

Strategic Environmental Assessment – necessity, principles and specificities

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Abstract. *With the development of market economy, the upgrading of manufacturing activities and the globalization of all spheres of public life, it now becomes clear that the pace of economic growth may decrease and even to acquire a negative entry, under the influence of environmental pollution. This requires an assessment of environmental risks, their management, reduction and/or prevention.*

SEA is an essential tool for integrating environmental considerations into the preparation and adoption of plans and programs which are likely to have significant effects on the environment.

The purpose of SEA is to detect the environmental issues at an early stage of development the strategic decision-making and to assess the possible effects of their implementation.

The basic principles to be observed in SEA are integration, dialogue, responsibility, willingness to defend the decisions taken in the process, awareness (information), flexibility and democracy.

SEA procedure is characterized by the following features:

- *Public participation should be an inseparable part of the process.*
- *Integrating of the planning process and the process of environmental assessment and continuous contact between the two teams.*
- *Successful consultations amongst with the stakeholders.*

The relations between man and the environment are a prerequisite for the occurrence of a number of changes in it, that can significantly deteriorate the environmental conditions. This threatens ecosystems, social stability, health and economic development and requires strict measures towards nature conservation and preventing (or limiting) the adverse impacts.

Keywords: SEA; prevention; sustainable development; preventive control; environmental management

Jel Codes: Q01; Q50; Q56; Q57; Q59

1. Introduction

With the development of market economy, modernization of manufacturing activities and the globalization of all spheres of public life, it now becomes clear that the pace of economic growth may decrease and even to acquire a negative entry, under the influence of environmental pollution, natural resource depletion, reducing bioproductivity of land and continuously growing population. This requires an assessment of environmental risks, their management, reduction and/or prevention. For this purpose a number of methods and approaches for environmental assessment are established.

Environmental assessment [1] is an important tool for integrating environmental considerations in preparation and adoption of certain plans and programs which are likely to have significant effects on the

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environment in the European Union Member States. Strategic Environmental Assessment (SEA) refers to the policy of the EU and in most cases takes place before Environmental Impact Assessment (EIA). This means that information on the environmental impact of the plan can be used for decision-making in EIA at a later stage, which could significantly reduce the amount of work in subsequent evaluations.

SEA[1] is inseparable from the term „sustainability”, and is expected to be carried out as a part of a wider Sustainability Appraisal (SA), which was already a requirement for many types of plans before the SEA Directive and includes social and economic factors in addition to environmental. Essentially SA is intended to better inform decision makers on the sustainability aspects of the plan and ensure the full impact of the plan on sustainability is understood.

Strategic environmental assessment [2] is carried out for plans and programs which are prepared for agriculture, forestry, fisheries, energy, industry, including mining activities, transport, regional development, waste management, water management, telecommunications, tourism, urban planning or land use and which set the framework for future development consent for projects listed in Annex I and any other project listed in Annex II of the Environmental Protection Act, which requires an assessment of environmental impact under national law.

The EIA Convention [3] in a Transboundary Context of the United Nations Economic Commission for Europe on February 25, 1991, encourages the parties to the Convention to apply its principles to plans and programs. In May 2003 in Kiev, Ukraine the SEA Protocol is adopted. On this basis in 2004 was developed and adopted the SEA Directive, which in practice SEA become obligatory. This Directive introduces a systematic evaluation of the environmental effects in the strategic use of natural resources.

Strategic Environmental Assessment [4] is carried out for politics, plans and programs. It constitutes a systematic evaluation process of the environmental consequences of application of relevant politics, plans and programs. This activity indicates the difference of sectoral politics at an early stage of operational decision-making and takes place simultaneously with their preparation, and takes into consideration their objectives, territorial scope and level of detail. Thus, the possible impacts of policies, plans and programs are identified, described and evaluated appropriately.

The purpose of SEA [4] is to render an account of environmental issues at the earliest stage of development of strategic planning decisions, when determining the territorial scope and evaluating the possible impacts of investment proposals in global strategies and development plans, and to make this process more transparent through consultation and participation. This assessment provides decision makers the required information to enable the consideration of the potential environmental hazards from the implementation of the plan/program.

Objects of SEA [4] are strategies, plans and programs in industry, energy, agriculture, forestry, tourism, transport, mining of underground and ground resources, water use and management of water resources, fisheries, spatial planning and land use, waste management, electronic messages, when these plans and programs outline the framework for future development of investment proposals.

Subjects of SEA [4] are the Minister of Environment and Waters, and the Directors of Regional Inspectorate of Environment and Waters (RIEW). These government bodies are authorized to give opinions in validation the national and regional plans and programs. Such assessments are prepared by registered experts, employed by specialized departments and assisted by researchers working in the field of Eco-economics. Subjects of SEA are also the registered experts preparing the reports that underpin the opinion of the Minister of Environment and Waters and the Directors of Regional Inspectorates.

The purpose of this paper is to analyze the Strategic Environmental Assessment (SEA), describing its stages, basic principles, characteristics and groups of indicators applicable to the implementation of SEA.

2. Basic SEA principles

The basic principles to be followed in SEA [4] are the principles of integration, of dialogue, of responsibility for reduction or complete elimination of the environmental impacts, of awareness, of flexibility, of democracy and willingness to defend decisions taken. They are characterised as follows:

- **Principle of integration** – This principle is applied during the implementation of the planning process in the preparation of plans and programs for development of various sectors. According to this principle, the SEA process should be integrated into the planning process and to take into account environmental issues at an early stage. It also requires a constant exchange of information between the two teams: the one who makes out the plan / program and the one who makes the assessment, in order to be achieved a high integration and to be avoided the disparities between development priorities and the loss of time and energy;
- **Principle of dialogue** – it requires the planning authorities to be in a constant dialogue with each other and with experts in environmental assessment, and that dialogue to begin as soon as the decision about the need of the plan / program is taken. If the SEA starts after the key decisions about the plan / program are taken, it is almost impossible to influence them;
- **Principle of responsibility for reduction or complete elimination of the environmental impacts** – the responsibility falls on the assignor of the plan / program, who must consult with the authorities in environmental protection and during the implementation of the plan / program to comply with environmental objectives set. Also, the assignor should prepare a report on the environmental assessment;
- **Willingness to defend decisions taken and to eliminate adverse effects on environment** – The environmental report should be submitted as part of the plan / program or along with it and the decisions must comply with the recommendations of the Report, and to contain clear references to it. If it is unlikely to comply some of the prescriptions of the Report, the authorities should justify its decision very well;
- **Principle of awareness** – finds expression in the inclusion of public and civil community in the environmental assessment process through their participation in discussion of solutions. For this purpose, the public must be informed of the steps of the environmental assessment of the plan / program and opportunities for participation. The results of the assessment must be understandable for the general public;
- **Principle of flexibility** – requires the implementation of a flexible mutually acceptable approach in identifying the correlation between the planning procedure and methods of evaluation of individual environmental impacts;
- **Principle of democracy** – it is expressed in applying the democratic approach when making decisions for implementing the various stages of evaluation. For this purpose it is better to have coherence between different policy sectors and various levels of governance, and public participation.

SEA [4] is implemented in compliance with the principles and legal requirements of the environmental assessment. Identification of steps and procedures for organization and conducting of SEA is associated with distinguishing the methodological steps of the procedure and the development of individual plan / program. The steps in the process of developing the plan / program are the basis for determining the stages of the SEA.

SEA [1], [3] is a legally enforced assessment procedure required by Directive 2001/42/EC (known as the SEA Directive). SEA Directive aims to establish a systematic assessment of the environmental impacts of strategic plans and programs related to land use. This assessment usually refers to local and regional development plans of the waste management and transport within the European Union. SEA Directive only applies to plans and programs, not politics.

3. Stages of SEA

SEA, under the SEA Directive, includes the following steps [1], [3]:

- **Screening** – determines whether the plan or program falls within the scope of SEA legislation;
- **Scoping** – determining and evaluating the scope of the assessment, making assumptions and guesses, determining the scope and content of the procedure and the groups (teams) which should be involved in the process of environmental assessment, and determining the possible connection of the plan / program with other plans / programs;
- **Documenting the environmental conditions** – a baseline scenario is developed and the baseline values, which are the basis of decisions related to evaluation, are determined;
- **Determining the possible (non-marginal) environmental impacts** – indicating the environmental impacts that might be relevant to the project, using accurate data and numbers;
- **Informing and consulting the public** – evaluation results should become available for the public;
- **Impact of the decision** – which management decisions will follow the assessment and how they are influenced by it – SEA objectives are related to determination of environmental criteria for evaluation of the selected option. Alternative ways to achieve the goals of the plan / program and measures to reduce the adverse impacts on the environment are suggested. It is necessary the potential implications of implementation of the plan / program for the areas and sectors covered by it to be considered, and also the existing situation to be assessed. The evaluation results are provided to the planning team and the two teams discuss them. At this stage no quantitative assessment of impacts is made. It is developed only during the EIA of investment proposals;
- **Monitoring** – what is the effect of implementation of plans and programs and how do they affect the environment. Measures to monitor the effects of the selected alternative are developed. The SEA team assesses the proposed program for monitoring the implementation of the plan / program and suggests measures for monitoring the environment. Thus ensures that appropriate attention to environmental impacts will be given during the implementation of the plan / program. Both teams discuss the proposed measures. During all stages of the SEA the team documents the results and summarizes them in an Environmental Assessment Report, including the non-technical summary of the Environmental Assessment Report, which is available to the public. This report includes comments from interested parties. It provides information about the environmental impacts and must be comprehensible. And the non-technical summary should be available to the public. At the end of the stage, the SEA team submits the Report to the assignor and participates in its public hearing and justification.

4. Evaluation of the alternatives

The different alternatives [4], developed in the planning process are evaluated and then one of them is selected and is developed in details. It is necessary to determine whether the alternatives meet the environmental objectives and simultaneously recommendations and conditions for further development of alternatives to be provided. The team developing the plan/program develops the objectives into possible alternatives and the SEA team determines the extent to which they meet the environmental objectives. It is possible the assessment to be very uncertain, as it is based on strategic proposals which are not developed in details. During this assessment the following methods are used:

- **Determining the qualities of the impact by an impact matrix** – it gives a visual and comprehensible presentation of the assessment results;
- **Preparation of questionnaires, interviews and discussions**, appropriate for gathering information – through this method it is easier to reach consensus and transparency;

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- **Checklists** – they are applied for registration of significant impacts and it is imperative that lists to be carefully prepared and to consider that the combined and cumulative effects involve more complex cause-effect relations than those of investment proposals;
 - **Trend analysis** – it is used for evaluating the state of natural resources, ecosystems or the sensitive areas for a certain period. It is possible to make a graphic projection that reflects both past and future state and thus present the changes;
 - **Geographic Information Systems** – they are used for spatial representation of the results of the analysis. They are suitable for determining the area of the most significant influence of the individual factors, or where there is a stress concentration due to development;
 - **Analysis of Ecosystems and Biodiversity** – It contributes to drawing the attention on the sustainable use of natural resources;
 - **Application of diagrams, networks, systems and other means** of explaining and illustrating the cause-effect relations and determining both direct and cumulative impacts;
 - A popular method of forecasting and risk evaluation is the **expert assessment**. This method is applied in order to achieve a consensus among the various stakeholders in SEA.

5. Contents of the SEA report

As any other procedure, SEA ends up with a detailed report that contains [4]:

- Description of main objectives of the plan/program and relations with other plans/programs – These objectives must be clearly identified and principles and relations with all procedures concerning the evaluation should be described;
- In-depth analysis and evaluation of all environmental issues relevant to the procedure. All alternatives are considered and the most economically advantageous tender is chosen;
- Assessment of environmental impacts of the chosen alternative – here is determined which impacts can be eliminated or minimized and measures for further monitoring are described;
- Describing the results of the environmental assessment (justification and summary of the decision-makers);
- Determining the environmental objectives of the plan/program of the relevant sector (area);
- Evaluation of different alternatives of the plan/program – determining how they contribute to achieving the environmental objectives related to the plan/program;
- Measures for monitoring and reducing the impacts of the selected alternative of the plan/program.

6. Characteristics of the procedure

SEA procedure [4] is distinguished by the following features:

- Public participation should be an integral part of the environmental assessment of plans/programs. The form of participation should be consistent with the nature and scope of the problems associated with the plan/program and to reflect the interests and values of the affected parties;
- Integration of the planning process with the process of environmental assessment and continuous contact between the two teams – The planning and environmental assessment teams should work in parallel and organize joint discussion of the results of environmental assessment at every stage of planning, in order to allow the plan/program to take into account the national and international goals in the sphere of environment;
- Successful consultations among stakeholders – they can be held in different ways. Their implementation is possible on the basis of forming an expert or public group for determining the extent of the problem and methods of implementing the debate on the problems encountered. To do

so, the upcoming evaluation procedure of the plan/program should be brought to the attention of public.

7. Necessity of SEA

The assessment system is needed [5], [6] due to the following basic positive and negative characteristics of the method:

- Integration of SEA during the formulation process of PPPs can not be achieved by adjusting the existing EIA for a project to the relevant legislation, procedures and forms. SEA has new methodological and procedural requirements. Particular efforts are needed for identifying the indirect, the secondary and the cumulative impacts that are not adequately covered by EIA at project level. The effects of strategic actions are often much more uncertain than those of projects so the methods for conducting SEA should be able to cope with this uncertainty. The timeframe of the SEA, the evolutionary nature of the strategic actions and their interaction with other strategic actions are also very different from those for specific projects and should to be considered when developing and adopting the methods of SEA. However, some principles and concepts of EIA are synonymous in SEA – they include consideration of the need of strategic actions, of alternatives and means to mitigate adverse impacts, stakeholder participation and taking into account a wide range of disciplines in the evaluation process.
- With increasing the awareness of the issues related to environment and sustainable development on a political level and in parallel with the development of environmental management systems (EMS) in government and industry, issues related to environmental protection become more important in the process of decision making. They can now include elements of SEA. For example, forming the catchment areas, the integration management plans, regional ecological plans and programs for environmental protection, etc. can now include SEA – methodologies, although they can not be recognized as such. Under this process it is necessary to determine where the elements of SEA are included and where they are insufficient, to be complemented, or to be provided an integrated framework for SEA, where there is none. When applying SEA all considerations (concerns) related to environment and sustainable development that have already been taken into account in existing strategic plans and activities should be clarified. This tendency of convergence of SEA with other methods of planning in consideration of environmental and social parameters and those related to sustainability, has certain benefits but also leads to some confusions and can lead to the assumption that "we already do SEA but do not call it so". This is partially true, but SEA can determine the framework for introduction of these techniques together in a more structured and comprehensive manner, moving towards to a more integrated analysis of sustainability. Even where the existing techniques focus on the environment, the SEA allows this focus to expand, which is particularly suitable for strategic actions (plans) and for decision-making, where certain environmental costs can be balanced by other environmental benefits on another level where strategic decisions should be based on a wide range of social, economic and environmental factors.
- SEA can be applied to a wide range of strategic actions at all levels (international, national, regional, local), sectors and resources, plans and politics and in terms on fundamentally different issues.

8. Political and institutional context

The reason for describing the political and institutional context of SEA [7] is that it defines the objective of strategic actions and determines what can or can not be done in strategic plan. This step involves identifying of:

- The strategic actions, which are to be prepared and a response to the questions why these exact actions will be prepared; what other strategic actions are required by law (if any) and what is the history of development of the plan;
- Other strategies that support or limit the forthcoming strategic actions – higher requirements or a low level of actions that can help or hinder the implementation of the strategy;
- Current opportunities and practices for protecting the environment – at what professional level is the business in the area, is there a system for environmental management, etc.;
- Contemporary approaches to social issues – how and to what extent the problems with gender inequality and poverty were overcome, how important are the traditional cultural and religious practices and how would they influence the decision for strategic actions;
- Other institutional factors such as: who has the most important role in taking the key decisions in the field; what determines the funding; is cooperation with other organizations that are not local a common practice, etc.

9. Limitations of SEA

SEA is a new procedure referred to preventing environmental damages caused by decisions about adopting or not programs, plans and politics, relevant to the aspects of environment and human life. As a relatively new tool for integrating sustainability in decision-making, SEA has a number of technical and procedural constraints [8], [9], namely:

- On the technical side the relative lack of case studies and experience of SEA exacerbates these limitations. On the procedural side decision-makers, competent authorities and stakeholders must be aware that SEA is inherently a political process, and should ensure that SEA informs decisions but does not make them;
- Each SEA system and methodology should be able to cope with many issues – SEA must be able to cope with a more nebulous decision-making process, with uncertainty, with larger scales and with induced, secondary and cumulative impacts. The techniques used in SEA are often a combination of those used in traditional policy analysis and those used in EIA;
- SEA and decision-makers – SEA might be seen as a political act aiming to mislead voters that politicians care about the environment, because many problems are not completely developed, but the focus is on some of their individual aspects, which leads to partial solutions.

Table: Technical and procedural constraints of SEA [8]

Technical and Procedural Limitations of SEA		
Type	Limitation	Outcome
Technical	SEAs generally cover a large area - sometimes several countries - and a large number of alternatives	This makes collecting and analysing data for SEAs very complex
	SEAs are subject to greater levels of uncertainty than project EIA	Uncertainty, in terms of future environmental, economic and social conditions, likely development as a result of the PPP, and likely future technologies

Technical and Procedural Limitations of SEA		
Type	Limitation	Outcome
	SEAs often have to cope with limited information	Environmental data collected in different countries are often incompatible or limited
	SEAs have to deal with information at a different level from project EIAs	A national-level SEA needs to focus on national -level concerns, and thus may have to disregard impacts that are important at a local level but that do not influence a national-level decision
Procedural	A strategic action may have no formal authorisation stage	Instead it evolves in fits and starts through to implementation. There may be issues of confidentiality. Decision-makers may also be concerned that SEA should not take over the process of decision-making. SEA is also inherently a political process.
	The concept of SEA, particularly sustainability-led SEA, is not yet politically accepted	Many countries' traditional approaches to policy-making, the worldwide emphasis on economic well-being (e.g. GNP) rather than total quality of life, and the sheer effort involved in determining sustainability criteria/targets all frustrate this concept.

10. Basic information needed before initiating SEA

Some basic information [10] about a strategic action is needed before it can be subject to SEA:

- What is the level (policy, plan, program) and scale (international, national, national, regional, local) of the strategic action? – The higher the level and larger the scale are, the more broad-brush and qualitative the SEA is likely to be.
- What is the time period of the strategic action? – This affects the time period over which SEA predictions are made: most SEAs make predictions that go to, or beyond, the lifetime of the strategic action.
- Is the strategic action one-off or cyclical? – Cyclical strategic actions are those that get updated regularly: typically every 3-10 years. For cyclical strategic actions, there will often be an existing strategic action which would act as the 'do minimum' scenario in SEA. One-off strategic actions are more likely to have an indefinite time-span, and typically won't be replacing an existing strategic action.
- Is the strategic action for a sector (e.g. waste, energy); or a land use plan for an area (e.g. region, local authority); or something different still? – Sectoral strategic actions often lend themselves to modelling, and to more detailed, quantitative SEA predictions. Land use plans are often more complex, with more interacting factors.
- Who is the competent authority, and what other stakeholders are involved in developing the strategic action? – Depending on who the SEA audience are, they could be fully involved in the SEA process, or could simply read and respond to SEA reports, or something in between.
- Is the competent authority a public or a private agency? – This will determine who it is accountable to, what issues it must consider, and what constraints it works under.

11. Development of objectives and indicators of SEA

Methods of carrying out SEA [11] must be specified at the beginning of the SEA procedure. Guidelines for determining the scope suggest that the responsible authorities should specify the purpose of SEA at the stage of determining the scope and should work with the advisory bodies. If the responsible authorities intend to use an alternative valuation method consultations during the scoping stage are recommended. Some of the problems in identifying the SEA objectives are:

- It is good practice for SEA objectives to focus on outcomes (or ends), not how the outcomes will be achieved ("inputs" or means). For example, they might focus on improved biodiversity, rather than protection of individual wildlife sites.
- SEA objectives can be supported by a list of more detailed criteria or questions. For example, an SEA objective to protect the aquatic environment could be supported by questions about water quality, watercourses, aquifers and marine and coastal waters, water abstraction and flooding. Impacts affecting the features which make up the historic environment can be identified through these supporting criteria.
- The development of SEA objectives and indicators and the collection of baseline information should inform each other. As the SEA objectives become clearer, they should help to focus (and where necessary restrict) the collection of baseline information, whilst the baseline information should help to identify which SEA objectives are of most concern for a particular project.
- Each SEA objective should be genuinely needed and should not duplicate or overlap with other objectives. Experience suggests that between 8 and 16 objectives are normally enough to cover the range of topics needed for SEA and to keep the process efficient and manageable.
- SEA objectives should be linked to indicators which measure progress or otherwise towards or away from them.

Table: Determination of SEA objectives [12]

SEA topics	Possible SEA objectives (to be adapted to regional/local circumstances)	Possible SEA indicators (to be adapted to regional/local circumstances)
Biodiversity, fauna and flora	<ul style="list-style-type: none"> ➤ to conserve and enhance the integrity of ecosystems ➤ prevent damage to designated wildlife and geological sites and protected species ➤ maintain biodiversity, avoiding irreversible losses ➤ reverse the long term decline in farmland birds ➤ ensure the sustainable management of key wildlife sites and the ecological processes on which they depend ➤ provide appropriate opportunities for people to come into contact with and appreciate wildlife and wild places 	<ul style="list-style-type: none"> ➤ reported levels of damage to designated sites/species ➤ achievement of Biodiversity Action Plan targets ➤ reported condition of nationally important wildlife sites, Sites of Special Scientific Interest (SSSI) etc. ➤ number/area of Local Nature Reserves
Population and human health	<ul style="list-style-type: none"> ➤ create conditions to improve health ➤ protect and enhance human health 	<ul style="list-style-type: none"> ➤ number of transport/pedestrian/cyclist road accidents

	<ul style="list-style-type: none"> ➤ decrease noise and vibration ➤ maintain and improve opportunities to access public open space ➤ conserve and enhance the quality of the built environment ➤ improve and promote appropriate access to the natural and historic environment 	<ul style="list-style-type: none"> ➤ number of people affected by ambient noise levels ➤ proportion of population within 200m of parks and open spaces
Water	<ul style="list-style-type: none"> ➤ limit water pollution to levels that do not damage natural systems ➤ maintain water abstraction, run-off and recharge within carrying capacity (including future capacity) ➤ maintain and restore key ecological processes (e.g. hydrology, water quality, coastal processes) ➤ protect and, where necessary, enhance waterbody status ➤ reduce / manage flood risk 	<ul style="list-style-type: none"> ➤ quality (biology and chemistry) of rivers, canals and freshwater bodies ➤ quality and quantity of groundwater ➤ water use (by sector, including leakage), availability and proportions recycled ➤ water availability for water-dependent habitats, especially designated wetlands ➤ extent of use of Sustainable Urban Drainage solutions in new development
Soil	<ul style="list-style-type: none"> ➤ safeguard soil quality, quantity and function ➤ reduce levels of brownfield, derelict and contaminated land in the plan area 	<ul style="list-style-type: none"> ➤ amount/loss of greenfield / brownfield land and proportion available for reuse ➤ number of houses affected by subsidence, instability, etc. ➤ land identified on Scottish Vacant and Derelict Land Survey (number of hectares) ➤ hectares of contaminated land in plan area
Air	<ul style="list-style-type: none"> ➤ to maintain and improve air quality ➤ limit air pollution to levels that do not damage natural systems ➤ limit air emissions to comply with air quality standards 	<ul style="list-style-type: none"> ➤ number of days air quality limits exceeded annually ➤ levels of key air pollutants / by sector and per capita ➤ achievement of Emission Limit Values ➤ population living in Air Quality Management Area ➤ distances travelled per person per year by mode of transport (proxy indicator) ➤ modal split (proxy indicator) ➤ traffic volumes (proxy indicator)
Climatic factors	<ul style="list-style-type: none"> ➤ to reduce the cause and effects of climate change ➤ reduce greenhouse gas emissions ➤ reduce vulnerability to the effects of climate change e.g. flooding, disruption to travel by extreme weather, etc. 	<ul style="list-style-type: none"> ➤ electricity and gas use (proxy indicator) ➤ electricity generated from renewable energy sources and CHP located in the area (proxy indicator) ➤ energy consumption per building and per occupant (proxy indicator) ➤ carbon dioxide (CO₂) emissions by sector/ per capita

		<ul style="list-style-type: none"> ➤ amount of development in the floodplain ➤ flood risk
Cultural heritage	<ul style="list-style-type: none"> ➤ protect and, where appropriate, enhance or restore the historic environment ➤ preserve historic buildings, archaeological sites and other culturally important features ➤ promote access to the historic environment ➤ improve the enjoyment and understanding of the historic environment 	<ul style="list-style-type: none"> ➤ number and outcome of Listed Building Consent applications received ➤ number and outcome of applications received for Listed Building demolition ➤ number and outcome of applications for Scheduled Monument Consent received ➤ number of planning applications rejected for not complying with Development Plan policy relating to historic environment ➤ condition (as affected by strategic action of PPS) ➤ number and outcomes of planning applications that affect gardens and designed landscapes
Landscape	<ul style="list-style-type: none"> ➤ to conserve and enhance landscape character and scenic value of the area ➤ protect and enhance the landscape everywhere and particularly in designated areas ➤ value and protect diversity and local distinctiveness ➤ improve the quantity and quality of publicly accessible open space 	<ul style="list-style-type: none"> ➤ number and area of designated landscape areas ➤ percentage of land designated for particular quality or amenity value, including publicly accessible land and greenways
Material assets	<ul style="list-style-type: none"> ➤ to promote sustainable use of natural resources and material assets ➤ minimise waste, then re-use or recover it through recycling, composting or energy recovery ➤ to promote effective use of existing infrastructure 	<ul style="list-style-type: none"> ➤ amount of waste generated ➤ waste disposed of in landfill ➤ percent of waste recycled or reused

12. SEA indicators:

Potential SEA Indicators [13], [14], [15] according to assessment purposes – As the implementation phase of the Strategy progresses, it is recommended that each Implementation Sub-Group identifies those indicators most applicable to their activities, such that the development of an effective monitoring framework becomes an organic process, with indicators and review periods identified for each proposed action before implementation. In this way, there will develop an effective record of implementation, with associated indicators which will help identify trends for future baseline studies in conjunction with the next review of the Forward Strategy for Agriculture.

Indicators – the European Commission has developed a list of common indicators to be used in the Common Monitoring and Evaluation Framework. They are directed to improving the monitoring and implementation of the Rural Development Program. These indicators are divided into five groups – basic

indicators related to purposes, basic indicators related to context, output indicators, outcome indicators and impact indicators. They are distributed in the respective axes: Axis 1 Improving the competitiveness of the agricultural and forestry sector; Axis 2, Improving the environment and the countryside through land management; Axis 3 Improving the quality of life in rural areas and encouraging diversification of economic activity and Axis Leader+ as follows:

- Basic indicators related to objectives – here 36 indicators that are identical to those applied for Sustainability Impact Assessment are included. They are divided into 5 sub-groups – horizontal indicators and indicators for assessment of all the axes;
- Basic indicators related to context – 36 indicators that are identical to those applied for Sustainability Impact Assessment are used. They are divided into 4 sub-groups – horizontal indicators and indicators for axis 1, 2 and 3;
- Output indicators – 79 indicators are used. They are divided into 4 sub-groups – indicators for assessment of all 4 axes and they depend on the specific measures in the relevant axis;
- Result indicators – 16 indicators for axis 1, 2 and 3 are included. They depend on the purposes of the relevant axis;
- Impact indicators – 7 indicators are included – Economic growth; Employment creation; Labour productivity; Reversing biodiversity decline; Maintenance of high nature value farming and forestry areas; Improvement in water quality and Contribution to combating climate change.

13. Conclusions

The relationship between mankind and environment is a prerequisite for occurrence of a number of amendments in it, which can significantly deteriorate its condition. This threatens ecosystems, social stability, health condition and economic development and requires the need of strict measures towards conservation and prevention (or limiting) the adverse impacts. Therefore an environmental assessment of all strategic and planning documents on different levels becomes a major tool for maintaining the ecological stability.

One of the most important procedures related to nature conservation and achieving the objectives of sustainable development is the strategic environmental assessment of plans and programs (SEA). SEA is one of the basic tools for preventive control and is also an integral part of the process of development and adoption of plans, programs and politics. Its main objective is achieving a sustainable development, minimizing the adverse impacts on environment and improving its quality. SEA should ensure that plans and programs take into account the potential environmental impacts they cause.

Environmental assessment is an important tool for integrating the environmental considerations into preparation and adoption of certain plans and programs which are likely to have significant effects on environment in the Member States of the EU. Strategic Environmental Assessment refers to the policy of the EU and in most cases takes place before EIA.

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