

CONTENTS

Use of natural resources	64 67
CHAPTER VI: EXPLOITATION OF NATURAL RESOURCES AND WASTE GENERATION	64
Environmental Chine	55
Contaminated sites remediation Environmental crime	54 55
Food security	53
Genetically Modified Organisms	51
Electromagnetic pollution	50
Noise	49
Indoor air quality and radon	48
Air quality	46
Urban environment	42
CHAPTER V: QUALITY OF LIFE AND ENVIRONMENT IN URBAN AREAS	42
Marine and coastal habitats	33
Soil, subsoil and desertification	30
Living natural resources Biotechnologies	26
CHAPTER IV: NATURE AND BIODIVERSITY	26 26
QUARTER IIV. MATURE AND DIARRYEROUTY	
Stratospheric ozone	24
Climate change and green-house gas effects	18
CHAPTER III: CLIMATE AND ATMOSPHERE	18
Techno-scientific research for environment and sustainable development	17
Sustainable development financing	16
Local Agenda 21 processes Indicators and accounting for environmental action and sustainable development	15
Awareness and decision-making skills of citizens	14 15
Quality and environmental certification	
Subsidies and environmental externalities	
Ecologic taxation reform	
The integration of the environmental factor in the market	12
Environmental Assessment of Plans and Programmes	
The integration of the environmental factor within sectoral policies	11
Application of the legislation on environmental protection	10
CHAPTER II: ENVIRONMENTAL ACTION TOOLS	10
National strategy breakdown	8
Environmental action	7
Ecologic foundations of sustainability	7
Sustainable development and environment	7
CHAPTER I: THE ENVIRONMENTAL ACTION PLAN IN ITALY	7



The environmental action plan in Italy

The growth rate of the world population shows an increasing trend although the pace is slowing down, while in some countries, such as Italy, it has come to a standstill. The most industrialized countries constantly deplete resources, such as water and energy from the environment. They also spread pollutants and waste thus irreversibly affecting the quality of land, air and water. However, while economic systems need an everincreasing growth, the environment demands balance and stability. In order to reach sustainable development, the self-subsistence and self-organization of ecosystems must coexist with anthropic processes, otherwise their imbalance will in turn lead to self-induced entropy.

Sustainable development and environment

The population of industrialized countries exploits ten times more natural resources per capita than those living in developing countries. The economic and demographic growth of developing countries, entailing new consumptions, can only resort to natural resources. On the other hand, nowadays and in the years to come, our wealth standard requires unpolluted air, water and food, unspoilt landscapes, enticing sea waters and shores, towns wisely striking a balance between their huge historical heritage preservation needs and their everchanging operational and organizational requirements.

At the end of the second millennium, our civilization conceived sustainable development, designed to meet present needs while preserving the expectations and requirements of future generations , pursuing at the same time different aims such as quality of life, peace, an equitable wealth and a clean and healthy environment. This is not a brand new concept. In fact, many cultures have thoroughly accepted the need to strike a balance among different economic, social and environmental requirements. Today, this standpoint has been restated in industrialized and developing countries eventually aware of the exhaustibility of global natural resources . However, sustainable development urges a changeover of growth patterns and socio-economic relations.

Ecologic foundations of sustainability

A developing economical system can be regarded as sustainable only if it exploits natural resources up to a set quantity and quality limit within the earth renewal capacity by never exceeding this threshold. If this does not occur, the economy will continue to use and to jeopardize the quality of natural resources which sooner or later will be exhausted or not anymore useable.

The earth, being a shut-down ecosystem with limited natural resources, can only rely on solar energy. Every natural resource, such as food, water, timber, ores oil and natural gases, is restricted by the availability and absorption capacity of the ecosystem. The ecologic foundations of sustainability suggest to preserve the stability of internal processes of the ecosphere and implies a dynamic self-organizing structure, for an undefined long-term period, to avoid ever-increasing entropic consequences.

The greatest acceptable values of deposition and concentration in the environment of human activity pollutants and waste are known as *critical loads* and are set according to the typologies, the specific chemical, biodegradable and storing peculiarities and properties. The greatest flow of natural resources extracted and disposed from a given ecosystem represents its *carrying capacity*.

Well-grounded fears suggest that in some cases the carrying capacity of the Earth is failing since we have almost exhausted it. As the anthropic sphere is increasingly stretching behind the earth through new technologies, innovations and explorations, a great deal of destructive interactions are occurring at the border with the ecosphere.

Environmental action

New sustainability-oriented projects are most needed in order to reset ecological balances, to change consumption and production patterns, to promote ecological efficiency and to restore social equity conditions. The environmental action, as part of this overall planning, aims at: easing frictions between the anthropic sphere and the

Environmental action strategy for sustainable development in Italy

1



earth, eliminating the exploitation of non-renewable natural resources, phasing out pollutants, enhancing the value of waste through its reuse, recycling and recovery of both energy and secondary raw materials, changing the balances of generation and absorption of GHG emissions, interrupting biodiversity erosion and desertification processes, safeguarding landscapes and habitats.

However, although a few positive results have been achieved, earth warming, biodiversity shrinkage, disposal of household and hazardous waste, poor quality of urban areas, increasing exploitation of natural resources, and the spreading of environmental criminality have become crucial issues thus jeopardizing the environment. Other factors negatively affecting the health of both environment and the inhabitants are the following: unhealthy food due to biotechnologies and Genetically Modified Organisms, unconscious use of private transport, increase of personal and mass mobile communications and electromagnetic pollution. The Environmental Action remains therefore a fundamental pillar of a strategy for a new development model.

Since carrying capacities and critical loads cannot be exactly estimated, the Environmental Action relies on the *precautionary principle*, according to EU-set guidelines.

Sustainable development cannot be based on a mere environmental action, nor it can promote only bans, rules and limits. A sustainable economy must be focused on a long-lasting stable development, including high employment rates, low inflation rates and international trade stability.

Economic growth is generally measured by the GDP rate, which does not register any environmental damages and thus their social costs. The time has come to measure our economic growth by a wide range of physical and monetary parameters integrating environmental and economic factors so as to show the results achieved in protecting the environment and the quality of life as well as the stock decrease or increase of natural resources.

Social sustainability has to do with distributive equity, human and civil rights, social conditions of children, teen-agers, women, elderly and disabled people, immigration and cooperation between countries. Sustainable development targeted actions and commitments are closely linked to the implementation of policies to eliminate social exclusion and poverty. Such objective, as expected by the 2001-2003 National Action Plan of Interventions and Social Services, can be achieved through a fair distribution of resources, a decrease of the unemployment rate, the accomplishment of economic

measures by means of investments in the national health system, in education and, in social programs that guarantee the access to services and social cohesion.

The inspiring principles of the environmental action strategy for sustainable development in Italy are the following:

- integration of environmental issues into other policy making processes;
- the preference for an aware economic and environmental lifestyle;
- an increase in the global efficiency of resource usage;
- refusal of the "end cycle" intervention approach and promotion of prevention policies;
- general waste reduction;
- stretching the lifetime of goods;
- ending of material cycles of productionconsumption;
- development of local markets and local productions;
- promotion of typical products and traditional cultures;
- involvement of social parties in setting goals, commitments and sharing responsibilities.

National strategy breakdown

The national environmental action strategy ensures continuity to the EU action, namely through the Sixth Environmental Action Plan, with the targets regarding social cohesion, full employment and environmental protection approved by the Council of Europe in Lisbon and Göthenburg. Moreover, according to the guidelines of Barcelona 2002 European Council , the strategy must ensure the setting of tools needed for the concertation, participation, sharing of responsibilities at a national level and reporting.

The objectives and actions of the Strategy must find their continuity in a system of Regions, autonomous provinces and local authorities according to the subsidiary principle through the definition of sustainability strategies at every level. In order to achieve these objectives, according to their own peculiarities, it is strongly recommended to adjust contents and priorities through co-operation and partnership with local authorities and any involved party. For this purpose, Regions must locate and divert from their budgets the needed financial resources. In turn, the Government itself must allocate its budget to support the regional action wherever strategies ensure the fulfilment of large-scale objectives and macro-actions. The same guidelines may apply to special-autonomous Regions and Provinces such as Bolzano and Trento, abiding to the



principles issued in their own statutes.

The environmental action strategy distinguishes first its operational tools of general purpose within four broad priority subject matters, the same stated by the Sixth Environmental EU Action Plan, as follows:

- climate change and ozone layer protection;
- protection and sustainable valorisation of Nature and Biodiversity;
- quality of the environment and quality of life in urban areas;
- exploitation of resources and waste generation.



Environmental action tools

An effective environmental action strategy demands every social party's voluntary behaviour towards environmental protection so as to overcome a mere "bid-and-check" approach.

Environmental policy instruments need to be reviewed in order to achieve the following aims: enhancement and enforcement of the environmental protection laws; integration of the environment within sectoral policies and markets; implementation of an ecologic taxation reform; removal of unfair subsidies and softening environmental externalities; introduction of environmental accounting; improving the awareness, the knowledge and the involvement of citizens through a stronger public information; increasing the decision-making role for citizens; implementing technological and scientific research other than promoting information and training.

The environmental action strategy, by meeting the above-stated requirements, needs to be regarded as a flexible tool able to constantly adapt to newly-arising environmental needs and chances. To this end, a Forum will be set up, involving every concerned party, aiming at:

- ensuring a full participation;
- --- monitoring the achieved results;
- checking the effectiveness of the strategy;
- proposing timely-needed amendments and the updating of the strategy;
- contributing in the creation of sustainable development information, education and training.

Application of the legislation on environmental protection

The framework of the environmental protection laws and regulations, along with an effective techno-logistic monitoring system, at the basis of the so-called "bid and check" approach, can be regarded as inadequate to ensure and support on its own a sustainable development strategy, even though they must be still considered as an essential requirement for any effective environmental action.

The environmental protection requirements provided, throughout the years, the set-up of new standards for

emissions, waste, sewage and other pollutants, with positive effects on the environment, the modernisation of plants and the development of new technologies, creating a strong incentive towards innovations. In order to spread and consolidate this positive outcome, there is the need to proceed with clear and effective goals applying the analysis principle which measures the impact of the regulations on Public Administration, citizens and enterprises, according to Act 50/1999, "1998 Streamlining Act".

The present complex legal reference framework calls for a streamlining revision. In fact, too many regulations do not entail environmental benefits and lower the efficiency of administrative and thus industrial systems. However, mutually agreed Environmental Texts can overcome these obstacles and make the legal reference framework easily enforceable and less uncertain, such as the Italian environmental legislation.

Moreover, it is required that all infringements, occured within the industrial sector throughout the years, are revealed in order to carefully review the past, incoherent and hardly-enforceable regulations.

The completion of a national network of agencies for the environmental protection (ANPA/ARPA) is a priority goal that must be achieved to ensure the availability of a technical support entirely developed for all monitoring activities, thus overcoming the present approach, made of inspections to repress illegal activities. This in turn will strengthen the role of the service provider, which represents a support tool for the management of environmental policies and for the processes of citizens information. A necessary national environmental information system (SINAnet) is being accomplished by the National Environmental Protection Agency and is gradually made accessible on line to the general public through the web.

A strategic breakdown, made up by complex actions and objectives skilfully designed and planned, implies an effective monitoring of global changes, cross-sectoral processes and development patterns. Although it will not be an easy task, a strategy implementation audit must point out the gap existing between a mere statement of principles and a real action plan.

Environmental action tools

2



The integration of the environmental factor within sectoral policies

The integration of policies is a constitutional principle for the whole of Europe. Art. 6 of the Amsterdam Treaty, asserts: "requirements for environmental protection are to be included in any definition and implementation of EU activities and policies, especially to promote sustainable development."

The "Integration Principle" affirms that the environmental protection must not be considered as a sectoral policy, but as a common denominator for all policies. Environmental action must be coupled with new actions by other sectors, which must internalise the environmental concern.

The Environmental integration with any field programme, plan and policy drawing as well as decision-making procedures requires the introduction of a wide-spread Strategic Environmental Assessment (SEA), which proved successful in the early stages of Agenda 2000-2006, and an in-depth revision and standardisation of the procedures functional to the decisions of the Inter-Ministerial Committee for Economic Planning and the State-Region Conference, supported by the full involvement of environmental authorities for sustainable development. Hence, within the State-Region Conference a permanent technical board has been set up to fulfil an important sustainable development task.

A further sustainable development basic principle promotes vertical integration between different administrative levels, as well as between public and private sectors, according to the so-called "shared responsibility" principle. This principle aims at strengthening and promoting the role of every involved party as the recipient and protagonist of actions promoting the environmental development. Therefore, co-operation projects supporting the contribution of stakeholders and each party must be promoted and carried out.

The institutional reorganization, assigning important land and environment governance tasks to regions and to local territorial authorities, urges more consistent and functional planning, designing patterns and the introduction of appropriate decision-making procedures. A new scale of plans and contents is most needed, stemming from the enforcement of sustainability Strategies at every level coherent with the national-set scheme, under the new system of autonomies, provide citizens and enterprises with timely clear-cut transparent procedures as well as a more dynamic and effective protection of land and environment resources. The criteria

which outlines objects and areas subject to partial or total protection must be granted,- whether natural, cultural, archaeological, landscape or hydro-geological, identifying a competent institution to establish terms and techno-scientific grounds for the safeguard. However, an integrated scheme of protected areas and resources must be periodically checked with the involvement of citizens and their associations.

Environmental Assessment of Plans and Programmes

The perspectives of realizing wide infrastructure works, entailing irreversible ecosystem alterations, nonetheless the consistent flow of investments to be allocated to southern regions under Objective One over the 2000-2006 period, enforcing the Community Support Framework, highlight the need to resort to suitable tools to assess and steer the sustainability of infrastructure works and to minimise their impact on the environment.

The improvement of the assessment tools demands two different categories of actions. The procedure for the Environmental Impact Assessment must be systematically enforced by making it more effective, also by setting up efficient environmental Observatories, aiming at the assessment related to the compliance of environmental compatibility judgements, and to monitor the environmental concerns of the outstanding works during their realization.

The assessment of the environmental impact of each work cannot ensure an overall sustainability. The Environmental Impact Assessment procedure is to be integrated at the early stages with plans and programmes that envisage, since their initial drafting, the required criteria for environmental sustainability. To this end, new methodologies programmes and plans of the Strategic Environmental Assessment are to be developed, widening and arranging the ongoing initiatives regarding the draft of guidelines, lists of indicators and computerized data bases to overcome a mere environmental protection and address the planned modifications towards sustainable development.

The SEA procedure envisaged by Directive 2001/42/EC calls for an integrated and interactive cross-sectoral approach which ensures the involvement of the public during the consultation process, the introduction of environmental qualitative objectives and modalities for their practical fulfilment among urban and territorial infrastructure planning and designing tools. The evaluation process within SEA, following the planning and designing procedures, will verify the coherence and the contri-

2



bution of policies, plans and programmes to the objectives, criteria and actions defined by sustainable strategies at each level.

The SEA enforcement within intervention programmes of municipalities, provinces, metropolitan cities, regions and states, through detailed negotiation procedures with concerned communities, will renovate the perspective between plans and programmes which imply environmental and territorial transformations, also to ensure the coherence and the contribution to locally-defined sustainability strategies, also through local Agenda 21 processes.

The integration of the environmental factor in the market

The demand of consumers and enterprises shows an increasing interest for products and services with high ecologic qualities. The Italian marketing success is due to the functional aesthetic features of its products, therefore the new "global quality" competitive marketing potentials has still not been thoroughly understood; the concept encloses the following three stages: dematerialization, greening, that is the proactive integration of the environmental factor, the qualitative innovation of the manufacturing processes, the quality of services and products. This is partially due to the difficulty for innovation to penetrate the SMEs peculiar structure as well as to our overall lack of fiscal, welfare and development promotion policies.

The attitudes of the leading consumers ought to be changed, among them first of all the public sector that covers 15% of EU overall services and products, followed by banks, universities, hospitals, etc. Therefore the internalisation of environmental requirements into Public Administration purchases must be considered a compulsory step towards the integration. To this end,

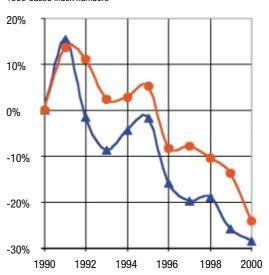
the use of flexible environmental tools such as voluntary agreements between PA and the industrial sector need to be eased.

Ecological taxation reform

The key objective for any sustainable policy consists in a re-definition of the economic incentives and disincentives. To this end a thorough ecologic taxation reform needs to be implemented, by gradually shifting the present taxable base from the manufacture usage, that is from value-added production generally speaking, to the exploitation of natural resources. The possibility of correspondently softening the tax burden on work is at the base of what is known as "a double dividend", so-called by the economists, that is an eventual workforce demand increase coupled with a decrease of the environmental pressures at a global economic level.

Figure 1 Environmental taxation trends In Italy

1990-based index numbers



预览已结束,完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5 11947



