

Methods for the Evaluation of the Environmental Impacts of the Structural Funds Programme

Mission

Environment and sustainability issues have gained significance in the EU Structural Funds Planning Period 2000 – 2006. In contrast to the period 1995 – 1999, the environment is to be taken into consideration as a horizontal issue analogous to the treatment of the gender aspects in all priorities and measures of the Structural Funds Programmes.

This study, commissioned by ÖROK, has developed a method that can be used to evaluate how far the measures prescribed in the regional objective programmes help to improve the environment. The study focuses on projects co-financed by the European Regional Development Fund (ERDF), as these account for the major share of the funds allocated. The incorporation of environmentally relevant issues and investigations into the monitoring of the Structural Funds Programmes is a necessary requirement if the assistance measures are to be evaluated for their environmental effects.

Within the scope of this study, the requirements were defined that are substantial for a mid-term evaluation of the environmental and sustainability aspects of the Structural Funds Programmes. This was achieved by assessing the suitability of the monitoring methods and indicators for evaluating environmental impacts and how effectively they were implemented, and in collaboration with the managing authorities involved, these indicators were also supplemented and more precisely defined.

The report contains an investigation of the basic options available for the description of environmental impacts and an analysis of the relevant data available in Austria. Furthermore, based on this information, a proposal for the evaluation method and a second proposal for expanding the monitoring of the ERDF have been developed and already implemented at the bodies responsible for state aid and at the ERP Fund. On the basis of the evaluation of the data obtained in the first year of the new Structural Funds period, an exemplary analysis and test evaluation was conducted. This should clarify the question whether the methods should be used for the mid-term evaluations of the Objective 1 and Objective 2 programmes commissioned in 2002 in Austria.

Method

The **method proposed** concentrates on the programme priorities co-financed by ERDF and attempts to find out whether the Structural Funds Programmes (Objective 1 and Objective 2) can contribute to the improvement of economic structures with respect to the concept of sustainability such as lowering energy consumption, reducing emissions and maintaining biodiversity. The underlying assumption is that the national state aids co-financed and supported under the Structural Funds Programmes are largely targeted at economic development goals and therefore the state aid regulations (with the exception of assistance explicitly for environmental schemes) also refer to these goals. Capital spending by the business sector generally only takes into account environmental goals, as these are stipulated in technical regulations and approval procedures and in those cases in which it is of relevance for the market that production processes and products are environmentally sound.

Looking at the projects receiving assistance and investigated in this study, the question arises whether and to what extent – despite the general conditions mentioned above – investments are currently being made in sustainable, environmentally-friendly technologies and processes that go beyond the required minimum standards, and thus contribute to the goal of economic sustainability.

The **questions (indicators)**, which were developed jointly with the managing authorities within the scope of the monitoring task are based on categories of projects defined by the volume of total eligible costs and were drafted on the assumption that larger projects have a greater environmental effect. Therefore, with the increasing size of the projects, more and detailed questions are investigated.

An environmental indicator was created for **all projects** based on the grouping of the projects as set out in Annex IV of the Decree on the Implementing Provisions for Administration and Control Systems.² This requires an assessment for every project according to the categories “in accordance with statutory requirements” “positive impacts” and “very positive impacts” **for four environmental dimensions** (pollution, consumption of resources, waste and biological diversity). The categorisation of the projects is done by the bodies responsible for state aid based on the jointly drafted and specified **Guidelines** at several workshops, which differentiate the qualitative criteria by **area of intervention** and allow the categorisation of the projects as positive or very positive with respect to their environmental impact.

2 Commission Regulation (EC) No. 438/2001 of 2 March 2001 laying down provisions for implementing Regulation (EC) No. 1260/1999 of the Council on the administrative and control systems of interventions by the Structural Funds: this regulation stipulates that Member States are under the obligation to say whether a project a) is mainly environmentally oriented, b) environmentally friendly, c) environmentally neutral. These terms are used in the following: a) very positive impacts (on the environment), b) positive impacts (on the environment), and c) in accordance with statutory requirements.

For **medium-sized and larger projects** with a positive environmental impact, an additional written statement is required. Furthermore, when medium-sized or larger businesses apply for assistance, additional information on the enterprise is requested. This may include environmentally relevant information about an enterprise's certification and activities that go beyond statutory requirements. In the case of **larger projects** a detailed description of the measures taken and their effects is required as well as information on the project's location and the local conditions.

An overview of the questions asked within the scope of monitoring is given in Table K1.

Table K1

Summary of the indicators for the environmental evaluation by project size

Smaller projects Project costs eligible for assistance < € 350,000	Medium-sized projects Project costs eligible for assistance € 350,000 to € 3.5m	Larger projects Project costs eligible for assistance > € 3.5m
Environmental indicators (evaluation according to four environmental dimensions)	Environmental indicators (evaluation according to four environmental dimensions)	Environmental indicators (evaluation according to four environmental dimensions)
	Written statement explaining the reasons for the environmental indicators	Written statement explaining the reasons for the environmental indicators
	Additional indicators on the enterprise	Additional indicators on the enterprise
		Detailed description of the environmental impacts

Source: ÖIR

Although project developers will not be motivated to produce environmentally friendly projects just because of the monitoring process, which includes some questions on a project's environmental effects, however – as things stand today – at least the quality of the features of the programmes' effects on the environment in spatial and temporal terms can be collected and demonstrated. Kommunalkredit Austria (KKA) currently administrates assistance for most of the projects that are specifically designed to be environmentally friendly. However, these projects account for only a small share of the total number of projects receiving assistance from the Structural Funds Programmes.

Exemplary analysis of the environmental monitoring data

The application of the indicators tested in the exemplary analysis aimed to discover the proportion of ERDF co-financed projects that have potentially positive effects on the environment relative to the total number of projects that receive co-financing from the ERDF; Additionally, projects receiving financial assistance were analysed to winnow out effects on the different environmental dimensions and to pinpoint where specific and innovative efforts to address the environmental aspects have been made.

The results of the analysis indicate substantial differences between assistance programmes, assistance priorities and areas of intervention with respect to their significance for sustainable development. Overall, the test evaluations of a total of 1,143 projects determined that 27% have one or more positive environmental effects (35% of the total project volume to date of €1,064m), and in some assistance priorities up to 78% of projects contribute positively to environmental protection.

Table K2

Environmental impacts of the projects: Share of ERDF co-financed projects with a positive environmental impact in %, by project size, 2001

	Positive or very positive impacts in the Environmental dimensions					Total
	0	1	2	3	4	
Small projects	73.7	5.6	16.1	1.9	2.7	100.0
Medium-sized projects	73.6	11.2	8.2	4.5	2.6	100.0
Large projects	60.3	11.0	8.2	12.3	8.2	100.0
Total	72.8	7.3	13.7	3.1	3.1	100.0

Furthermore, there is a clear relationship between the existence of other environmentally relevant entrepreneurial activities (e.g., environmental commissioner, certification, etc.) and projects with a positive environmental impact.

It was also possible to determine a spatial and programming focus that shows that at least some influence can be exerted in certain areas through project selection and other (exogenous) mechanisms on the sustainability of entrepreneurial activity (e.g., via technology assistance, cluster formation, certification, promotion of a knowledge base). It may be assumed that these mechanisms take effect before investment subsidies and guidelines are implemented.

For example, **the location of projects** reveals a concentration of environmentally-friendly projects (see Map 1 in the long version) in the region of southern and south-eastern Vorarlberg (district of Bludenz) where quite a few projects with a positive impact in up to four environmental dimensions may be found. Clusters have also

formed in industrial and commercial zones such as Judenburg – Bruck/Mur – Südburgenland, the region Perg-Amstetten-Melk and the western part of Upper Austria where funds are frequently applied to material investments relating to the environment and to businesses' environmental projects.

However, we would like to point out that all of the interpretations of the analyses mentioned here must be viewed with great caution. The reason is that data from the monitoring system at the time of the survey (March 2002) were very rudimentary due to the brief programming period and the ex-post adjustments that became necessary, and therefore, there may be strong statistical distortions.

Conclusion

Overall, the exemplary analysis reveals that despite the quite constrained framework for project assistance, it is largely possible to grant substantial assistance to projects with positive environmental effects. The fact that there are enormous differences as regards the spatial aspects and measures shows that there is significant scope for actions in the areas of programme implementation, project selection and other instruments that have a major influence on economic development. This refers especially to the technological and knowledge-related business needs. It may be assumed that technology policy, competence centres, assistance for research, university facilities and specialised colleges will contribute substantially to the development of a sustainable economy. To what extent the regional mainstream programmes will also reinforce this trend and encourage a selection fostering sustainability apparently also depends largely on the programmes' implementation. An environmental and thematic programme evaluation might look in more detail into these preliminary findings.

The exemplary analysis leads to the conclusion that in preparing the monitoring database for the environmental evaluation, these questions are feasible and meaningful within the scope of the monitoring process. The standardised questions and the largely standardised answers as well as the Guidelines make it easier to compare the various Structural Fund programmes, regions and periods and are thus a prerequisite for conducting the analysis. Subsequently, it would be necessary to examine the experience gained by the bodies responsible for state aid in implementing this component in the ERDF monitoring and look at whether improvements and more detailed information would be meaningful, and how quality assurance might be achieved.

Finally, we must point out that, using the indicators and information available, an investigation of the requirements has shown that within the scope of the interim and ex-post evaluation of the Structural Funds Programmes it is not possible to achieve a quantified representation of the impacts of one or more of the projects on a specific location.

- The indicators and the additional contents contain mainly qualitative statements (exception: the KKA projects)
- Quantitative, regional environmental impact balance sheets differentiated by environmental media for the Objective areas are not available and will not become available in the foreseeable future.

The information available allows us to make a statement on how relevant environmental and sustainability issues are considered in the Structural Funds Programmes. If surveys of the monitoring are continued it will also be possible to analyse their spatial and temporal effects, as well as to look at programme priorities, areas of intervention and economic activities.

Above all, it will be interesting to investigate and filter out the regional, temporal and structural differences in clusters of projects with positive environmental impacts. This will help to determine whether there are significant development tendencies in the duration of the projects' implementation, such as an increase or decline in the share of projects that are good for the environment. To attain sustainable economic development or to point out false paths of development and quickly identify positive developmental approaches, it will be necessary to develop – on the basis of a continuous monitoring database – values of comparison and benchmarks. However, this will only be possible if there is a continuing and systematic treatment of the issue of sustainability. This means that a monitoring database has to be maintained, which allows a quick assessment of the level and tendencies of the Structural Funds Programmes' implementation with respect to sustainable economic development, the detection of false developments and positive approaches, and to facilitate a more detailed analysis.