape is of interest	Identifies for each Municipality the presence of areas qualified as of archaeological interest with respect to landscape under regional legislation.
		Areas subject to landscape requirements under Leg. Dec. 42/2004	Identifies areas that are subject to landscape requirements pursuant to article 136 of Legislative Decree 42/2004 (formerly Requirement 1089/1939).

Biodiversity Nature conservation	**Wealth of animal and vegetable species**	Indicates the status of animal and vegetable biodiversity within the territory.
	Main types of habitat present in protected areas	Distribution of main types of habitat classified in agreement with the Corine Biotopes project within protected areas, identified by the 5th List of Official Protected Areas (EUPA) by the Ministry for Environment and the Protection of Territories (regional parks, national and regional reserves) and areas protected under Regional Law 42/1996 (areas of possible environmental interest, natural biotopes and retrieval areas).
	Main types of habitat present in important EU sites approved and nominated (SCI)	Distribution of main types of habitats classified in accordance with the Corine Biotopes within Sites of Community Importance.
	Nature Map (ecological class)	The area in each Municipality is characterized using Nature Map indicators according to the relevant ecological sensitivity to anthropogenic pressure, environmental fragility and ecological value.
	Protected marine areas	Considers the surface and also the number of protected marine areas under national legislation.
	Protected areas	Considers the number and the surface of protected areas under national and regional legislation.
	SPZ	Considers the number and the surface of Special Protected Zones under national and regional legislation.
	SCI areas	Considers the number and the surface areas that are classified as Sites of Community Importance under national and regional legislation.
	Humid areas	Considers the number and the surface areas that are classified as Humid Areas under national and regional legislation.
	Town planning fragmentation for protected areas	Town planning is considered to be a potential source of interference in relation to changes to the main environmental components (air, water, land, flora and fauna) and to the special continuity of natural formations.
	Natural Monuments	Lists and describes single forests or specific woods or connected geological formations either natural or anthropogenic which due to age, form, dimension or location or historical, literal or toponymy reasons, or landscape, cultural or spiritual reasons are of preeminent interest and require to be specially conserved.
	Permanent meadows	The number and surface area of meadows established as defined by article 2(1) of Regional law 9 of 29 April 2005.
	Vegetated buffer strips	Vegetated buffer strips placed along waterways.
	Hedges	Strips of hedgerows (an element of the ecological network).

6.3 ENVIRONMENTAL EVOLUTION TRENDS IN THE ABSENCE OF THE PLAN

Further to identifying the fundamental environmental topics which the Plan could have an impact on, a quality evaluation is then conducted on the probable evolution of such topics in the event the measures contemplated in the Plan are not implemented.

To describe in summary the results of said evaluation, a scale of quality levels has been created in relation to the current status and a scale of evolutionary trends to be applied to each environmental topic according, for example, to the symbol set out in the legend below:

Current quality level		**Trend**	
Symbol	**Status**	**Symbol**	**Trend**
∪	Good	↑	Improving

¬	Mediocre	↔	Stable
∩	Bad	↓	Worsening
n.a.	non assessable	**n.a.**	non assessable

The framework of knowledge relating to the environmental and territorial context is developed by characterizing the local territorial Systems. The purpose of carrying out this research is two-fold: on the one hand it identifies the status of the reference environmental and territorial context and to identify any evolutionary trends without implementing the Plan and also makes it possible to identify an initial selection of indicators to be used for the monitoring Plan. Indeed, it is deemed that said structure double-checks at this stage the availability of a series of information that can be updated in the subsequent stages of implementing the Plan and can be implemented in the monitoring Plan and qualify the status of the specific characteristics of the Local Tourism System (LTS) by flagging the distinctive and vocational elements of each vast territory.

The form offered for completion contains the following sections, each of which is aimed at expressing specific parts of the LTS:

- Physical-demographical characteristics;
- Municipalities comprising the local territorial System;
- The contextualization of the environmental topics and the anthropogenic activities using specific indicators that represent the overall system conditions in the broader areas starting from the status conditions for the municipalities that are part of the LTS;
- A preliminary identification of the distinctive and vocational elements of the LTS by identifying the topics that strongly characterize the LTS and any aspects that describe critical situations;
- Summary comments.

Below a possible structure is set out for summarising the information characterizing the local territorial System with an indication of a preliminary selection of topics that could significantly qualify each broader area. It is deemed that throughout the drafting of the plan and the environmental Report – in light of further examination carried out as part of drafting the TGP and the availability of specific data bases – the indicators characterising the environmental topics and the anthropogenic activities may be changed and/or integrated with indicators that are then deemed to be more accurately qualifying.

LOCAL TERRITORIAL SYSTEM "XXXX"		
STRUCTURAL CHARACTERISTICS OF BROADER AREA		
	VALUE	Notes
Surface		
Resident population	inhabitants	
Density of population	inhabitants/sq. km	
MUNICIPALITIES COMPRISING LOCAL TERRITORIAL SYSTEM		
XXXX		
CHARACTERISTICS OF ENVIRONMENTAL TOPICS AND ANTHROPOGENIC ACTIVITIES IN THE LOCAL TERRITORIAL SYSTEM		
Map excerpt of LTS showing the characteristics of the territory		Legend
ENVIRONMENTAL INDICATORS		
AIR QUALITY		
	VALUE	Trend/Notes
…		
…		
SURFACE WATERS		
	VALUE	Trend/Notes
…		
…		
UNDERGROUND WATERS		
	VALUE	Trend/Notes
…		
…		
LAND AND UNDERGROUND		
	VALUE	Trend/Notes
…		
…		
BIODIVERSITY, NATURE CONSERVATION		
	VALUE	Trend/Notes
…		
…		
LANDSCAPE		
	VALUE	Trend/Notes

…		
…		
INDICATORS OF ANTHROPOGENIC ACTIVITIES		
AGRICULTURE		
	VALUE	Trend/Notes
…		
…		
FISHING		
	VALUE	Trend/Notes
…		
…		
MINING		
	VALUE	Trend/Notes
…		
…		
INDUSTRY		
	VALUE	Trend/Notes
…		
…		
ENERGY		
	VALUE	Trend/Notes
…		
…		
TRANSPORT		
	VALUE	Trend/Notes
…		
…		
TOURISM		
	VALUE	Trend/Notes
…		
…		
WASTE		
	VALUE	Trend/Notes

…		
…		
NOISE AND RADIATION		
	VALUE	Trend/Notes
…		
…		

DISTINCTIVE AND VOCATIONAL ELEMENTS OF LTS		
ENVIRONMENTAL TOPICS		
	STRENGTHS/OPPORTUNITIES	**WEAKNESS/CRITICAL AREAS**
Air		
Water		
Land		
Biodiversity		
Landscape		
ANTHROPOGENIC ACTIVITIES		
	STRENGTHS/OPPORTUNITIES	**WEAKNESS/CRITICAL AREAS**
Agriculture		
Fishing		
Mining		
Industry		
Energy		
Transport		
Tourism		
Waste		
Noise and radiation		

SUMMARY COMMENTS				
XXXX				
Environment	Mobility	Production activities	University centres/research	Tourism

In proceeding with drafting the environmental Report, whether or not to use an IT tool will be considered (*e.g.* Dashboard of Sustainability, *etc.*) both for the purpose of summarizing the performance of the environmental indicators and the anthropogenic activities used for the environmental assessment and also to aid the comparison between the alternatives under the Plan. That kind of tool could be effective not just for improving how the final assessment results are communicated but it

could also be used in the implementation stage of the TGP to implement the planning of the broader area and proceed with the environmental assessment stage at that level of planning.

7 PLAN ON GOVERNING TERRITORY AND HABITATS DIRECTIVE

7.1 HABITATS DIRECTIVE AND SEA

The procedure for assessing the impact is aimed at ascertaining whether the Plan, which will be implemented according to specific terms is compatible – and perhaps also under specific conditions – with the conservation objectives for Sites of Community Importance (SCI) or Special Protected Zones (SPZ) according to Nature Network 2000, which are affected by the Plan.

The main applicable provisions are EU regulations relating to the conservation of natural habitats (Nature 2000) and wild birds, namely:

- Directive 79/409/EEC "Conservation of wild birds", implemented on 07.04.1981;

- Directive 92/43/EEC "Conservation of natural and semi-natural habitats, and wild flora and fauna", implemented on 10.06.1994.

In terms of national legislation, the following provisions are applicable:

- Presidential Decree 357/97 (O.G. no. 219 of 23.10.1997): "Regulations implementing directive 92/43/EEC relating to the conservation of natural and semi-natural habitats and wild flora and fauna";

- Ministry of Environment Decree, Ministerial Decree 20.01.1999 (O.G. no. 32 of 09.02.1999): amendment to list of species and habitats (attachments A and B – Presidential Decree 357/97);

- Ministry of Environment Decree, Ministerial Decree 03.04.2000 (O.G. no. 95 of 22.04.2000) setting out a list of the SCI and SPZ;

- Presidential Decree 120/03 (O.G. no. 124 of 30.05.2003): "Regulation setting forth amendments and integrations to Presidential Decree 357/97 of 08.09.1997 relating to the implementation of Directive 92/43/EEC relating to the conservation of natural and semi-natural habitats and wild flora and fauna".

In terms of regional provisions, reference can be made to Regional Council decision 2203 of 21 September 2007 (published on the Regional Bulletin no. 41 of 10.10.2007) which sets out provisions concerning how to apply the impact assessment procedure.

As part of the impact assessment, a specific report must be drawn up, and the minimum content as provided for by Attachment G to presidential Decree 357/1997, mainly comprises the characteristics of the Plan (the actions contemplated under the plan) and the identification/analysis of areas that will be influenced by the Plan – so namely the interference with the environmental system.

It must be noted that pursuant to article 10(3) of Legislative Decree 152 of 3 April 2006, the SEA must encompass the impact assessment procedure as provided for by article 5 of Decree 357 of 1997.

For that reason, the environmental plan must contain the elements already indicated in the aforementioned attachment G to Decree 357 of 1997. In addition, the valuation by the competent authority must also include the conservation purposes of its own impact assessment, or rather should acknowledge the outcome of the impact assessment.

7.2 METHODOLOGICAL APPROACH

The main objective of the cognitive activities of the impact assessment is to analyse potential impacts on the different aspects of the affected environment (natural and semi-natural habitats, wild flora and fauna) in order to determine whether the extent of the impact and the possibility that such an impact is compatible with the SCI and/or SPZ conservation objectives that are affected by the Plan under assessment.

The conditions for subjecting the Plan to the impact assessment (as indicated in the Habitat Directive and the national legislation implementing the same) are that the Plan is not directly connected to and required for the management of the site and that there is the possibility that it has a significant impact on the site.

According to applicable regulations, the requirement to carry out an impact assessment refers:

- not only to Plans that concern all or part of areas that are within the boundaries of SCI and/or SPZ or bordering the same;

- but also Plans that are outside or distant from SCI and/or SPZ, which, although do not contain provisions that apply to areas that are part of the Natura 2000, could nonetheless significantly impact them. For that reason, an assessment must be conducted on the type of habitat, the ecological connection and the functions of the ecosystem.

An impact assessment is not deemed necessary when:

- the Plan is directly connected to and necessary for the management/conservation of the site (for example the management plans provided for regional law 7/2008 and some of the plans provided for by regional law 42/96 for Parks, Reserves, *etc.*);

- the Plan does not impact or interfere with the Natura 2000.

In order to ascertain whether there is any interference between the Plan and the SCI and/or SPZ consideration is given to the physical overlapping, and also the function or ecological functions without physical overlapping. Interference occurs when there is an overlapping between the scope of impact of the Plan and the ecological functional area of a SCI and/or a SPZ.

The scope of impact of the Plan on the territory is the areas affected by the Plan in terms of emissions (air, water, noise, *etc.*), generated or influenced traffic, anthropic interference. The effect of the area of impact must be evident directly and thus determine particular phenomena of pollution or perceptible and measurable interference. The scope of impact does not include any area which is affected by the Plan in theory only or which is affected remotely resulting in the loss of the perception in terms of relevance.

The ecological functional area of the SCI and/or SPZ is the area where there are physical and ecological processes which guarantee the conservation of the SCI and/or the SPZ. In this case as well, it is necessary to limit the application to the structural parameters of the SCI and/or the SPZ, such as the physical components and the main ecological relationships with the surrounding land for example waterways.

In this regard, it should be noted that article 6 of the Habitat Directive provides that there be a direct link between the Plan and a specific site and not a link between the Plans the network of Natura 2000 sites.

In the event there exist probably effects or interference between the Plan and sites of community importance, it must be ascertained whether they can significantly impact the ecological elements that

lead to the site's inclusion in Natura 2000 and an ecological impact assessment must be conducted in accordance with the terms set forth in applicable provisions.

In accordance with the content of the technical documents drawn up by the EU relating to the assessments required by article 6 of Directive 92/43/EEC, which must be created according to level, the methodological procedure entails two levels:

- Level I: a preliminary screening stage which checks if there could be a significant impact on the Natura 2000;

- Level II: "adequate assessment": which is the actual and proper impact assessment.

If upon completing Level I the conclusion is reached that the Plan is connected to the management and the conservation of the site and that there is no possibility of significant impact on the site of the Natura 2000, then it is not necessary to go ahead with the second stage of the actual detailed assessment.

As mentioned, the Habitat Directive is implicitly based on the application of the principal of precaution given that it requires that the conservation objectives of Natura 2000 always prevail in the event of any doubt. In that regard, the "Communication by the Commission on the principal of precaution" (European Commission, 2000a, COM (2000) 1 final) establishes that the application of such principal of precaution works on the assumption that:

- There is the identification of potentially negative effects resulting from a phenomenon, a product or a procedure;

- There is a scientific assessment of risks that cannot be determined with sufficient certainty because of their imprecise or non-definitive nature, or there is not sufficient data (European Commission, 2000a, p. 14).

The assessment must therefore demonstrate objectively and supported by documentation that:

- There are not any significant effects on the Natura 2000 (Level I: screening);

or

- That there are not any effects that could prejudice the integrity of any nature Map 2000 site (Level II: impact assessment);

or

there are no alternative solutions to the Plan which could prejudice the integrity of any Natura 2000 site (Level II: impact assessment: analysis of alternative solutions);

or

there exist measures to mitigate the negative effects which could maintain or increase the global coherence of the Natura 2000 (Level II: impact assessment: analysis and check of mitigating measures).

The environmental Report will report the elements necessary for the impact assessment, according to the type and the cogency level of the actions proposed under the TGP: those research aspects shall be defined in collaboration with the technicians from the central Centre on environment, energy and mountain policies and the central Centre on rural resources, agro-food and forests, both of which are involved in the scope of the TGP-SEA assessment.

7.3 CONSIDERATION ON THE "BALANCE OF ENVIRONMENTAL SUSTAINABILITY"

The TGP – by way of the SEA which also includes the assessment on the impact on the Natura 2000 sites – is centred around the principle of sustainability, as provided for by article3-*quater* of Legislative Decree 152/2006, which can guide the plan through a conservational approach in terms of socio-economic stability, or make it necessary to apply a mitigation approach in this kind of situation where on the one hand it is imperative to respond to the economic and financial crisis and on the other, the socio-economic system must be adjusted and adapted to the sustainability standards provided for at a European level.

It is therefore necessary to introduce a mechanism of "sustainability balance" which, although contains special elements (such as environmental mitigation or adjustment) and time elements (environmental debt), sets out the rules and the mechanisms whereby every transformation needs the territorial balancing to be provided firstly in environmental terms and then subsequently also on socio-economical terms.

In order to define the object of the territorial balancing it is possible to use the concept of "ecological services" or more generally environmental, which are services that are provided by some sections of the territory to others. The concept of ecological services is acknowledged in the "Siracusa agreement" which was signed during the G8 on Environment for 2009 and became an essential part of national Strategy on biodiversity (Regional Conference, October 2010) and the EU New Strategy on Biodiversity (Objective 2, May 2011).

Ecological services are usually concentrated in highly complex environmental areas and therefore areas with high biodiversity which in that light are acknowledged as areas strongly active and containing many functions connected to maintaining and continuing reconstructing biological balance in order to directly guarantee agricultural production and fishing, and indirectly other social and economic sectors, from hydro-geological balance, to industrial production and tourism.

If the functioning of said services is in any way reduced, it is necessary to maximize them in other areas of the territory using recorded mitigation measures.

In economic terms, that means allowing negative externalities to re-enter which are typical of changes made to natural resources, and which are also in line with social aspects, as part of an economic framework for territorial transformations. In terms of planning, this means extending the scope of the "territorial projects" to planning new balances that the territory has to assume after it has undergone a significant change.

In terms of provisions, it means achieving the integration level for the Plan/SEA that represents the prevailing technical approach at EU level. The mechanism is not just a methodological proposal by sector experts but more a collective request that expresses an "acknowledgement of non-economic values for the area".

If we want to see similar experiences we can look to the accounting mechanism for carbon quotas in order to eliminate emissions by using mitigating actions.

The systematization of a mitigation approach translates ultimately into an "agreement between territories" which focuses on the local specialization and specific aspects as part of an overall strengthening structure of socio-economic cohesion at regional level and ultimately in strengthening the collective identity of Friuli Venezia Giulia.

7.4 THE 2011-2020 CHALLENGE FOR BIODIVERSITY

In relation to research on the impact of the TGP on Natura 2000 sites, it is deemed useful to make certain considerations in relation to the policies on protecting biodiversity.

During 2010, at an international and European level, there was a review of the tools aimed at stopping the loss of biodiversity and the ecosystem services deriving from the same.
The United Nations General Meeting as a result assumed a new Vision for Biodiversity for implementation by 2050 instead of the previous plan provided for under the convention of Biological diversity (Rio de Janeiro Conference, 1992): that vision was reviewed as part of the "Strategic Plan for 2011-2020" (October 2010) based on strategic objectives and 20 operational objectives.

As part of this international sphere, Italy assumed a fundamentally important tool for guaranteeing a proper integration between the Country's development objectives and the protection of its biodiversity. The tool is the National Strategy on Biodiversity which was approved further to the consultation of the Ministry for Environment and the autonomous Regions and Provinces of Trento and Bolzano, with the express agreement of the Permanent Conference for relationships between the State, and Autonomous Regions and Provinces of 7 October 2010.

At European level, through the Communication "Our life insurance, our natural resources: a European strategy for biodiversity towards 2020" (May 2011), the European Commission launched a new Strategy for protecting and improving biodiversity in Europe in the following ten years. The European strategy, with the vision on biodiversity for 2015 and clear objective for 2020, entails achieving six objectives centred around the main factors responsible for the loss of biodiversity in order to reduce the pressure that said factors have on nature and the ecosystem services within the European Union and globally as well.

The Vision for 2050 of the "European Strategy for Biodiversity towards 2020" see the EU involved in protecting, assessing and duly restoring the natural assets of the EU for the intrinsic value of biodiversity and for the fundamental contribution to human wellbeing and economic prosperity, in order to avoid any catastrophic changes resulting from losses in biodiversity..

The key Objective in the European strategy for the year 2020 entails "*Ending losses in Biodiversity and the degrading of ecosystem services within the EU by 2020 and restoring the same to the extent possible, whilst at the same time intensifying the contribution by the EU to avoiding the loss of Biodiversity at a worldwide level*". That objective is pursued through the following six main Objectives:

1. Favouring the implementation of environmental measures;
2. Restoring ecosystems (for example using green infrastructures);
3. Incentivising sustainable Agriculture and Forestry;
4. Incentivising sustainable fishing;
5. Combating invasive alien Species;
6. Contributing to halting losses in Biodiversity globally.

7.5 NATIONAL STRATEGY FOR BIODIVERSITY

This paragraph sets out the specific objectives of the National Strategy on Biodiversity with the strategic provisions of the TGP, in order to provide an initial assessment that will be subsequently furthered when conducting the environmental Report.

The Strategy was drawn up in 2010 with the participation and discussion with various institutional, social and economic figures and also using specific territorial Workshops: that process culminated in the National Conference on Biodiversity (Rome, 20 – 22 May 2010).

The Strategy is presented as a tool for integration with the needs of biodiversity within national sector policies, acknowledging the need to maintain and strengthen the conservation and the sustainable use for its intrinsic value and as an essential element of human wellbeing.

In order to achieve the vision, the national Strategy has been drafted based on the following three topics:

1. Biodiversity and ecosystem services;
2. Biodiversity and climate change;
3. Biodiversity and economic policies.

In strict relation to the above three topics, the identification of the strategic objectives, which complement one another, derives from a careful technical and scientific evaluation that sees the safeguarding and restoration of ecosystem services and their essential contribution to human wellbeing, a man aspect in the implementation of biodiversity conservation. The achievement of the strategic objectives covers 15 different areas of work.

7.5.1 Strategy Topics and reference strategic Objectives

In relation to the three topics of the Strategy, three strategic topics have been identified, which complement one another: the strategic objectives are aimed at guaranteeing the continuation of the ecosystem services required for life, to deal with the environmental and economic changes currently underway and to maximize the synergy between sector policies and environmental protection.

Biodiversity and ecosystem services

Biodiversity has to be conserved for its intrinsic value, also because it is a source for mankind of assets and resources and so-called ecosystem services, which are indispensable for survival and fundamental to the construction of the nations' economies.

Benefitting from such services either directly or indirectly are all the living communities on the Planet: human society has developed thanks to biodiversity which has condition and will keep conditioning human wellbeing. According to the definition given by the Millennium Ecosystem Assessment of 2005, ecosystem services are "the multiple benefits provided by the ecosystem to mankind" and can be divided into four main categories: supporting life (e.g. the formation of the earth), resources (e.g. food, water resources, medicines), regulating factors (e.g. climate) and culture (e.g. cultural and religious services, aesthetics and recreation, education).

Although a strong connection has already been ascertained between human wellbeing and maintaining ecosystem services, in many cases it is difficult to fully comprehend the relationship, except in cases involving the direct use of the resource, such as with food or potable water.

It is therefore fundamentally important to have a full comprehension of the functions of the ecosystem services and the processes that govern the provision of the services supporting life, and then to calculate the same and their conservation and valorisation, in order to guarantee their functioning in the mid-long term and to ensure wellbeing and economic prosperity for current and future generations.

Strategic Objective 1

By 2020 guarantee the conservation of biodiversity, understood to be the variety of living organisms, their genetic variability and the ecological systems they are part of, and ensure the safeguarding and restoration of ecosystem services in order to guarantee their key role for life on Earth and human wellbeing.

Biodiversity and climate change

Current production and consumption models at global level depend largely on biodiversity and the resulting ecosystem services.

The non-sustainability of the current socio-economic growth rates, driven mainly by economic criteria of privatization, does not ensure, through choices made under various sector policies, an adequate conservation of biodiversity and the deriving ecosystem services.

The loss of biodiversity could give rise to significant costs for society due to the loss of the ecosystem services: the consequences of the loss of biodiversity and the effects on the structure and the functions of many ecosystems must be addressed on a social and economic level, by an adequate economic theory and as part of the actual economy and markets.

The failure to acknowledge the economic value of biodiversity contributes to its very decline.

The assessment on the value of conserving biodiversity requires the integration between ecology and economy as part of a cross disciplinary framework. Ecology should provide information the necessary information regarding the generation of ecosystem services, which should be evaluated based on the comprehension of the biological and physical processes deriving from the same, whereas the economy should provide us with the tools for evaluating its values.

Once the values connected to the ecosystem services have been evaluated, it will then be necessary to identify innovative economic tools for managing and financing the conservation activities and the sustainable use of biodiversity.

Understanding the importance of economic policies in safeguarding biodiversity increases as the economic importance of the natural resources becomes clearer and clearer.

An economic tool could be considered suitable if it meets three requirements: it must be environmentally consistent, socially acceptable and financially feasible.

The international Community is working on identifying economic tools that can be effectively useful in this regard, namely that meet the need to be environmentally consistent, socially acceptable and financially feasible. Old principles, even if they are already widely accepted, such as

"polluter pays", are looking to be supplemented with new ones such as the so-called Payment for Ecosystem Services (PES), however there are still not the actual scientific-economic basis for adopting truly innovative tools.

There are a number of studies on attributing a monetary value to biodiversity and ecosystems, and consequently the costs deriving from the loss of the same, including a recent study on the economy of ecosystems and biodiversity (TEEB The Economics of Ecosystems and Biodiversity) presented at the COP 10 of CBD (the tenth conference of the Parties held as part of the Convention of Biodiversity).

Strategic Objective 2

By 2020, significantly reduce within the national territory, the impact of climate change on biodiversity, establishing suitable measures for adapting to changes and mitigating their effects and increasing the resilience of natural and semi-natural ecosystems.

Biodiversity and economic policies

In the last ten years, the traditional threats to biodiversity, such as the loss, fragmentation of habitats and their decline, have continued to intensify. Climate changes add to such phenomena, often acting in combination and widening the effects.

Scientists forecast that climate changes will greatly change the Planet's biodiversity. Only a minority of species will benefit from them, those which are most adaptable, and thus not threatened by extinction.

Although threatened by climate change, biodiversity has the notable potential to mitigate the impacts on the human species and the environment.

There are two main approaches to react to the effects of climate change reducing the vulnerability of the human species and ecosystems: mitigation and adaptation. Mitigation, at a global level, entails a net reduction of greenhouse gases and the protection and the promotion of vegetable ecosystems such as carbon tanks, by a correct management of the territory and habitats, and the use of energy sources (bio-energy) instead of fossil fuels which increase the greenhouse gases in the atmosphere. Mitigation at local level entails the management of the territory so habitats are created that can maintain a certain micro-climate.

The adaptation to climate change can occur as part of the natural reaction by ecosystems or can be planned and used by man always with the knowledge of the extreme complexity of ecosystems and thus encountering the difficulty of envisaging the real consequences of whatever actions are taken.

Spontaneous adaptation is often insufficient to combat the effects of climate change on biodiversity: measures favouring mitigation or adaptation to climate change for ecosystems that are natural or managed by man must be taken proactively in order to be more efficient.

Obviously, the mitigation and adaptation measures giving rise to negative effects on biodiversity must be avoided, whereas measures that have a positive effect on biodiversity, increasing resilience and the capacity to adapt of species, habitat and ecosystems, are a real opportunity to combat climate change and should be researched and promoted.

In relation to the three topics of the Strategy, the three strategic objectives which are complementary, have been identified further to a careful technical and scientific evaluation which sees the safeguarding and restoration of ecosystem services and their essential relationship with humankind, as a main aspect of implementing biodiversity conservation.

The strategic objectives are aimed at guaranteeing the continuation of the ecosystem services that are necessary for life, and for combating the environmental and economic changes currently underway, and for maximizing the synergy between sector policies and environmental protection.

Strategic Objective 3

By 2020, integrate the conservation of biodiversity with economic and sector policies, including as an opportunity for employment and social development, improving the understanding of the benefits of the deriving ecosystem services and the understanding of the cost of their loss.

7.5.2 Areas of work

The three strategic objectives will be pursued as part of fifteen areas of work. The analysis conducted in each area of work is aimed at maximizing the contribution that can be derived from each sector policy in achieving the strategic objective and more in general, the vision of the Strategy by increasing the

awareness of the importance of biodiversity for ecosystem services, and of mitigating and adapting to climate changes, and for the economy.
For each area of work, the main "threats" on biodiversity are demonstrated and then "specific objectives" are detailed along with the "priority actions", which are concrete and linked to the application of existing tools (regulatory, financial and voluntary) and secondary to be developed from scratch. The final part, which is dedicated to each area of work, the main action tools are set out, which comprise plans, rules and regulations that already exist internationally, in Europe and nation-wide. All the areas of work, except the area "Research and innovation" entail as the main sources of implementation of the strategy the regional and local Administrations.

The table below sets out the relevant specific objectives for each area of work.

AREA OF WORK	SPECIFIC OBJECTIVES
1. Species, habitats, landscape	1.1 Increase awareness and fill any gaps in knowledge on the consistency, the characteristics and the status of the conservation of habitats and species and ecosystem services they offer, and on the factors directly and indirectly threatening them.
	1.2 Increase awareness of the value of the ecosystems and the services they offer, identifying potential beneficiaries and main players who have an effective role in the management of said systems.
	1.3 Favour a sustainable use of the natural resources and introduce the application of the ecosystem approach and a prudent approach to their management
	1.4 Integrate national regulations on the topic of biodiversity within wide-dimension and local planning tools to guarantee that the flow of ecosystem services is maintained and the capacity to mitigate and adapt to climate change.
	1.5 Implement policies aimed at guaranteeing the satisfactory conservation of native habitats and species, including by engaging in safeguarding and restoring actions, both onsite and offsite.
	1.6 Implement policies for the careful evaluation of any risks connected to the use of GMOs.
	1.7 Implement policies aimed at resolving problems caused by the IAS.
	1.8 Implement policies for improving sustainability of hunting practices in respect and harmony with national and European rules and regulations.
	1.9 Implement policies aimed at protecting migrating species.
	1.10 Implement policies aimed at mitigating the impact of infrastructure on species and habitats.
	1.11 Implement policies aimed at reducing the impact of toxic and hazardous substances on species and habitats.
	1.12 Implement policies aimed at significantly reducing poaching.
	1.13 Implement policies aimed at removing and/or mitigating the main anthropogenic causes giving rise to climate changes and simultaneously implement a strategy for adaptation aimed at reducing the impact of climate change on species and habitats used, with specific reference to migrating species and mountainous environments.
	1.14 Develop permanent monitoring of migrating species in relation to climate change.
	1.15 Implement policies aimed at reducing and planning the annual percentage of land subject to changes incentivizing restoration plans and transformations in areas that are already built-up.
	1.16 Implement policies aimed at including in landscaping plans provided for by the "Code of cultural assets and landscapes" (Legislative Decree 42 of 22 January 2004 as amended) specific conservation objectives for biodiversity, in relation to the landscaping quality objectives already provided for in specifically identified landscape areas.
	1.17 Implement policies aimed at integrating regulations with biodiversity topics as part of wide-dimension and local planning measures, defining the minimum cognitive content in relation to such topics.
	1.18 Implement policies aimed at developing the integration of the various territorial planning levels to guarantee the maintenance of biodiversity for its intrinsic value, the flow of ecosystem services and the capacity to mitigate and adapt to climate change.
	1.19 Implement policies aimed at setting out mechanisms for landscape planning which are based on the characteristics of vulnerability, criticality and potential of the natural systems present throughout the territory.
	1.20 Develop efficient policies for preventing natural risks that are rapidly triggered (landslides, flooding, *etc.*) and over a longer term (desertification, coastal erosion, *etc.*) and efficient action for mitigating the same, preserving the resilience of the territory and favouring the maintenance and the restoration of natural conditions and the local responsibility for natural disasters.
2. Protected areas	2.1 Promoting an efficient national policy for protected areas, structured as part of the strategies for conserving nature and for economic and territorial growth of the Country, based on identifying long term and ambitious common and differentiated objectives and strategies to be adopted for carrying them out.
	2.2 Set forth the basis for a real systematic approach to protected areas favouring in particular the creation and the development if already existing, of technical structures at national, regional and provincial level that are able to guarantee, through the assistance and the provision of qualified services, the development of systems for protected areas in terms of ecological, social and economic performance.
	2.3 Approve as soon as possible approval procedures for planning, management and socio-economic development tools for national and regional protected areas, which include specific conservation measures for habitats and species of common interest if present, and the monitoring the efficiency of the same for biodiversity conservation.
	2.4 Make protected areas effectively areas of focus for research and monitoring networks throughout the territory for topics relating to biodiversity and preferred sites for collaboration with the research world.
	2.5 Halt delays in creating and setting up protected marine areas.
	2.6 Supporting the system of protected areas with sufficient financing.

AREA OF WORK	SPECIFIC OBJECTIVES
	2.6 Implementing policies aimed at completing and supporting the management of the Natura 2000 in terms of land and waters and to guarantee its valorisation and promotion as an added value to the economic and social development programmes in the territory, through the adequate and coherent use of Structural Funds and financing from the CAP the European Union and a strengthening of the mechanisms and the terms for participating with the view also to making clear what the benefits are and also the issues to be overcome.
	2.7 Strengthening the efficiency and the effectiveness of the impact assessment in terms of central and peripheral levels.
	2.8 Establish monitoring protocols, setting out the roles and the methods for collecting, transferring and validating data, aimed at evaluating the status of conservation, the consistency and the characteristics of the habitats and species of common interest, with specific interest to those of priority and identifying the relevant favourable references and the direct and indirect threatening factors throughout the national territory by using common methodologies that can be compared and shared.
	2.9 Strengthening the integration of the Natura 2000 and the conservation measures focused on habitats and species of common interest, within existing planning tools and at the same time, valorising and strengthening the degree and the cogency of the management Plans and the instructions for management the same contain.
3. Genetic resources	3.1 Pursue the third objective of the Convention on Biological Diversity for a correct and fair division of the benefits that derive from the use of genetic resources.
	3.2 Promote the awareness of national and international genetic resources (nature, distribution, conservation status), forms of sustainable use, an analysis of their contribution to the national economy and the overall traditional know-how linked to their use.
	3.3 Increasing awareness of the opportunities deriving from the use of genetic resources and the connected risks with genetic erosion and pollution through informative, communication and sensitization programmes.
	3.4 Achieving the objectives set out under the European Plant Conservation Strategy (EPCS), the European reference to the Global Strategy for Plant Conservation (GSPC) relating to genetic vegetable resources.
	3.5 Improving the contribution to onsite and offsite conservation to improve the safeguarding and restoration of biodiversity, ecosystem services and the consequent economic benefits, and to favour the adaptation to and the mitigation of the effects of climate changes.
	3.6 Safeguarding certain ancestral species of agricultural crops and zoo-technical variations at risk of extinction or genetic pollution.
	3.7 Prevent genetic pollution of wild or farmed species of land and marine animals and in repopulation activities.
	3.8 Mitigate the genetic impact of non-native species.
4. Agriculture	4.1 Favouring conservation and the sustainable use of agricultural biodiversity and the protection and the diffusion of agricultural and forestry systems of high natural value (HNV).
	4.2 Maintaining and if necessary, restoring ecosystem services within the agricultural sphere that are being damaged as a result in particular of the use of chemical products, land erosion or the loss of biodiversity in land, maintaining connectivity, and air, land and water pollution.
	4.3 Promoting the protection of territory (in particular marginal areas or areas subject to marginalization and abandoned) through integrated policies that favour sustainable agriculture with benefits for biodiversity, for keeping hydro-geological and nutritional balance, avoiding any abandonment and/or marginalization of agricultural areas (applicability of the conditionality whereby the farmers also take on the role of custodian over their land).
	4.4 Promote the protection and the valorisation of local and native species.
	4.5 Implement a record of farmed species, so as to censure and monitor the extent of the population of pure native species.
	4.6 Promote the use of land according to their aptitude/vocation and favour the protection and the valorisation of local and native species, evaluating also the need and the usefulness of amending crops and variety in accordance with climate trends.
	4.7 Favour the maintenance of rural ecosystems and landscapes through management focused on agricultural lane in order to create and/or maintain a form of "green infrastructure".
5. Forests	5.1 Take opportunities for support offered by way of the forestry measures submitted as part of the Rural Development Plan, in particular with reference to measures to safeguard the environment and Natura 2000 measures.
	5.2 Safeguard the integrity of land, surface areas, plant protection structure and status of national forests by implementing sustainable forestry management principles and ensuring continued monitoring of conservation progress of forests which could present a premature issue.
	5.3 Safeguard the diversity and complexity of landscapes and the biology of forestry ecosystems valorising the ecological connectivity of the same, including through reforestation schemes carried out according to modern plans in compliance with genetic diversity as regards the choice of reproductive forest materials; implement measures aimed at the adoption of forestry production systems that are able to prevent physical, chemical and biological decline of forest floors.
	5.4 Contribute to the mitigation of climate changes improving the contribution of forestry environments to the carbon circle creating a synergy between existing action tools.
	5.5 Promote the restoration and the maintenance of ecosystem services for forest formation in particular with respect to hydro-geological defence, water regime and the maintenance of their quantities and quality.
	5.6 Recreate potential forests damages by climate events, plant protection or fire with native species, even if they are not rapid growers.
	5.7 Promote the efficiency and the harmonisation of monitoring and systems for collecting data, at a regional, national and European level, to allow the aggregation and comparison of results.
	5.8 Developing sufficient planning levels integrated with agro-forestry, environmental, catchment and town planning infrastructure sectors.
	5.9 Promoting integrated management of forestry fauna, in the knowledge that wild fauna is an essential element of forestry ecosystems.
	5.10 Incentivize and support rational grazing regimes, which take into account sustainable levels in order to guarantee

AREA OF WORK	SPECIFIC OBJECTIVES
	a balance between biological and socio-economic processes and a level of interaction to safeguard forests.
	5.11 Promote cross-disciplinary research projects evaluating multi-functional aspects of sustainable management of forestry systems, in order to maintain a high level of biodiversity, and to better understand the impact of climate change, and to combat the decline of forestry ecosystems and promote the wellbeing of local communities.
	5.12 Sensitize public opinion and administrations at various levels of the opportunity of valorising non-monetary services offered by forest resources through suitable communications tools.
	5.13 Favouring the cooperation with Countries that have important commercial relationships with Italy with respect to the market of forest products, promoting a sustainable management of forestry areas.
	5.14 Increasing the forestry certification process, with particular regard to the two marks present in Italy, "FSC" and "PEFC".
6. Internal waters	6.1 Protect and conserve water ecosystems within the whole hydrographical basin, combating the decline to and loss of biodiversity and where possible, promote restoration in order to guarantee the vitality and function and also the provision of the ecosystem services deriving from the same, mainly for meeting and restoring the water needs but also for the capacity to mitigate the effects of climate change.
	6.2 Guarantee the integration of the biodiversity conservation needs of the ecosystems for internal waters and the relevant ecosystem services with sector and economic policies, improving the awareness of the benefits deriving from them and the costs resulting from their loss.
	6.3 Guarantee the sustainable use of water systems (water, sediment, biota), through integrated planning that entails harmonising competing uses, associated with the numerous anthropogenic activities linked to internal waters.
	6.4 Improving awareness of the overall status of aquatic systems in order to understand the effects and impacts of human activities and climate changes on the physical systems and associated biological processes.
	6.5 Limit the anthropogenic pressure on internal waters from tourism also by diversifying the seasons and how the area is used.
7. Marine environments	7.1 Protect and conserve the marine-coastal environment, combating the decline and the loss of biodiversity and where possible, maintain and/or restore the best conditions for marine ecosystems, in order to guarantee high levels of vitality and function of the ocean and the provision of marine ecosystem services, including the capacity to mitigate and adapt to climate change.
	7.2 Guarantee the integration of the biodiversity and coastal conservation needs and the relevant ecosystem services in economic and sector policies, increasing awareness of the benefits deriving there from and the cost of their loss.
	7.3 Guarantee the sustainable use of marine-coastal environment resources by taking an ecosystem approach to the management over a long term period, of the anthropogenic activities involving the ocean.
	7.4 Promote the development of tools for evaluating the ecosystem services deriving from marine and coastal environments that could be used to implement sector policies and integrated in programme and planning processes.
	7.5 Furthering knowledge and filling gaps in the comprehension of the consistency, the characteristics and the conservation status of marine habitats and species and the factors directly and indirectly threatening them.
	7.6 Improving by way of scientific research the awareness of the biological and ecological status of the marine and coastal environment, in order to understand, prevent and mitigate the loss of biodiversity caused by the effects of human activities and climate change.
	7.7 promote the creation of a network of protected marine areas in the Mediterranean, ecologically represented and efficiently managed, which can be monitored with standardized methods to evaluate the effects in terms of efficiency of the biodiversity protection and strengthening of ecosystem services.
	7.8 Limit the anthropogenic pressure on the coastal and marine environment from tourism also by diversifying seasons and how areas are used.
	7.9 Developing and implementing integrated policies for protecting and developing the marine-coastal environment in sub-regions, regions and globally, in cooperation with other Countries that are party to the relevant Agreements and Conventions.
	7.10 Promote the diffusion of the understanding and the professional skill required to know, appreciate and evaluate marine biodiversity promoting a sustainable use.
	7.11 Sustaining actions for integrating marine research and maritime research (on transport means and infrastructure and the use of marine resources) in order to integrate the culture of protecting biodiversity with the innovation of ocean products, processes and services.
8. Infrastructure and transport	8.1 Prefer the maximization of the existing networks with respect to carrying out large new works.
	8.2 Carry out a weighted evaluation of the efficiency standard of the infrastructure compared to their functions and the ecosystem values/services of the territory affected by works, limiting the environmental fragmentation.
	8.3 Avoiding further urban sprawl and city growth, adopting for built-up areas and for road systems, quality and limited quantity criteria which take into account the range, the distribution and the use of the natural resources.
	8.4 Limit the use of non-anthropogenic land preferring the restoration and/or expansion where possible, of existing infrastructure.
	8.5 Integrate territory plans with the policies relating to mobility, infrastructure and transport for a synchronic evaluation of the effects of the environmental elements and biodiversity.
	8.6 Safeguard natural areas and habitats.
	8.7 Check the efficiency of the application of: - The SEA in terms of integrating the environmental topics regarding sustainable planning, with specific reference to the management of mobility and transport, thereby allowing the definition on the basis of specific, objective and qualitative indicators (limiting use of land, natural resources, emissions), an approach towards sustainability in the sector levels; - The EIA in order to evaluate the potential effects that the construction of works – either lineal or punctual – could have on the habitats and the animal and/or vegetable species present in the broader area - The VincA with the aim of identifying and evaluating the possible effects that a project could have on habitats and species of community interest and on Nature 2000 sites.
	8.8 Identifying solutions for mitigating the impact of the use and operations of infrastructure.

AREA OF WORK	SPECIFIC OBJECTIVES
	8.9 Identifying environmental compensatory measures in the event of residual impacts that cannot be mitigated.
	8.10 Apply procedures for landscape reporting pursuant to Council of Ministers Presidential Decree 12/12/2005 for identifying the best solutions for integrating infrastructure with landscapes and natural surroundings.
	8.11 Mitigating noise, light, atmospheric pollution by applying suitable mitigation solutions that provide for green areas and the maintenance/creation of ecological strips and natural habitats.
9. Urban areas	9.1 Limiting the use of non-anthropogenic land.
	9.2 Protecting and conserving urban ecosystems, including residual.
	9.3 Guaranteeing the integration of biodiversity conservation needs in urban systems with specific reference to maintaining ecological strips and connectivity.
	9.4 Guaranteeing a sustainable use of urban resources.
	9.5 Improving awareness of the ecological status of urban environments for a better understanding of their potential role in maintaining ecosystem services and quality of life in that environment.
	9.6 Favouring the restoration of disused urban areas integrating permeable land provisions and natural areas.
	9.7 Integration of local town planning with green planning.
	9.8 Application of the SEA for the integration of the environmental issues in the creation of sustainable planning.
	9.9 Inserting in municipal construction regulations, the possibility of applying innovative choices for restoring buildings and new buildings, such as roof gardens and vegetable patches.
	9.10 Restoring natural inner city areas with specific reference to green areas, humid areas and riparian strips, guaranteeing the maintenance of natural habitats including in urban areas.
	9.11 Improving awareness of the ecological status of the urban environment, in order to involve citizens in the understanding of the impacts of human activity and climate changes on biodiversity.
10. Health	10.1 The integration of relevant aspects for public health in plans relating to the protection and conservation of biodiversity through the development of cognitive tools (such as databases, indicators, ad hoc monitoring projects for species at health risk and for human wellbeing) and operational tools (such as guidelines on integrated environmental management for toxic and/or allergenic species and carrier insects).
	10.2 An increased awareness in the population of the importance of biodiversity and ecosystem services for the protection of health by integrating the topics with environmental education policies.
	10.3 The promotion of the conservation of biodiversity for protecting health and wellbeing in actions and projects in local environments, negotiations, intergovernmental and inter-sector situations.
	10.4 An increased awareness of the risks and the impacts on health of the effects of biodiversity linked to climate change and variability.
	10.5 The sustainable protection and the management of important vegetable and animal species for conserving foodstuff production and nutritional safety.
	10.6 Strengthening health and environmental systems for sounding alarms and reacting to risks deriving from alien species.
	10.7 The prevention of diseases with specific carriers and the control against the same through integrated environmental controls.
	10.8 The sustainable protection and management of vegetable and animal species required for therapeutic purposes and for biomedical research.
	10.9 Strengthening at a national level the integration between biodiversity conservation and human health and wellbeing.
11. Energy	11.1 Promote the sustainability of energy crops reiterating the need to focus on short chains which have energy (and carbon) levels that are advantageous, and that are not caused by the loss of biodiversity or land resources.
	11.2 Identify solutions for mitigating the impact of infrastructure construction and operations.
	11.3 Limit non-anthropogenic land use preferring the expansion where possible of existing infrastructures.
	11.4 Safeguard natural areas and habitats.
	11.5 Integrate territorial plans with energy policies, for a synchronized evaluation of the effects of environmental aspects on biodiversity.
	11.6 Apply the Vas for the integration of environmental topics in the drafting of sustainable energy plans.
	11.7 Apply procedures for landscape reporting pursuant to Council of Ministers Presidential Decree 12/12/2005 for identifying the best solutions for integrating infrastructure with landscapes and natural surroundings.
	11.8 Favour the mitigation of noise, light, atmospheric, pedagogical and magnetic pollution by identifying forms of mitigation involving green areas and maintaining/creating ecological strips and natural habitats.
12. Tourism	12.1 Preventing and minimizing the impacts on biodiversity and landscapes of tourism and favour restoration activities.
	12.2 Promote the integration between conservation and sustainable use of biodiversity and tourism development.
	12.3 Ensure base information, including by using specific indicators, which allows an effective evaluation and for informed decisions to be taken at all levels with respect to tourism and biodiversity.
	12.4 Promoting education, training, information and sensitization to sustainable tourism and the critical use of resources.
	12.5 As part of sustainable tourism, promote the national image on world-wide markets, valorising the biodiversity, resources and characteristics of the different territorial environments.
13 Research and innovation	13. 1 *"[. . .] Proceed with the analysis process of the mechanisms for improving the interfacing between science and politics for biodiversity, long term wellbeing of humanity and sustainable development, giving specific consideration to the needs to develop and maintain a technical-scientific capacity in developing countries with connected biodiversity issues (omissis)* – specific objective to pursue by 2020 approved by the Siracusa Agreement on Biodiversity.
	13.2 *Support cooperation between Countries, international organisations, research organisations and NGOx for further monitoring of biodiversity, maximizing the existing monitoring networks* - specific objective to pursue by 2020 approved by the Siracusa Agreement on Biodiversity.
	13.3 *Collect data on biodiversity including therein data relating to suitable indicators for human wellbeing: reliable and*

AREA OF WORK	SPECIFIC OBJECTIVES
	interoperable indicators that can be compared, and develop global systems for exchanging scientific knowledge, best practices, technology and innovation, making reference to the existing organisations, processes and mechanisms – specific objective to pursue by 2020 approved by the Siracusa Agreement on Biodiversity.
	13.4 *Promote thorough research aimed at a capacity building system at all levels and relating to biodiversity and ecosystem services, leaving margins for the different abilities of each country and improving the development and the general use of technologies aimed at monitoring the status and the evolution of biodiversity, as part of a global evaluation of the environment […]"*– specific objective to pursue by 2020 approved by the Siracusa Agreement on Biodiversity.
14. Education, information, communications and participation	14.1 Make clear, accessible and comprehensible all the information relating to the value of biodiversity.
	14.2 Strengthen the role of education, information and communications as factors for sensitizing and improving the perception of environmental issues in general and the objectives of the Strategy in particular.
	14.3 Improving the specific training of teachers and knowledge providers.
	14.4 Favour the comparison, sharing and exchange of good practices between knowledge providers on environmental sustainability and biodiversity conservation.
	14.5 Redirect educational programmes to the changes and developments in thoughts and opinions on the issue of biodiversity incentivizing the adoption of responsible conduct.
	14.6 Improving the level of information, training and sensitization on political decision-makers and administrators on the importance of biodiversity.
	14.7 Have biodiversity inserted in the scholastic curriculum, as an element of sustainability and also as part of existing topics, and also as cross-disciplinary subjects and projects.
	14.8 Promote the use of participation processes as key tools in safeguarding biodiversity.
15. Italy and biodiversity world-wide	15.1 Strengthening the efficiency of international governance for biodiversity and ecosystem services, so the effective implementation is pursued of the CBD and the integration of biodiversity within global processes – versions of European Action Plans.
	15.2 Increase in real terms the financial resources for projects that directly favour biodiversity, including by increasing the general contribution for biodiversity by the members of the European Union through a substantial 4th Consolidation of the Global Environment Facility (GEF)
	15.3 Drastically reduce the impact of works and international exchanges on biodiversity and the ecosystem service world-wide, starting with the identification and the valorisation of the main effects of those activities on third country biodiversity.

Below the results are set out of the assessment on the coherence of the strategic objectives of the TGP and the specific objectives of the national Strategy on Biodiversity; the assessment should be considered as a preliminary starting point as it is taken from a comparison between the strategic objectives of the Plan given the current level of detail and the specific objectives of the Strategy. When drafting the environmental report, the assessment will be much more detailed, and take into account also the accounts of the TGP.

LEGEND	
***	HIGH coherence between strategies and objectives
**	MEDIUM coherence between strategies and objectives
*	LOW coherence between strategies and objectives
-	NO CONSISTENCY between strategies and objectives

TABLE OF COHERENCE WITH SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY										
	SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY	TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
1. Species, habitats, landscapes	1.1 Increase awareness and fill any gaps in knowledge on the consistency, the characteristics and the status of the conservation of habitats and species and ecosystem services they offer, and on the factors directly and indirectly threatening them.	*	*	-	-	*	**	***	**	*
	1.2 Increase awareness of the value of the ecosystems and the services they offer, identifying potential beneficiaries and main players who have an effective role in the management of said systems.	*	*	-	-	*	**	***	**	*
	1.3 Favour a sustainable use of the natural resources and introduce the application of the ecosystem approach and a prudent approach to their management	*	**	-	*	***	**	***	***	*
	1.4 Integrate national regulations on the topic of biodiversity within wide-dimension and local planning tools to guarantee that the flow of ecosystem services is maintained and the capacity to mitigate and adapt to climate change.	-	*	-	-	*	*	***	**	-
	1.5 Implement policies aimed at guaranteeing the satisfactory conservation of native habitats and species, including by engaging in safeguarding and restoring actions, both onsite and offsite.	-	-	-	-	-	*	***	*	-
	1.6 Implement policies for the careful evaluation of any risks connected to the use of GMOs.	*	-	-	-	-	*	**	-	-
	1.7 Implement policies aimed at resolving problems caused by the IAS.	*	-	-	-	-	*	**	-	-
	1.8 Implement policies for improving sustainability of hunting practices in respect and harmony with national and European rules and regulations.	-	-	-	-	-	-	-	-	-
	1.9 Implement policies aimed at protecting migrating species.	-	*	-	-	-	*	**	*	-
	1.10 Implement policies aimed at mitigating the impact of infrastructure on species and habitats.	*	*	-	***	***	*	**	*	*
	1.11 Implement policies aimed at reducing the impact of toxic and hazardous substances on species and habitats.	**	-	-	-	-	*	*	-	-

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	SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY	TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
1. Species, habitat, landscape	1.12 Implement policies aimed at significantly reducing poaching.	-	-	-	-	-	-	-	-	-
	1.13 Implement policies aimed at removing and/or mitigating the main anthropogenic causes giving rise to climate changes and simultaneously implement a strategy for adaptation aimed at reducing the impact of climate change on species and habitats used, with specific reference to migrating species and mountainous environments.	*	*	-	*	***	***	***	*	*
	1.14 Develop permanent monitoring of migrating species in relation to climate change.	-	-	-	-	-	*	**	*	-
	1.15 Implement policies aimed at reducing and planning the annual percentage of land subject to changes incentivizing restoration plans and transformations in areas that are already built-up.	*	*	-	*	*	**	*	***	*
	1.16 Implement policies aimed at including in landscaping plans provided for by the "Code of cultural assets and landscapes" (Legislative Decree 42 of 22 January 2004 as amended) specific conservation objectives for biodiversity, in relation to the landscaping quality objectives already provided for in specifically identified landscape areas.	*	**	-	*	*	**	**	**	*
	1.17 Implement policies aimed at integrating regulations with biodiversity topics as part of wide-dimension and local planning measures, defining the minimum cognitive content in relation to such topics.	-	*	-	*	*	*	**	*	-
	1.18 Implement policies aimed at developing the integration of the various territorial planning levels to guarantee the maintenance of biodiversity for its intrinsic value, the flow of ecosystem services and the capacity to mitigate and adapt to climate change.	*	**	*	*	*	**	***	**	*
	1.19 Implement policies aimed at setting out mechanisms for landscape planning which are based on the characteristics of vulnerability, criticality and potential of the natural systems present throughout the territory.	-	*	-	-	-	**	*	*	-
	1.20 Develop efficient policies for preventing natural risks that are rapidly triggered (landslides, flooding, *etc.*) and over a longer term (desertification, coastal erosion, *etc.*) and efficient action for mitigating the same, preserving the resilience of the territory and favouring the maintenance and the restoration of natural conditions and the local responsibility for natural disasters.	*	*	-	*	*	**	***	**	*

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SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY		TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
2. Protected areas	2.1 Promoting an efficient national policy for protected areas, structured as part of the strategies for conserving nature and for economic and territorial growth of the Country, based on identifying long term and ambitious common and differentiated objectives and strategies to be adopted for carrying them out.	-	-	-	-	-	-	-	-	-
	2.2 Set forth the basis for a real systematic approach to protected areas favouring in particular the creation and the development if already existing, of technical structures at national, regional and provincial level that are able to guarantee, through the assistance and the provision of qualified services, the development of systems for protected areas in terms of ecological, social and economic performance.	-	*	-	-	-	*	*	*	-
	2.3 Approve as soon as possible approval procedures for planning, management and socio-economic development tools for national and regional protected areas, which include specific conservation measures for habitats and species of common interest if present, and the monitoring the efficiency of the same for biodiversity conservation.	-	-	-	-	-	-	-	-	-
	2.4 Make protected areas effectively areas of focus for research and monitoring networks throughout the territory for topics relating to biodiversity and preferred sites for collaboration with the research world.	-	-	-	-	-	-	*	-	-
	2.5 Halt delays in creating and setting up protected marine areas.	-	-	-	-	-	-	-	-	-
	2.6 Supporting the system of protected areas with sufficient financing.	-	-	-	-	-	-	-	-	-
	2.6 Implementing policies aimed at completing and supporting the management of the Natura 2000 in terms of land and waters and to guarantee its valorisation and promotion as an added value to the economic and social development programmes in the territory, through the adequate and coherent use of Structural Funds and financing from the CAP the European Union and a strengthening of the mechanisms and the terms for participating with the view also to making clear what the benefits are and also the issues to be overcome.	-	*	-	-	-	*	*	*	-
	2.7 Strengthening the efficiency and the effectiveness of the impact assessment in terms of central and peripheral levels.	-	-	-	-	-	-	-	-	-

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SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY		TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
2. protected areas	2.8 Establish monitoring protocols, setting out the roles and the methods for collecting, transferring and validating data, aimed at evaluating the status of conservation, the consistency and the characteristics of the habitats and species of common interest, with specific interest to those of priority and identifying the relevant favourable references and the direct and indirect threatening factors throughout the national territory by using common methodologies that can be compared and shared.	-	-	-	-	-	-	-	-	-
	2.9 Strengthening the integration of Natura 2000 and the conservation measures focused on habitats and species of common interest, within existing planning tools and at the same time, valorising and strengthening the degree and the cogency of the management Plans and the instructions for management the same contain.	-	-	-	-	-	-	-	-	-
3. Genetic resources	3.1 Pursue the third objective of the Convention on Biological Diversity for a correct and fair division of the benefits that derive from the use of genetic resources.	-	-	-	-	-	-	-	-	-
	3.2 Promote the awareness of national and international genetic resources (nature, distribution, conservation status), forms of sustainable use, an analysis of their contribution to the national economy and the overall traditional know-how linked to their use.	-	-	-	-	-	-	-	-	-
	3.3 Increasing awareness of the opportunities deriving from the use of genetic resources and the connected risks with genetic erosion and pollution through informative, communication and sensitization programmes.	-	-	-	-	-	-	-	-	-
	3.4 Achieving the objectives set out under the European Plant Conservation Strategy (EPCS), the European reference to the Global Strategy for Plant Conservation (GSPC) relating to genetic vegetable resources.	-	-	-	-	-	**	**	**	-
	3.5 Improving the contribution to onsite and offsite conservation to improve the safeguarding and restoration of biodiversity, ecosystem services and the consequent economic benefits, and to favour the adaptation to and the mitigation of the effects of climate changes.	-	**	-	-	-	***	***	***	-
	3.6 Safeguarding certain ancestral species of agricultural crops and zoo-technical variations at risk of extinction or genetic pollution.	*	*	-	-	-	***	***	**	-
	3.7 Prevent genetic pollution of wild or farmed species of land and marine animals and in repopulation activities.	*	*	-	-	-	***	***	*	-

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SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY		TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
3. Genetic resources	3.8 Mitigate the genetic impact of non-native species.	*	*	-	-	-	***	***	*	-
4. Agriculture	4.1 Favouring conservation and the sustainable use of agricultural biodiversity and the protection and the diffusion of agricultural and forestry systems of high natural value (HNV).	**	**	-	-	-	***	***	**	-
	4.2 Maintaining and if necessary, restoring ecosystem services within the agricultural sphere that are being damaged as a result in particular of the use of chemical products, land erosion or the loss of biodiversity in land, maintaining connectivity, and air, land and water pollution.	**	**	-	-	-	***	***	***	-
	4.3 Promoting the protection of territory (in particular marginal areas or areas subject to marginalization and abandoned) through integrated policies that favour sustainable agriculture with benefits for biodiversity, for keeping hydro-geological and nutritional balance, avoiding any abandonment and/or marginalization of agricultural areas (applicability of the conditionality whereby the farmers also take on the role of custodian over their land).	**	**	-	-	-	***	***	***	-
	4.4 Promote the protection and the valorisation of local and native species.	*	*	-	-	-	***	***	*	-
	4.5 Implement a record of farmed species, so as to censure and monitor the extent of the population of pure native species.	-	-	-	-	-	-	-	-	-
	4.6 Promote the use of land according to their aptitude/vocation and favour the protection and the valorisation of local and native species, evaluating also the need and the usefulness of amending crops and variety in accordance with climate trends.	***	**	-	-	-	***	***	***	-
	4.7 Favour the maintenance of rural ecosystems and landscapes through management focused on agricultural lane in order to create and/or maintain a form of "green infrastructure".	**	**	-	-	-	***	***	***	-
5. Forests	5.1 Take opportunities for support offered by way of the forestry measures submitted as part of the Rural Development Plan, in particular with reference to measures to safeguard the environment and Natura 2000 measures.	**	*	-	-	-	*	***	**	-

TABLE OF COHERENCE WITH SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY										
SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY		TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
5. Forests	5.2 Safeguard the integrity of land, surface areas, plant protection structure and status of national forests by implementing sustainable forestry management principles and ensuring continued monitoring of conservation progress of forests which could present a premature issue.	*	*	-	-	-	*	**	*	-
	5.3 Safeguard the diversity and complexity of landscapes and the biology of forestry ecosystems valorising the ecological connectivity of the same, including through reforestation schemes carried out according to modern plans in compliance with genetic diversity as regards the choice of reproductive forest materials.	-	-	-	-	-	*	*	**	-
	5.4 Implement measures aimed at the adoption of forestry production systems that are able to prevent physical, chemical and biological decline of forest floors.	*	-	-	-	-	*	**	*	-
	5.5 Contribute to the mitigation of climate changes improving the contribution of forestry environments to the carbon circle creating a synergy between existing action tools.	-	-	-	-	-	*	*	**	-
	5.6 Promote the restoration and the maintenance of ecosystem services for forest formation in particular with respect to hydro-geological defence, water regime and the maintenance of their quantities and quality.	-	-	-	-	-	*	*	*	-
	5.7 Recreate potential forests damages by climate events, plant protection or fire with native species, even if they are not rapid growers.	-	-	-	-	-	*	*	***	-
	5.8 Promote the efficiency and the harmonisation of monitoring and systems for collecting data, at a regional, national and European level, to allow the aggregation and comparison of results.	-	-	-	-	-	-	-	-	-
	5.9 Developing sufficient planning levels integrated with agro-forestry, environmental, catchment and town planning infrastructure sectors.	***	***	*	*	*	***	***	***	**
	5.10 Promoting integrated management of forestry fauna, in the knowledge that wild fauna is an essential element of forestry ecosystems.	-	-	-	-	-	*	*	*	-
	5.11 Incentivize and support rational grazing regimes, which take into account sustainable levels in order to guarantee a balance between biological and socio-economic processes and a level of interaction to safeguard forests.	-	-	-	-	-	**	**	***	-

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SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY		TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
5. Forests	5.12 Promote cross-disciplinary research projects evaluating multi-functional aspects of sustainable management of forestry systems, in order to maintain a high level of biodiversity, and to better understand the impact of climate change, and to combat the decline of forestry ecosystems and promote the wellbeing of local communities.	-	-	-	-	-	*	*	*	-
	5.13 Sensitize public opinion and administrations at various levels of the opportunity of valorising non-monetary services offered by forest resources through suitable communications tools.	*	*	-	-	-	*	*	-	-
	5.14 Favouring the cooperation with Countries that have important commercial relationships with Italy with respect to the market of forest products, promoting a sustainable management of forestry areas.	*	-	***	***	-	*	*	-	-
	5.15 Increasing the forestry certification process, with particular regard to the two marks present in Italy, "FSC" and "PEFC".	-	-	-	-	-	-	-	-	-
6. Internal waters	6.1 Protect and conserve water ecosystems within the whole hydrographical basin, combating the decline to and loss of biodiversity and where possible, promote restoration in order to guarantee the vitality and function and also the provision of the ecosystem services deriving from the same, mainly for meeting and restoring the water needs but also for the capacity to mitigate the effects of climate change.	-	-	-	-	-	**	***	-	-
	6.2 Guarantee the integration of the biodiversity conservation needs of the ecosystems for internal waters and the relevant ecosystem services with sector and economic policies, improving the awareness of the benefits deriving from them and the costs resulting from their loss.	***	**	-	-	-	***	***	*	-
	6.3 Guarantee the sustainable use of water systems (water, sediment, biota), through integrated planning that entails harmonising competing uses, associated with the numerous anthropic activities linked to internal waters.	**	-	-	-	-	***	***	-	-
	6.4 Improving awareness of the overall status of aquatic systems in order to understand the effects and impacts of human activities and climate changes on the physical systems and associated biological processes.	-	-	-	-	-	-	-	-	-
	6.5 Limit the anthropogenic pressure on internal waters from tourism also by diversifying the seasons and how the area is used.	-	***	-	-	-	***	***	-	-

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SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY		TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
7. Marine environments	7.1 Protect and conserve the marine-coastal environment, combating the decline and the loss of biodiversity and where possible, maintain and/or restore the best conditions for marine ecosystems, in order to guarantee high levels of vitality and function of the ocean and the provision of marine ecosystem services, including the capacity to mitigate and adapt to climate change.	-	-	-	-	-	***	***	*	-
	7.2 Guarantee the integration of the biodiversity and coastal conservation needs and the relevant ecosystem services in economic and sector policies, increasing awareness of the benefits deriving there from and the cost of their loss.	***	***	-	-	-	***	***	*	-
	7.3 Guarantee the sustainable use of marine-coastal environment resources by taking an ecosystem approach to the management over a long term period, of the anthropogenic activities involving the ocean.	***	***	-	-	-	***	***	*	-
	7.4 Promote the development of tools for evaluating the ecosystem services deriving from marine and coastal environments that could be used to implement sector policies and integrated in programme and planning processes.	-	-	-	-	-	-	-	-	-
	7.5 Furthering knowledge and filling gaps in the comprehension of the consistency, the characteristics and the conservation status of marine habitats and species and the factors directly and indirectly threatening them.	*	*	-	-	*	**	***	**	*
	7.6 Improving by way of scientific research the awareness of the biological and ecological status of the marine and coastal environment, in order to understand, prevent and mitigate the loss of biodiversity caused by the effects of human activities and climate change.	-	-	-	-	-	-	-	-	-
	7.7 promote the creation of a network of protected marine areas in the Mediterranean, ecologically represented and efficiently managed, which can be monitored with standardized methods to evaluate the effects in terms of efficiency of the biodiversity protection and strengthening of ecosystem services.	-	-	-	-	-	-	-	-	-
	7.8 Limit the anthropogenic pressure on the coastal and marine environment from tourism also by diversifying seasons and how areas are used.	-	***	-	-	-	***	***	-	-
	7.9 Developing and implementing integrated policies for protecting and developing the marine-coastal environment in sub-regions, regions and globally, in cooperation with other Countries that are party to the relevant Agreements and Conventions.	-	-	***	-	-	***	***	-	-

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SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY		TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
7. Marine environments	7.10 Promote the diffusion of the understanding and the professional skill required to know, appreciate and evaluate marine biodiversity promoting a sustainable use.	-	-	-	-	-	-	-	-	-
	7.11 Sustaining actions for integrating marine research and maritime research (on transport means and infrastructure and the use of marine resources) in order to integrate the culture of protecting biodiversity with the innovation of ocean products, processes and services.	-	-	-	-	-	-	-	-	-
8. Infrastructure and transport	8.1 Prefer the maximization of the existing networks with respect to carrying out large new works.	-	-	*	*	-	**	**	***	*
	8.2 Carry out a weighted evaluation of the efficiency standard of the infrastructure compared to their functions and the ecosystem values/services of the territory affected by works, limiting the environmental fragmentation.	-	-	*	*	-	**	**	**	-
	8.3 Avoiding further urban sprawl and city growth, adopting for built-up areas and for road systems, quality and limited quantity criteria which take into account the range, the distribution and the use of the natural resources.	-	-	-	-	-	**	**	**	**
	8.4 Limit the use of non-anthropogenic land preferring the restoration and/or expansion where possible, of existing infrastructure.	-	*	-	-	-	**	**	***	*
	8.5 Integrate territory plans with the policies relating to mobility, infrastructure and transport for a synchronic evaluation of the effects of the environmental elements and biodiversity.	-	-	-	-	-	-	-	-	-
	8.6 Safeguard natural areas and habitats.	**	**	-	-	-	***	***	***	-
	8.7 Check the efficiency of the application of: - The SEA in terms of integrating the environmental topics regarding sustainable planning, with specific reference to the management of mobility and transport, thereby allowing the definition on the basis of specific, objective and qualitative indicators (limiting use of land, natural resources, emissions), an approach towards sustainability in the sector levels; - The EIA in order to evaluate the potential effects that the construction of works – either lineal or punctual – could have on the habitats and the animal and/or vegetable species present in the broader area - The VincA with the aim of identifying and evaluating the possible	**	*	-	**	**	*	*	*	*

TABLE OF COHERENCE WITH SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY										
	SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY	TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
	effects that a project could have on habitats and species of community interest and on Nature 2000 sites.									
8. Infrastructure and transport	8.8 Identifying solutions for mitigating the impact of the use and operations of infrastructure.	-	*	-	**	**	*	*	*	-
	8.9 Identifying environmental compensatory measures in the event of residual impacts that cannot be mitigated.	-	*	-	**	**	*	*	*	-
	8.10 Apply procedures for landscape reporting pursuant to Council of Ministers Presidential Decree 12/12/2005 for identifying the best solutions for integrating infrastructure with landscapes and natural surroundings.	*	*	-	**	*	*	*	*	-
	8.11 Mitigating noise, light, atmospheric pollution by applying suitable mitigation solutions that provide for green areas and the maintenance/creation of ecological strips and natural habitats.	*	*	-	*	*	**	**	-	-
9. Urban areas	9.1 Limiting the use of non-anthropogenic land.	-	*	-	-	-	**	**	***	**
	9.2 Protecting and conserving urban ecosystems, including residual.	-	-	-	-	-	**	**	***	*
	9.3 Guaranteeing the integration of biodiversity conservation needs in urban systems with specific reference to maintaining ecological strips and connectivity.	-	-	-	-	-	**	**	***	*
	9.4 Guaranteeing a sustainable use of urban resources.	-	-	-	-	-	**	**	***	*
	9.5 Improving awareness of the ecological status of urban environments for a better understanding of their potential role in maintaining ecosystem services and quality of life in that environment.	-	-	-	-	-	*	*	-	*
	9.6 Favouring the restoration of disused urban areas integrating permeable land provisions and natural areas.	*	*	-	-	-	**	**	***	*
	9.7 Integration of local town planning with green planning.	-	-	-	-	-	-	-	-	-

TABLE OF COHERENCE WITH SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY										
	SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY	TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
	9.8 Application of the SEA for the integration of the environmental issues in the creation of sustainable planning.	-	-	-	-	-	-	-	-	-
9. Urban areas	9.9 Inserting in municipal construction regulations, the possibility of applying innovative choices for restoring buildings and new buildings, such as roof gardens and vegetable patches.	*	*	-	-	-	**	*	**	*
	9.10 Restoring natural inner city areas with specific reference to green areas, humid areas and riparian strips, guaranteeing the maintenance of natural habitats including in urban areas.	*	*	-	-	-	**	*	*	*
	9.11 Improving awareness of the ecological status of the urban environment, in order to involve citizens in the understanding of the impacts of human activity and climate changes on biodiversity.	*	*	-	-	-	**	*	*	*
10. Health	10.1 The integration of relevant aspects for public health in plans relating to the protection and conservation of biodiversity through the development of cognitive tools (such as databases, indicators, ad hoc monitoring projects for species at health risk and for human wellbeing) and operational tools (such as guidelines on integrated environmental management for toxic and/or allergenic species and carrier insects).	-	-	-	-	-	-	-	-	-
	10.2 An increased awareness in the population of the importance of biodiversity and ecosystem services for the protection of health by integrating the topics with environmental education policies.	-	-	-	-	-	-	-	-	-
	10.3 The promotion of the conservation of biodiversity for protecting health and wellbeing in actions and projects in local environments, negotiations, intergovernmental and inter-sector situations.	*	*	*	-	-	*	*	-	*
	10.4 An increased awareness of the risks and the impacts on health of the effects of biodiversity linked to climate change and variability.	*	-	-	-	-	**	**	-	-
	10.5 The sustainable protection and the management of important vegetable and animal species for conserving foodstuff production and nutritional safety.	**	-	-	-	-	**	*	-	-
	10.6 Strengthening health and environmental systems for sounding alarms and reacting to risks deriving from alien species.	*	-	-	-	-	*	*	-	-
	10.7 The prevention of diseases with specific carriers and the control against the same through integrated environmental controls.	-	-	-	-	-	*	-	-	-

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	SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY	TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
	10.8 The sustainable protection and management of vegetable and animal species required for therapeutic purposes and for biomedical research.	*	-	-	-	-	*	*	-	-
10. Health	10.9 Strengthening at a national level the integration between biodiversity conservation and human health and wellbeing.	-	-	-	-	-	-	-	-	-
11. Energy	11.1 Promote the sustainability of energy crops reiterating the need to focus on short chains which have energy (and carbon) levels that are advantageous, and that are not caused by the loss of biodiversity or land resources.	**	-	-	-	***	*	**	**	-
	11.2 Identify solutions for mitigating the impact of infrastructure construction and operations.	-	-	*	**	***	*	*	-	-
	11.3 Limit non-anthropogenic land use preferring the expansion where possible of existing infrastructures.	-	-	-	**	***	*	*	***	-
	11.4 Safeguard natural areas and habitats.	-	-	-	*	***	*	**	*	-
	11.5 Integrate territorial plans with energy policies, for a synchronized evaluation of the effects of environmental aspects on biodiversity.	-	-	-	*	***	*	**	*	-
	11.6 Apply the Vas for the integration of environmental topics in the drafting of sustainable energy plans.	-	-	-	-	-	-	-	-	-
	11.7 Apply procedures for landscape reporting pursuant to Council of Ministers Presidential Decree 12/12/2005 for identifying the best solutions for integrating infrastructure with landscapes and natural surroundings.	-	-	-	**	***	*	-	-	-
	11.8 Favour the mitigation of noise, light, atmospheric, pedagogical and magnetic pollution by identifying forms of mitigation involving green areas and maintaining/creating ecological strips and natural habitats.	*	*	*	**	***	*	*	**	*

TABLE OF COHERENCE WITH SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY										
SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY		TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
12. Tourism	12.1 Preventing and minimizing the impacts on biodiversity and landscapes of tourism and favour restoration activities.	*	***	*	*	*	**	***	***	*
	12.2 Promote the integration between conservation and sustainable use of biodiversity and tourism development.	*	***	*	*	*	**	***	***	*
12. Tourism	12.3 Ensure base information, including by using specific indicators, which allows an effective evaluation and for informed decisions to be taken at all levels with respect to tourism and biodiversity.	*	***	*	*	*	*	*	*	*
	12.4 Promoting education, training, information and sensitization to sustainable tourism and the critical use of resources.	*	***	*	*	*	*	*	**	*
	12.5 As part of sustainable tourism, promote the national image on world-wide markets, valorising the biodiversity, resources and characteristics of the different territorial environments.	*	***	*	*	*	*	*	*	*
13 Research and innovation	13. 1 *"[…] Proceed with the analysis process of the mechanisms for improving the interfacing between science and politics for biodiversity, long term wellbeing of humanity and sustainable development, giving specific consideration to the needs to develop and maintain a technical-scientific capacity in developing countries with connected biodiversity issues (omissis)* – specific objective to pursue by 2020 approved by the Siracusa Agreement on Biodiversity.	-	-	-	-	-	*	-	-	-
	13.2 *Support cooperation between Countries, international organisations, research organisations and NGOx for further monitoring of biodiversity, maximizing the existing monitoring networks* - specific objective to pursue by 2020 approved by the Siracusa Agreement on Biodiversity.	-	-	-	-	-	*	-	-	-
	13.3 *Collect data on biodiversity including therein data relating to suitable indicators for human wellbeing: reliable and interoperable indicators that can be compared, and develop global systems for exchanging scientific knowledge, best practices, technology and innovation, making reference to the existing organisations, processes and mechanisms* – specific objective to pursue by 2020 approved by the Siracusa Agreement on Biodiversity.	-	-	-	-	-	*	-	-	-

TABLE OF COHERENCE WITH SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY										
SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY		**TGP STRATEGIES**								
		1.a	**1.b**	**1.c**	**2.a**	**2.b**	**3.a**	**3.b**	**3.c**	**4.a**
13 Research and innovation	13.4 *Promote thorough research aimed at a capacity building system at all levels and relating to biodiversity and ecosystem services, leaving margins for the different abilities of each country and improving the development and the general use of technologies aimed at monitoring the status and the evolution of biodiversity, as part of a global evaluation of the environment [...]"*– specific objective to pursue by 2020 approved by the Siracusa Agreement on Biodiversity.	-	-	-	-	-	-	-	-	-
14. Education, information, communications and participation	14.1 Make clear, accessible and comprehensible all the information relating to the value of biodiversity.	-	-	-	-	-	*	*	-	-
	14.2 Strengthen the role of education, information and communications as factors for sensitizing and improving the perception of environmental issues in general and the objectives of the Strategy in particular.	-	-	-	-	-	-	-	-	-
	14.3 Improving the specific training of teachers and knowledge providers.	-	-	-	-	-	-	-	-	-
	14.4 Favour the comparison, sharing and exchange of good practices between knowledge providers on environmental sustainability and biodiversity conservation.	-	-	-	-	-	-	-	-	-
	14.5 Redirect educational programmes to the changes and developments in thoughts and opinions on the issue of biodiversity incentivizing the adoption of responsible conduct.	-	-	-	-	-	-	-	-	-
	14.6 Improving the level of information, training and sensitization on political decision-makers and administrators on the importance of biodiversity.	-	-	-	-	-	-	-	-	-
	14.7 Have biodiversity inserted in the scholastic curriculum, as an element of sustainability and also as part of existing topics, and also as cross-disciplinary subjects and projects.	-	-	-	-	-	-	-	-	-
	14.8 Promote the use of participation processes as key tools in safeguarding biodiversity.	-	-	-	-	-	-	-	-	-

TABLE OF COHERENCE WITH SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY										
SPECIFIC OBJECTIVES OF NATIONAL BIODIVERSITY STRATEGY		TGP STRATEGIES								
		1.a	1.b	1.c	2.a	2.b	3.a	3.b	3.c	4.a
15. Italy and biodiversity world-wide	15.1 Strengthening the efficiency of international governance for biodiversity and ecosystem services, so the effective implementation is pursued of the CBD and the integration of biodiversity within global processes – versions of European Action Plans.	-	-	-	-	-	-	-	-	-
	15.2 Increase in real terms the financial resources for projects that directly favour biodiversity, including by increasing the general contribution for biodiversity by the members of the European Union through a substantial 4th Consolidation of the Global Environment Facility (GEF)	-	-	-	-	-	-	-	-	-
	15.3 Drastically reduce the impact of works and international exchanges on biodiversity and the ecosystem service world-wide, starting with the identification and the valorisation of the main effects of those activities on third country biodiversity.	-	-	**	*	-	*	-	-	-

8 METHODOLOGY IN IDENTIFYING AND EVALUATING EFFECTS OF PLAN MEASURES

8.1 METHODOLOGICAL APPROACH

The implementation of the Plan may have negative or positive repercussions on the environment, avoiding or minimizing certain environmental problems or, the opposite, adding to or exacerbating them or even causing new ones. In view of those considerations, the identification and evaluation of the significant impacts that the implementation of the Plan could have, overall, is a first step for proceeding with the assessment of the measures envisaged for preventing, reducing or compensating any such impact, and for establishing possible alternatives.

Legislative Decree 152/2006 indicates that the environmental report has to identify and evaluate significant environmental impacts deriving from implementing the measures set out under the Plan, including secondary, cumulative, synergistic, short, mid and long term ones, and whether permanent or temporary, positive or negative. For that reason it should be noted that the evaluation models of the effects present in literature are varied and each has specific peculiarities that have to be taken into consideration by whoever is conducting the evaluation. The better known techniques for estimating the environmental effects can be summarized as follows:

- *impact lists and matrices;*
- *coaxial graphs and matrices on cause/effect;*
- *overlapping of factors;*
- *estimates not formalised on a case by case basis.*

Evaluation methods with *impact lists and matrices* combine lists of common environmental components (or factors) for consideration with a list of alternative actions. Combining these lists on horizontal and vertical axes shows the cause/effect relationship between the alternatives and the environment. The elements of the matrix can offer evaluations on quality and also on quantity. In the latter case, the estimates on quantity can be associated with weighting diagrams for calculating the environmental performance of each alternative.
The *coaxial graphs and matrices on cause/effect* show the cause/effect chain of the plan's actions, the environmental conditions and the (direct, indirect) impacts on the various receptors.
The *overlapping of factors* (physical, social environment, ecosystems, landscapes, *etc.*) provide a description of the environment being affected and are aimed at highlighting above all the problems (critical issues, risks, vulnerabilities or sensitive aspects), or, on the opposite, the opportunities relating to the implementation of the Plan/Programme. Those methods can be more helpfully applied for localized choices on broader areas, limiting the number of overlapping factors to only environmental ones which are connected.
The *estimates not formalised on a case by case basis* are much simpler; they are based on comparison that are mainly on quantity and intuitive, mainly subjective, of the positive/negative impacts generated by the various alternatives. The methods may be applied only for simple variations, comparing separately the impacts of each environmental component (landscape, water, *etc.*).

The evaluation process for the territory zoning Plan entails a qualitative evaluation of the probable effects that the envisaged measures could have in relation to environmental factors, and also on anthropogenic activities. This process will take into consideration not just the direct effects but also the indirect, permanent, temporary, short, mid and long term ones and also any cross-border effects.

Using an analytical examination of each measure envisaged under the plan, drawn according to the different points of reference, will lead to a final summary for which the use of matrices is planned that will set forth according to the rows the measures proposes by the Plan, and according to the columns the evaluation on the effect that each measure could have in relation to environmental and anthropogenic topics which the Plan will majorly impact upon.

Where possible the evaluation is supported by suitable indicators and ends with some conclusions relating to the identified and evaluated effects, in particular the cumulative and cross-border effects.

For an immediate and effective assessment result, a scale has been created of how "significant" an effect is in relation to each factor, and is indicated as being either positive or negative.

Negative effects	**Significance**	**Positive effects**
---	Very significant effect	+++
--	Significant effect	++
-	Not very significant effect	+
o	No effect	o

Using that scale it may help to read the evaluation by cross-referencing, in the summary matrix, the line setting forth the Plan measure being evaluated with the column indicating the specific environmental or anthropogenic factor.

Below are set out the structures indicating the summary matrices for evaluating the effects, said matrices (which for now just contain the strategic axes) will contain possible actions under the Plan, which will be defined when the Plan is being drawn up.

		Effects on the ENVIRONMENTAL FACTORS						
STRATEGIC POLICIES Regional territories	**STRATEGIC AXES of territorial zoning Plan**	Population and human health	Climate changes	Air	Water	Land	Biodiversity	Landscape
1. Development of competition and territorial cohesion	**1.a** – Promotion, re-launching and development of regional production chains in compliance with and supporting territorial vocations	++	-	-	-	-	o	o
	1.b – Sustained development of regional tourism network by acknowledging the identity of places and territorial environments	+	o	o	o	o	+	+
	1.c – Valorisation of the territory through the integration with bordering territories	+	o	o	o	o	o	o
2. Promotion of integrated development of regional infrastructures	**2.a** – Enhancing connections with surrounding regions and networks at all levels strengthening internal territorial cohesion relationships	+	o	o	o	o	o	o
	2.b – Development of energy corridors and the promotion of alternative energy sources	++	+	+	o	o	+	o
3. Support with development of region and its social, economic and productive welfare according to criteria for sustained planning	**3.a** -. Improvement of quality of life and quality of environment	+++	+	+	+	++	++	++
	3.b – Defence of territory by mitigating risk, increasing ecological efficiency and the protection of habitats	++	+	+	++	++	+++	++
	3.c – Limiting the use of land	++	o	o	o	+++	++	++
4. Valorisation of polycentric regional system	**4.a** – Strengthening main urban junctions through the specialization and hierarchy of main territorial areas.	+	o	o	o	o	o	o

		Effects on ANTHROPOGENIC ACTIVITIES									
		Agriculture	Fishing	Mining	Industry	Energy	Transport	Tourism	Waste	Noise	Radiation
1. Development of competition and territorial cohesion	**1.a** – Promotion, re-launching and development of regional production chains in compliance with and supporting territorial vocations	++	+	o	++	+	+	o	-	-	o
	1.b – Sustained development of regional tourism network by acknowledging the identity of places and territorial environments	o	o	o	o	o	o	+++	o	-	o
	1.c – Valorisation of the territory through the integration with bordering territories	o	o	o	o	o	+	++	o	o	o
2. Promotion of integrated development of regional infrastructures	**2.a** – Enhancing connections with surrounding regions and networks at all levels strengthening internal territorial cohesion relationships	o	o	o	+	o	++	++	o	-	o
	2.b – Development of energy corridors and the promotion of alternative energy sources	+	o	o	++	+++	+	o	o	o	-
3. Support with development of region and its social, economic and productive welfare according to criteria for sustained planning	**3.a** -. Improvement of quality of life and quality of environment	++	+	o	o	o	o	++	o	o	o
	3.b – Defence of territory by mitigating risk, increasing ecological efficiency and the protection of habitats	+	o	o	o	o	o	+	o	o	o
	3.c – Limiting the use of land	+	o	o	o	o	o	o	o	+	o
4. Valorisation of polycentric regional system	**4.a** – Strengthening main urban junctions through the specialization and hierarchy of main territorial areas.	o	o	o	+	o	+	+	o	o	o

Once the stage of characterising the effects of the Plan on environmental factors and anthropogenic activities has been concluded, it is deemed useful to proceed with identifying and characterizing the environmental effects generated by the implementation of the territorial regional strategic policies and the consequent strategic axes under the TGP for each local territorial system (LTS).
Below is set out the structure indicating the matrix for evaluating the environmental effects, which will be completed in the subsequent stage of drafting the environmental Report.

LOCAL TERRITORIAL SYSTEM "XXXX"	
PLAN PROVISION IN RELATION TO LOCAL TERRITORIAL SYSTEM	
Map excerpt of TGP indicating the strategy of the Plan or the actions that relate to this specific territorial environment	Legend

		Effects on ENVIRONMENTAL FACTORS						
STRATEGIC POLICIES Regional territories	**STRATEGIC AXES of territorial zoning Plan**	Population and human health	Climate changes	Air	Water	Land	Biodiversity	Landscape
1. Development of competition and territorial cohesion	**1.a** – Promotion, re-launching and development of regional production chains in compliance with and supporting territorial vocations							
	1.b – Sustained development of regional tourism network by acknowledging the identity of places and territorial environments							
	1.c – Valorisation of the territory through the integration with bordering territories							
2. Promotion of integrated development of regional infrastructures	**2.a** – Enhancing connections with surrounding regions and networks at all levels strengthening internal territorial cohesion relationships							
	2.b – Development of energy corridors and the promotion of alternative energy sources							
3. Support with development of region and its social, economic and productive welfare according to criteria for sustained planning	**3.a** -. Improvement of quality of life and quality of environment							
	3.b – Defence of territory by mitigating risk, increasing ecological efficiency and the protection of habitats							

	3.c – Limiting the use of land							
4. Valorisation of polycentric regional system	**4.a** – Strengthening main urban junctions through the specialization and hierarchy of main territorial areas.							

		Effects on ANTHROPOGENIC ACTIVITIES									
STRATEGIC POLICIES Regional territories	**STRATEGIC AXES of territorial zoning Plan**	Agriculture	Fishing	Mining	Industry	Energy	Transport	Tourism	Waste	Noise	Radiation
1. Development of competition and territorial cohesion	**1.a** – Promotion, re-launching and development of regional production chains in compliance with and supporting territorial vocations										
	1.b – Sustained development of regional tourism network by acknowledging the identity of places and territorial environments										
	1.c – Valorisation of the territory through the integration with bordering territories										
2. Promotion of integrated development of regional infrastructures	**2.a** – Enhancing connections with surrounding regions and networks at all levels strengthening internal territorial cohesion relationships										
	2.b – Development of energy corridors and the promotion of alternative energy sources										
3. Support with development of region and its social, economic and productive welfare according to criteria for sustained planning	**3.a** -. Improvement of quality of life and quality of environment										
	3.b – Defence of territory by mitigating risk, increasing ecological efficiency and the protection of habitats										
	3.c – Limiting the use of land										

4. Valorisation of polycentric regional system	**4.a** – Strengthening main urban junctions through the specialization and hierarchy of main territorial areas.										

8.2 CONSIDERATIONS ON POSSIBLE CROSS-BORDER EFFECTS

The regional administration, in carrying out its territorial and sector planning activities including the SEA procedure, has proceeded pursuant to article 32 of Legislative Decree 152/2006 with the assessment of the relevance of possible impacts generated by its own planning and programming tools on the environment of bordering countries.

The possible cross-border effects shall be analysed and examined throughout the drafting of the environmental Report. In that context indeed, it will be possible to identify and characterize more reliably and specifically the type of possible impact, in relation to the development of specific objectives and the relevant choices under the plan.

It was deemed useful to preliminary identify in this Report the TGP's strategic policies which could give rise to environmental effects for neighbouring countries. It should be noted that the considerations set forth below may be subject to change throughout the drafting of the environmental Report.
The table below provides a preliminary and indicative view of the Plan's strategic policies which could potentially affect each bordering Country.

STRATEGIC POLICIES REGIONAL TERRITORIES		**STRATEGIC AXES**	**AFFECTED BORDERING COUNTRIES**	
			AUSTRIA	**SLOVENIA**
1	Development of competition and territorial cohesion	**1.a** – Promotion, re-launching and development of regional production chains in compliance with and supporting territorial vocations	**-**	**-**
		1.b – Sustained development of regional tourism network by acknowledging the identity of places and territorial environments	**X**	**X**
		1.c – Valorisation of the territory through the integration with bordering territories	**X**	**X**
2	Promotion of integrated development of regional infrastructures	**2.a** – Enhancing connections with surrounding regions and networks at all levels strengthening internal territorial cohesion relationships	**X**	**X**
		2.b – Development of energy corridors and the promotion of alternative energy sources	**-**	**-**
3	Support with development of region and its social, economic and productive	**3.a** -. Improvement of quality of life and quality of environment	**-**	**-**

	welfare according to criteria for sustained planning	**3.b** – Defence of territory by mitigating risk, increasing ecological efficiency and the protection of habitats	**-**	**-**
		3.c – Limiting the use of land	**-**	**-**
4	Valorisation of polycentric regional system	**4.a** – Strengthening main urban junctions through the specialization and hierarchy of main territorial areas.	**-**	**-**

In this respect some preliminary considerations can be provided regarding the cross-border effects of certain selected policies:

- it is deemed that the strategic policy "*1.b – Sustainable development of regional tourism network through identifying territorial places and environments*" could have positive cross-border effects in the mid to long term. The plan's objectives and actions which will develop this strategic policy could support the promotion of the tourism sector throughout Friuli Venezia Giulia, positively influencing also the economies of neighbouring countries, albeit indirectly (*e.g.* synergies between skiing areas, *etc.*);

- it is deemed that the strategic policy "*1.c – Valorisation of territory through the integration with bordering territories*" could have positive cross-border effects in the short and also mid to long term. The development of the plan's objectives and actions under this strategy could improve existing relationships with bordering countries, and favour the protection, the safeguarding and the sustainable development of areas of particular environmental and nature characteristics in bordering areas (*e.g.* nature parks and reserves, *etc.*);

- it is deemed that the strategic policy "*2.a - Enhancing connections with surrounding regions and networks at all levels strengthening internal territorial cohesion relationships*" could have positive cross-border effects supporting and promoting material and immaterial connections with the surrounding regions including bordering countries (*e.g.* actions relating to regional mobility, *etc.*).

Finally, it should be noted that the evaluation of the strategic policies that could affect neighbouring Countries indicated in this section, is merely indicative and should not be construed as definitive: a more accurate evaluation may be obtained during the drafting of the plan further to a more detailed examination of the actions provided for by the same.

9 CONTENT PROPOSAL FOR ENVIRONMENTAL REPORT

This chapter sets out a base for one of the most important purposes of the scoping stage which is establishing the scope and the level of information to be included in the environmental report, as provided for by article 13(1) of Legislative Decree 152/2006.

Below an initial proposal is set out on the content for the environmental report for the TGP, commenting on their scope and indicating where possible the level of detail.

The structuring of the content follows the indications provided by Legislative Decree 152/2006 and in particular those set out in Attachment VI to the second part of said decree. That attachment sets out the information to be included in the environmental report, to the extent it may be reasonably requested, taking into account the level of know-how and current evaluation methods, the content and the level of detail of the Plan. Indeed, an environmental plan with a very general scope, particularly detailed information or analyses may not be required whereas a more specific examination is envisaged for plans that are aimed at providing indications and guidelines also at an operational-planning level.

The following points provide a brief description of what could be included as base content for each chapter in the environmental report, in accordance with the aforementioned attachment.

A – Illustration of content, main objectives under the plan and the report with other relevant plans or programmes.

> Includes a description of the main content of the plan (legislative frame work, methodological framework, *etc.*), the proposed objectives and actions, including an internal coherence evaluation, and an analysis of the relationship between the plan's objectives and the objectives set forth in other planning documentation for the sector or other sectors, which however affect the area (or surrounding areas).
>
> It is possible that those aspects will be set out in two separate chapters, in two separate areas for evaluating the internal coherence and for evaluating the horizontal external coherence.

B – Aspects relating to the current status of the environment and its probable evolution if the Plan is not implemented.

> Includes a description using a suitable set of indicators, the environmental aspects which would be subject to possible material affects by the plan. It should be noted that the environmental report will then examine in more detail – at a general and cognitive level – either positive or negative but not addressed in the Plan itself (to avoid duplications). The study on the probable evolution in the event the Plan is not implemented, takes into account the same horizontal time line provided for the implementation of the Plan. In this regard, consideration is also given – to the extent possible – to the comments relating to the effects of other plans adopted that affect the areas in question.

C – Environmental, cultural and landscaping characteristics of the areas that could be of significant interest.

> Contains a detailed description together with specific indicators, of the environmental characteristics of the areas that could be majorly impacted by the Plan. The areas need not

necessarily be included in the areas contemplated in the Plan (such cases involve long range effects).

Please note that chapters B and C could be joined to form a single chapter.

D – Any existing environmental problem relating to the Plan, including therein those relating to areas of particular environmental, cultural and landscape importance, such as areas classified as special protected zones for the conservation of wild birds and those classified as sites of community importance for the protection of natural habitats and wild flora and fauna, and agricultural areas producing particular products or in certain quantities [...]

This chapter is drafted so as to comply with article 10(3) of Legislative Decree 152/2006, namely the inclusion of the impact evaluation in the SEA, and as such this chapter will also have inserted the elements required by attachment G to Presidential Decree 357/1997, also taking into account the comments under chapter 7 to this preliminary Report.

E – Environmental protection objectives established internationally, at European level or by Member States, relating to the Plan and the way in which, during its preparation, consideration is given to such objectives and to all environmental matters.

Includes a list of the sustainability objectives relating to environmental matters deemed to be most significant and the consequent external vertical coherence evaluation.

F – Possible significant impacts on the environment, including on biodiversity, the population, human health, flora and fauna, land, water, air, climate factors, materials things, cultural, architectural and archaeological assets, the landscape and the relationships between all such factors. Consideration must be given to all significant impacts including secondary, cumulative and synergistic ones, whether short, mid or long term, or permanent or temporary, positive or negative.

Includes identifying and evaluating the effects that the implementation of each action under the Plan could have in terms of the environment majorly affected by the Plan. The evaluation is carried out by elaborating a matrix which cross-references the measures envisaged under the Plan with said environmental issues. The evaluation is supported by suitable indicators. The chapter describes the evaluation methodology and sets out some considerations relating to the ascertained effects: this stage a starting point for studying the mitigation measures addressed in the subsequent chapter.

G – Measures provided for preventing, reducing and compensating to the greatest extent possible any significant negative impacts on the environment caused by the implementation of the plan or programme.

This chapter proceeds with identifying the measures required for mitigating the negative impacts on the environment as flagged in the previous chapter. Reference is made to measures provided for by the Plan and also measures taken from studies carried out during the drafting of the environmental Report. It can be noted that the same mitigation measures can have negative effects on the environment which must be acknowledged.

H – Summary of the reasons for choosing the alternatives identified and a description of how the evaluation was carried out, and also of any difficulties encountered (for example technical flaws or difficulties deriving from the issues being recent and the techniques used to resolve them) when collecting the required information.

This chapter together with the previous one will form a single chapter.

I – Description of the measures provided in relation to the monitoring and the control of the significant environmental impacts deriving from the implementation of the proposed plans or programmes establishing in particular, the methods for collecting the data and for elaborating the indicators needed for evaluating the impacts, the periodicity of the submission of a report setting out the results of the evaluation on the impacts and the corrective measures to be taken.

The chapter is based on the need to monitor the significant effects on the environment that are caused by the implementation of the Plan. The monitoring stage which follows the approval of the plan, is described here in relation to the affects identified in the previous chapters, including:
- the required resources (human, equipment, *etc.*);
- whoever is involved (roles and responsibilities);
- the time frame for implementing the monitoring stages;
- the methods for collecting data/information and elaborating the indicators, taking into account that they must always contribute to the knowledge framework for the purpose of subsequent planning and programming tools;
- the analysis of the data and the information and identifying the causes of any negative effects;
- the elaboration of indications for the reorientation of the plan;
- information on the methods for carrying out the monitoring and any corrective actions taken (monitoring Reports).

In addition, the individuals involved in carrying out and managing the monitoring will also be evaluated with reference in particular, to article 18(1) of Legislative Decree 152/2006.

L – A non-technical summary of the information set forth under the aforementioned letters.