



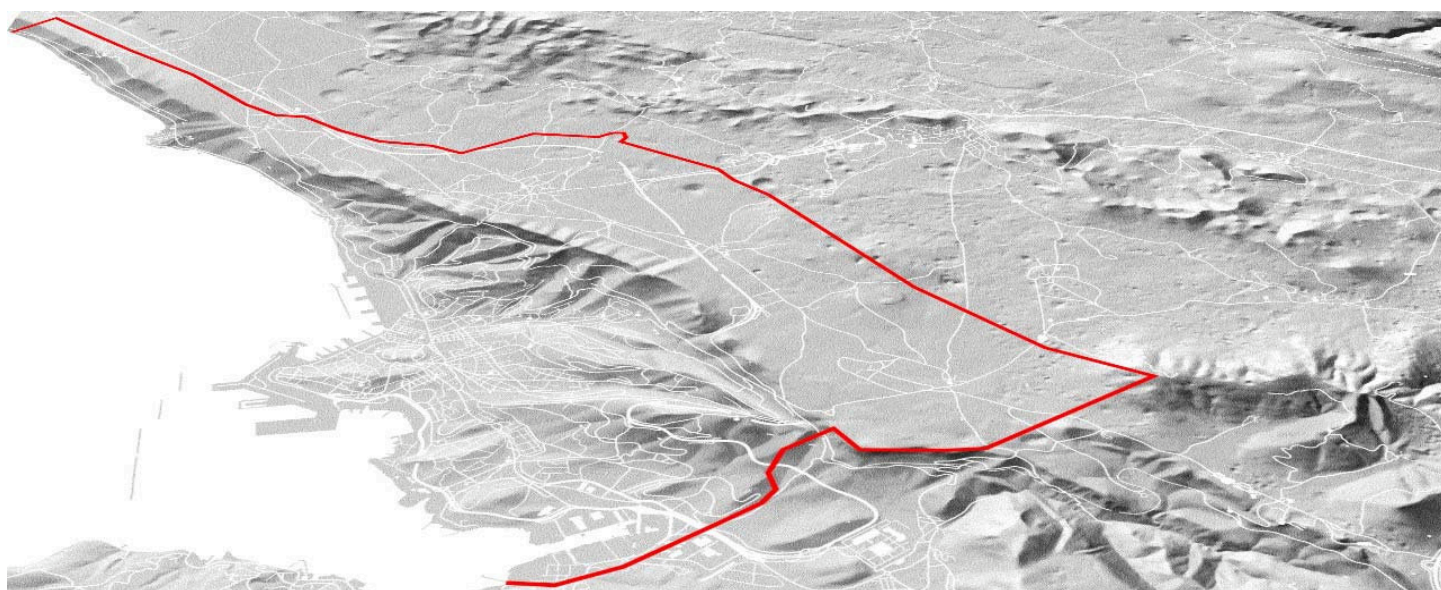
REGIONE AUTONOMA FRIULI-VENEZIA GIULIA

COMUNE DI TRIESTE

Area Pianificazione Territoriale
Servizio Pianificazione Urbana

PIANO REGOLATORE GENERALE COMUNALE

Variante Generale n°118 di Revisione dei Vincoli



Coordinatore del Progetto: dott. arch. Ave FURLAN

Coordinatore Unità di Progetto: dott. ing. Carlo TOSOLINI

Progettisti e collaboratori: dott. arch. Ave FURLAN

dott. ing. Giulio BERNETTI

per. ind. Luigi VASCOTTO

dott. Roberto PRODAN

dott. pianif. Alberto MENEGANTE

dott. arch. Francesco LOMUSCIO

RAPPORTO AMBIENTALE
Non-technical synopsis

6 agosto 2009

ANNEXE I

Non-technical synopsis

This non—technical synopsis is aimed at clearly explaining to a wide audience of non-experts the contents of the Environment Report annexed to the Variation.

Firstly, the Environment Report is aimed at providing all the elements for an Assessment of the Environmental Sustainability of the Scheme that is being analysed, which is the so-called Strategic Environmental Assessment (SEA).

The SEA, introduced at European Union level, is intended to help Public Administrators directly evaluate environmental problems that may be related not only to the Projects (through Environmental Impact Assessments), but also to their planning and orientation, which form or should form the base of their projects.

The purpose of the process is to establish a virtuous circle of assessment of choices and actions leading to an environmentally-friendly planning and development of works, reducing resource consumption and pursue the principle of a sustainable development that was defined by the 1987 UN Brundtland report as the “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

Detailed information is provided in the chapters of the Environment Report, however a synopsis is hereinafter provided to explain in brief the features of the Variation (Project Framework), its relations with the planning process at different administrative levels (Planning Framework), the state of the town’s environment (Environmental Framework), the assessment of sustainability (Sustainability of Choices) and finally the monitoring of environmental effects (Monitoring).

Project Framework

The development of the general variation to the Trieste Town Planning Scheme (PRGC) stems from the need to review the prescriptions of expropriation and procedural orders that have expired after 5 years from their adoption. To do this, which is prescribed by law, the Town Council has passed a series of directives requesting to review the Scheme of Variation 66 and to adapt it to the Town’s demographic dynamics and to the need of landscape and environmental safeguard.

The proposals of the General Town Planning Scheme, which shall be presented in the new Variation, are briefly described hereinafter by type of area and use.

Residential area

The Scheme envisages an overall review of the urban planning of residential areas in line with the principle of limited land use, completion of urban areas and re-use of areas that are abandoned or being abandoned and safeguard of the town’s architectural heritage.

The boundaries of the historic centre will be extended to A3 areas, that is the 19th Century zoning districts (*borghi*) and lots that are closet to the medieval town and to the districts known as the Borgo Teresiano and Borgo Giuseppino. Stricter regulations shall be applied for buildings that were built before 1918 in the B0 zone. Some typological and morphological elements have been identified in the other

homogenous completion zones, which are characterised by some remains of peculiar 19th Century architecture that would otherwise risk to disappear.

In the Carso area, the safeguarded zones A2 and B0b shall be maintained and their perimeters will undergo only slight corrections.

The parameters and perimeters of the other completion zones shall be modified: completion edge zones and construction indexes will be reduced so as to reduce the theoretical maximum settlement capacity of the Scheme. With regard to completion in the Carso area, size restriction will be imposed and typological parameters shall be applied for an improved settlement of new buildings in the landscape.

The expansion zones with an inadequate compact on the landscape have been eliminated, and only one new construction area (category C) has been identified in a part of the Villaggio del Fanciullo.

The most important residential expansion areas are those that fall within the renovation schemes (zones OI), which foresee the transformation of some abandoned, degraded mixed residential zones (Banne Army Station, former refugee camp in Padriciano, University, Children's Hospital 'Burlo Garofolo').

Public areas

Public areas are one of the main topics dealt with by the Variation. Construction objectives of Variation 66 have been updated including the assessment of ownership of areas and premises that are used for public purposes according to the current planning scheme.

Assessment studies have shown that the town has a number of public areas that complies with the standards set by the Region's governing authorities. The scheme that is currently in force declares that public areas, particularly green areas, abound in the town.

Surface of public services areas foreseen by the Variation (already constructed or to be constructed) and comparison with planning standards

Collective areas and equipment	Surface of areas already built (sq.mt.)	Surface of areas to be built (sq.mt.)	Total surface of areas (sq.mt.) foreseen by the Variation	Minimum areas (sq.mt.) requested to meet Standards
S1 - roads and transport	612,599.75	363,735.33	976,335.08	1,200,395.00
S2 – places of worship, associations and cultural clubs	1,353,841.98	14,130.28	1,367,972.26	720,237.00
S3 - education	1,544,477.74	39,504.33	1,583,982.07	840,276.50
S4 – social and health care	1,631,038.98	104,105.59	1,735,144.57	720,237.00
S5 – greeneries, outdoor sports and entertainment	10,902,301.61	218,914.90	11,121,216.51	3,601,185.00

With regard to the degree of construction of public services areas foreseen by the Variation, the table shows the amount of square meters that have already been built and those that are being constructed. Data show that almost 95.36% of the construction projections set out in the variations has been implementation.

Agricultural areas and environmentally protected areas

The Variation also deals with the agricultural areas (zones E) and environmentally protected areas (F). The latter will be the same as the ones that are outlined in the Current Town Planning Scheme and had been earlier laid out in the General Region Planning Scheme. Some changes have been made to agricultural areas in terms of perimeters and regulations.

The new planning framework for agricultural areas foresees the identification of 5 zones:

- zones E2: wooded areas which cover 15,005,072 square meters and where any work allowed must be related to wood maintenance and use;
- zones E3: farmland in the Carso area where animal farming, agriculture (though historically marginal) can be developed;
- zones E4a: agricultural land that is currently being farmed and is located on the town outskirts. This type of farming is to be maintained because it is typical of this landscape and it provides a hydrogeological protection of the territory;
- zones E4b: agricultural land along the Trieste coast, which, in some areas, is fairly extensive. Regulations call for the improvement and care of terrace land, while fully respecting landscape characteristics;
- zones E4c: agricultural land to be found in the Southern part of the Town. Regulations for these areas are less strict to avoid their disappearance facilitate their maintenance.

Land/Premises for production use

The Variation confirms the production use of land situated to the South of the town, which has historically been used for such purpose. Some projections have been removed, because they are obsolete and incompatible with the local context. In particular, these changes regard some projections on the Carso area which have not been implemented over the past few years (Opicnia, Trebiciano, Padriciano).

Land/Premises for commercial use

The projections contained in the Current Planning Scheme shall continue to be applied to the commercial sector. The projections for the use of land for large distribution have been extracted from the Sector's Scheme. With regard to smaller businesses, following the amendments, one projected area in Basovizza shall be excluded from the Scheme because of its difficult accessibility and lack of environmental and landscape compatibility. Some industrial lots, located at the top of Via Flavia, have already been transformed into commercial areas: this land is no longer used for production purposes and part of it today is already used by authorised commercial businesses.

Land/Premises for tourist use

The Variation confirms the tourist use of land and premises that are already used for this purpose and also foresees the development of new tourist areas by using some historical villas (villa Stavropulos e villa Cosulich). Some areas have also been identified for the development of the so-called “Sea Park” which shall be developed by using the spaces located between the former Fish Market and the former Bianchi Swimming Pool, and also the areas of the Sea Museum, the fruit and vegetable market and the Transalpine train station.

In the Carso area, the Scheme shall not include some of the projections that were made for various areas in Prosecco, Padriciano and Basovizza and have never been developed. A new area near Padriciano has been identified, along the provincial Carso road SPI.

A new specific regulation is introduced for industries posing a Relevant Accident Risk. They must be located in the industrial area at a specific distance from “sensible areas” of the town, which include residential and public areas as well as environmentally protected areas.

Land/Premises for port use

The Variation achieves coherence between the Port Planning Scheme and the General Town Planning Scheme by including the mutual choices that were made in identifying a new coast line and confirming the foreseen infrastructures. With regard to the Old Port, the projections included in the Current Planning Scheme are maintained.

Infrastructures

The projections on infrastructures of the Current Planning Scheme have been reviewed by the Variation. Only the works that will effectively be implemented over the next five years and those that regard road widening have been maintained. A new road has been projected only for the village of Santa Croce to be used for the works to be carried out in Banne.

Planning Framework

The Trieste Town Planning activity is part of a complex system of other planning procedures and regulations, ranging from Community planning to sector-specific planning regulations the Town Council passes.

Part of the Strategic Environmental Assessment is aimed at assessing the degree of coherence of the Scheme's objectives, the coherence between the objectives and actions (internal coherence) and the coherence with other planning regulations and procedures the Scheme may interact (external coherence).

This assessment helps analyse the Scheme's objectives within a reference framework, which should be focussed on sustainable development, since each and every planning procedure and regulation must meet this principle.

The Plans – Schemes that have been taken into consideration are the following:

- General Region Planning Scheme (PURG)
- Integrated Transport Regional Scheme (PRIT)
- Regional Road Scheme (PRV)
- Rural Development Programme 2007-2013 (PSR)
- Regional Energy Plan (PER)
- Regional Scheme for Local Public Transport
- Provincial Scheme for Local Public Transport
- Regional Waste Management Plan
- Corridor V
- Local Action Plan (Agenda 21) – Aalborg Commitments
- Mobility Plans
- Trade plan
- Plan for urban improvement and sustainable development of the territory (PRUSST)
- Port Planning Scheme
- VI Community Action Programme on the Environment 2002-2010
- Strategy on urban environment 2006
- CIPE – Strategy of Environmental Action for Sustainable Development 2002
- Law no. 120/2002 Ratification and execution of the Kyoto Protocol

Overall, the Scheme is either coherent with or indifferent to all the planning procedures and regulations with which it has been compared. In some cases, however, the schemes and plans cannot be easily compared because of the different metrics used or, as is the case with many regional planning schemes, because these schemes are old as they date back to the 1970s-1980s.

Compared to the international and national plans for sustainable development, the Trieste Planning Scheme is coherent, although some topics such as energy saving is not highly developed yet.

Finally, transport and mobility appear to be marginal issues compared to the other objectives and that is why the Scheme actions are rather indifferent to the other plans and schemes on this matter.

Environmental Framework

The Environmental Report provides important information on the state of the environment in the Town Council of Trieste, underlining critical issues and assessing the sustainability of the Planning Scheme.

Water

Water is supplied through the water duct. The main problem concerning water is the increase in the average consumption per capita. This phenomenon is typical of developed countries and can only be overcome through education on the correct use of this resource. Another problem concerns the leakage of water from the supply network, which is obsolete and should undergo adequate maintenance.

The Sea is under pressure from urban, industrial and port developments. Trieste has four water treatment plants, which serve the town and partially the Carso area and waste water is discharged through two pipes – one is located near Barcola and the other in Servola which reaches the breakwaters. The situation in the gulf is constantly monitored by ARPA, The Regional Agency for Environmental Protection.

Air - Climate

The data on air quality show both good and trouble spots, because the levels of some pollutants (SO₂, CO, C₆H₆, IPA) have reassuringly decreased, while other components such as NO_x, PM₁₀ and O₃ show worsening trends. In particular, O₃ is present in the atmosphere with very high concentrations during some seasons and especially in the town outskirts.

To reduce these concentrations, the root causes need to be addressed and they are: urban traffic, which has a strong impact on pollution levels and is concentrated in specific zones, and also emissions caused by industrial and port activities and domestic heating.

Noise

Acoustic pollution is a problem that affects several areas of the municipality. Solutions can be reached through actions that firstly need to provide a comprehensive and updated outline of the current situation (the latest available data date back to 2000) and secondly develop an acoustic zoning plan. The recent coming into force of the region's regulations on the matter shall oblige the Trieste Town Council to tackle this issue and integrated it in the town planning schemes.

Soil

Town development since the end of WWII has caused a rapid transformation of the territory, which is now literally devoured by the town, urbanized areas have increased and agricultural areas are progressively disappearing, while extra-urban areas have suffered from the pressure of transport and energy infrastructures. Moreover, in some areas, particularly the industrial area, pollution problems have caused

these areas to be included in the Site of Natural Interest. Soil is a resource that has been exploited beyond its levels of sustainability and priority actions are needed to prevent its disappearance.

Biodiversity – Flora – Fauna

Despite the town's urban development, the still existing natural areas in the municipality are high value and prestigious environmental resources, not only for the features of the geological phenomenon called *carsismo*, but also for the biodiversity they offer. That is why two protected areas that belong to the European network Natura2000 have been developed: one is the Special Protection Zone "Carso Areas in the Venezia Giulia Region" and the Important Community Site "Trieste and Gorizia Carso". It is essential to preserve not only these areas but also any other area that may not be safeguarded by regulations, but have important environmental values. These areas need to be protected from any urbanization process and at the same time the citizens' awareness and responsibility need to be strengthened.

Human health

An analysis of the causes of death and the use of hospital care has shown that it is difficult to recognize clear cause-effect relationships between more frequent diseases and environmental factors. To date, it has not been possible to strike a clear balance from available data. However, there are some shared factors, which have an impact on human health and need to be adequately addressed.

Air pollution is not the only culprit. Other factors causing ill health can be ionizing radiations, particularly radon emissions which ARPA surveys have shown to be elevated in the Carso area. Prevention measures need to be implemented, by modifying, for example, the way in which buildings are constructed in order to avoid the stagnation of this gas.

With regard to non-ionizing radiation, the levels of magnetic emissions due to antennae and the like is reassuring, except for the village of Conconello, which is being monitored.

Other causes of ill health are the four industries located in the municipality of Trieste, which pose a relevant accident risk. The damage they cause is currently contained, except for the Steel Plant in Servola. For the latter case, a national norm is necessary in order to establish acceptable distances from sensible areas.

Landscape

Trieste and its hamlets are located in a varied landscape which is characterised by two main systems – the Carso and the Coast (the latter may in turn even be composed of smaller landscape units). The lack of a Landscape Plan entail that the territory in this matter is still regulated by the prescriptions of Law 1497/39 and Law 431/85, today encompassed in the Code of cultural and landscape heritage.

The Landscape is a resource that needs to be jealously preserved, because once it is compromised it cannot be recovered. This is the reason why much attention must be placed on the most sensible areas.

Cultural, architectural and archaeological heritage

The cultural, architectural and archaeological heritage of Trieste and its hamlets encompasses a series of

resources, many of which still need to be assessed. The local heritage authorities, the *Soprintendenze*, need to work together in order to identify, recognise and protect this heritage through the appropriate norms.

Mobility and traffic

Traffic and more generally mobility in the territory cause pressure on the environment (air and acoustic pollution), the landscape (increase of limited traffic zones) and anthropic factors (accident rates).

The town, despite having a well developed network of local public transport, is overwhelmed with traffic, mainly scooters and motorbikes, that is growing exponentially.

The new road works (Waterfront and completion of the Trieste motorway extension, the so-called *Grande Viabilità Triestina*) leave some open questions mainly related to the coastal road (*Strada Costiera*) which leads into town, but is rather dangerous and could be transformed into a tourist road.

To overcome these problems, the town needs an efficient, integrated network of public transport and parking areas, which has been recently approved with the Town Parking Plan. A mobility Plan is also necessary to find solutions to congestions that are becoming widespread in Trieste.

Energy

The town is an energy hub in terms of supply (it has an oil terminal and may also have a methane terminal in the future) and energy production with the waste-to-energy plant located in via Errera. However, the town seems to gobble energy, mainly electric power, and consumption levels have rocketed in recent years.

Action is thus of the essence: awareness communication and technical improvements are needed to have energy-saving equipment and buildings. Promoting the use of innovative construction techniques is fundamental.

Waste

The problem for the waste produced in the Municipality of Trieste lies mainly in the fact that very little recycling is done by the citizens: there has been some improvement, but Trieste is lagging behind and is not fully complying with the set standards. Therefore, the recycling process needs to be reorganized.

With regard to special waste, this kind of waste produced in this area is exported, because of the features of the territory and because there are no sites that are suitable for the treatment of special waste.

Sustainability of choices

In light of the state of the local environment and of the choices proposed by the Variation, it is possible to assess the environmental impact of the Planning actions and therefore propose mitigation or compensation measures.

Overall, the Scheme and its actions are sustainable, although some of these actions will inevitably place increased pressure on the environment. However, the Scheme does envisage some improved actions, which have been proposed in order to guarantee more sustainability compared to the Current Planning Scheme.

The Planning Scheme provides a reference framework for future actions that will be practically implemented through the Implementation Plans (PAC) and projects and will be specifically assessed for the eco-compatibility, should the law require to do so.

With regard to the Variation, below is a list of the specific actions, which may have an impact on the environment and thus need to be corrected or compensated:

	Action	Reference to Variation of PRGC
1	J – Review of extension of parameters of zones GI	Homogeneous Zone GIa – Villa Cosulich, Strada del Friuli, 34
2		Homogeneous Zone GIa – Villa Stavropulos and park, Strada Costiera 35
3		Homogeneous Zone GIb1 – Extension of waterfront in Barcola
4		Homogeneous Zone GIc – Padriciano
5	P – Identification of abandoned and degraded areas and integration of Technical Implementation Norms (NTA) with norms foreseeing their reclamation	O1.1 – Trade fair
6		O1.2 – Former Sea Museum
7		O1.3 – Former Transalpine Train Station
8		O1.4 – Former Army Station of Monte Cimone in Banne
9		O1.5 – Area where Bianchi swimming pool once stood
10		O1.6 – Children’s Hospital I.R.C.C.S. Burlo Garofolo
11		O1.7 – Area opposite the University
12		O1.8 – Multi-storey car park (Silos)
13		O1.9 – Former Refugee Camp in Padriciano
14	R – Reduction of existing and non-implemented C expansion areas	Zone C.1- Erta S.Anna
15		Zone C.2- Strada per Longera Zone C.2- di Via Timignano Zone C.2- di via M.Dudovich
16		Zone C.5- Provincial Road S.P. no.1 del Carso in Padriciano
17		Zone C.6- Rupca in Padriciano
18		Zone C.7 – via Bonomea
19		Zone C.8- State Road S.S. no. 202 Triestina in Opicina
20		Zone C.9- via Basovizza in Opicina
21		Zone C.10- via del Refosco in Opicina
22		Zone C.11- via dei Salici in Opicina
23		Zone C.12, C.13 and C.14 in via di Prosecco in Opicina Zone C.15 and C.16 in via dei Fiordalisi in Opicina
24		Zone C.18 in Prosecco
25	U – Projection of new road infrastructures to support the new works	U.1 New road in S.Croce
26		U.2 Train station area in Opicina
27		U.3 Road connecting former Army Station in Banne / Provincial Road S.P. no.35
28		U.4 Road connecting via Valerio / via S. Cilino
29		U.5 Via Schiapparelli
30		U.6 Via Cumano / junction for Strada di Fiume
31	X – Rationalisation of public services and equipment according to settled population and sector plans	X.1 – former cinema in Opicina
32		X.2 – Largo Panfili, former Offices of the Financial Police
33		X.3 – former Military District of S.Giusto
34		X.4 – villa Necker
35		X.5 –I.N.A.F. premises, via Besenghi 17
36		X.6 – Nursery of S.Luigi
37		X.7 – extension of the golf course
38		X.9 –villa Buzzoni car park

Monitoring

The environmental assessment ends with the development of a monitoring plan, which will help evaluate the state of the environment over time, and identify any correlations with the actions laid out in the Variation.

In light of the considerations made above, the following indicators have been identified:

Indicators of the State of the Environment

Indicators	Measurement	Measuring Unit
4.1.1 Population		
Demographic dynamics	Absolute trend of resident population from 1978 to 2007;	inhabitants
	Trend of mobility indexes of population from 1978 to 2007	inhabitants
	Population descriptive indexes from 1992 to 2007	inhabitants
	Composition of families	no. of families
	Old age index	no. of over 65s every 100 youngsters aged 0 to 14 years
	Ageing index	Percentage of over 65s against the total of the population
	Dependence index	no. of young people aged 0 to 14 years and over 65s every 100 residents aged between 15 and 64 years
	Turnover Index of working population	no. of old people aged between 60 and 64 every 100 young people aged 15-19 years
	Structure index of working population	no. of residents between 40-64 years of age every 100 people aged between 15 and 39 years
	Index of number of children per fertile woman	no. of children aged between 0 and 4 years every 100 women aged 15 to 44 years
Foreign population	Men/women ratio	no. of men every 100 women
	Overall demographic trend of foreigners residing in the Trieste Municipality	no. of foreigners
Foreign population	Distribution of the foreign population residing in the municipal constituencies.	no. of /constituency
	4.1.2. Economic Activities	
	Businesses, local units, employees of institutions and businesses	no. of businesses and no. of employees
	Businesses registered with the Chamber of Commerce	no. of businesses
	Agricultural farms	
	Used Agricultural Surface (SAU)	Ha
	Tourist accommodation and services	no. of hotels, no. of complementary services, no. of other tourist services
	Tourist arrivals and number of tourists	No.
4.2.1 Water		
Inland surface waters	Quality of waterways	IBE, macrodescriptors
	Quality of bathing water	Presidential decree DPR 470/82
	Adequacy for fish life	Legislative decree D.lgs 152/99 annexe 2 table I/B
Water for human consumption	Quality of waters	Legislative decree D.lgs 152/99 annexe 2 table I/A
	Length of new pipes	Length (ml)
	Consumption	Litres
4.2.2. Climate		

	Rain	mm
	Temperature	C°
	Wind intensity	Km/h
	Irradiation	Kj/sq.mt.
	Humidity	gr/mc, %
4.2.3. Air		
	Sulphur dioxide - SO ₂	µg/m ³
	Nitrogen dioxide – NO ₂	µg/m ³
	Carbon monoxide - CO	mg/m ³
	Particulate matter – PM10	µg/m ³
	Tropospheric ozone - O ₃	µg/m ³ µg/m ³
	Benzene - C ₆ H ₆	µg/m ³
	Aromatic polycyclic hydrocarbons PAHs	IPA ng/m ³
4.2.4. Noise		
	Acoustic climate	db(A)
4.2.5 Soil		
Use of soil	Natural areas	Hectares (ha)
	Urbanized areas	Hectares (ha)
	Agricultural areas	Hectares (ha)
4.2.6. Biodiversity, flora and fauna		
	Municipal surface covered by natural habitat of community interest	ha
	Presence in the territory of habitats as specified in Annexe I of the Habitat Directive (92/43/CEE).	5 – priority habitats 3 – habitats of community interest 1 – other habitats (excluding villages, active industrial sites and quarries)
	Degree of rarity of local habitats.	1 – non-rare habitats 3 – rare habitats 5 – very rare habitats
	Naturalistic importance of forests.	Values from 1 to 5 in increasing order: (1 – lowest value, 5 – highest value)
	Sensitivity of forests to perturbations	Values from 0 to 4 in increasing order: (0 – no sensitivity, 4 – highest sensitivity)
	Biodiversity of territory according to plant and /or animal species	Number of various species found in the territory.
	Endangered Species according to the IUCN categories (1996).	(no. of endangered species/ total number of species)*100
	Factors threatening the conservation of the species	(no. of species affected by a specific threat /total number of species)*100
	Endangered flora species according to the IUCN categories (1994).	(no. of endangered species /total number of species)*100
	Number of protected species in relation to present species.	(no. of protected species /total number of species)*100
	Fragmentation of habitats due to presence of infrastructures (roads, railways).	Jaeger's Fragmentation Index (2000).
	Extension of surface of sites of community importance (SCI and ZPS) following the Habitat Directive (92/43/CEE) and Birds Directive (79/409/CEE).	SCI or ZPS surface (ha)/Total municipal surface (ha)*100
	Percentage of habitats of community importance that are within the Natura2000 sites (SCI and ZPS).	Surface of habitat of community importance that is located within a SCI or ZPS (ha)/total surface of habitat of community interest (ha)*100
		Surface of habitat of community interest (per type) that is located within a SCI or ZPS (ha)/total surface of habitat of community importance (per type) (ha)*100

Degree of conservation of structure and functions of the specific natural habitat and possible reclamation.	- Degree of conservation of the structure; - Degree of conservation of functions - Possibility of reclamation	A – excellent conservation B – good conservation C – average or low conservation
State of conservation of the habitat and abundance of fauna populations (listed in the Habitat Directive,Annexe II and Birds Directive,Annexe I) and of plants (listed in the Habitat Directive,Annexe II) to be found within SCI and ZPS.	<i>Degree of conservation:</i> degree of conservation of important habitat elements for the species concerned and possibility of reclamation;	<i>state of conservation:</i> A (excellent), B (good), C (average or limited);
	<i>Abundance of population:</i> size and density of the species to be found in the site in relation to the populations found at national level	<i>Abundance of population:</i> A (15-100%), B (2-15%), C (<2%)
	Density of communication infrastructures in the Natura2000 areas (SCI and ZPS).	m /m ²
4.2.7 Human health		
Mortality by cause	Mortality by cause of death.	no. of deaths
	Incidence of some causes on over 65s and under 65s.	Mortality rates are calculated every 10,000 inhabitants
	Incidence of cancer typologies.	
Hospitalization	Number of discharges per type of hospital care (intensive or day hospital) and per disorder	Standard discharge rate per 10,000 inhabitants
4.2.8 Landscape¹		
4.2.9. Cultural, architectural and archaeological heritage		
	Areas protected by archaeological and architectural regulations in the municipality	Detection of number of protected areas and premises by legislative decree d.lgs 42/04
4.2.10 Mobility and traffic		
	Use of local public transport	Number of passages (vehicles/hour), number of passengers (p), recommendations/complaints (n).
	Cycling/pedestrian paths	Km
4.3.1. Water waste		
Sewage network	Length of new pipes	Km
	Percentage of area served	%
4.3.2 Emissions in the atmosphere		
	Sulphur oxides – SO _x Nitrogen oxides – NO _x Carbon monoxide - CO Particulate matter – PM10 Benzene - C ₆ H ₆ Non-methane volatile organic compounds (NMVOC) Carbon dioxide – CO ₂	ton/year
	Aromatic Polycyclic Hydrocarbons PAHs	kg/year
4.3.2. Constructed areas		
	Surfaced identified in the Planning Scheme as “built according to the parameters set out in DPGR 126/95	sq.mt.
4.3.4. Polluting sites		
	Reclaimed surfaces	sq.mt.
4.3.5. Productive activities		
	Number of applications to A.I.A. (Environmental Integrated Authorization)	Unit
	Number of R.I.R. notifications	Unit

¹ Landscape description is fully based on the analysis that was performed by the Region's Territorial Plan (PTR) and adopted with Regional decision DGR 2401 dated 12.10.2007

4.3.6. – Energy supply and consumption		
	Energy production	GWh
	Length of lines	km
	Energy consumption	GWh
Transport networks	Oil and methane pipes	km
4.3.7 Non-ionizing radiations		
Radio base station for mobile phone coverage	Average magnetic field	(V/m)
	no. of stations	no. of stations
	no. of stations /sq.km. no. of stations /sq.km.	no. of stations /sq.km. no. of stations /sq.km.
T.V. homogeneous zones	Average magnetic field	(V/m)
	no. of stations	no. of stations
	no. of stations / sq.km no. of stations / sq.km	no. of stations / sq.km no. of stations / sq.km
4.3.8 Ionizing radiations		
	Radon gas	Bq/mc
	Artificial radioactivity	Concentration Cs ¹³⁷
4.3.9. Waste		
	Urban Waste , Recycled Waste, Solid Waste	Tons per year, kg/inhab.*year
4.3.10. Accident rates		
	Accident rate	accidents/kilometre, number of accidents
4.3.11 Motorization rate		
	Motorization rate	Vehicles (per type)/inhabitant

Indicators of action-specific monitoring

Environmental and anthropic elements concerned		Indicators
Water		Water consumption Length of pipes
Water	Wastewater	Length of sewage network
	Solid urban waste	Monitoring of waste collection
Climate – Air	Increase in emissions in the atmosphere: mainly due to traffic and domestic heating	Monitoring of air quality
Soil	Soil / Ground consumption	Constructed surface
		Covered surface
		Waterproofed surface
		Ratio between lot surface/covered surface
Mobility and traffic	Vehicle increase	Monitoring of number of vehicles Number of car parking spaces
	Accessibility	Monitoring of traffic flows
	Noise	Monitoring of sound emissions
Energy	Increase in consumption for heating, hot sanitary water and electricity	Monitoring of consumption
Landscape		Landscape protection
	Visual-perceptive Comfort	Height
	Coherence with context	Presence / lack of project study assessing impact on natural and constructed environment
	Vegetation	Number of plants
	Works of landscape mitigation	Presence / lack
	Control of the albedo in outdoor areas (pedestrian paths, roads, car parks) to reduce surface temperatures and favour outdoor comfort.	Coefficient of total reflection of solar radiation
		Landscape study (yes/no)

Cultural, architectonic and archaeological heritage		Protection decree
		Functional use
Biodiversity, Flora and Fauna	Alteration of state of the environment	