

**The European Union's IPA 2008 Programme
for the Republic of Croatia**

**Ex-ante evaluation of Programme Documents
and strengthening evaluation capacity for EU
funds post-accession**

(EUROPEAID/130401/D/SER/HR)

SF OP ENVIRONMENT 2007-2013

Ex-Ante Evaluation Report

Croatia

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LIST OF ABBREVIATIONS

AP	Accession Partnership
CARDS	Community Assistance for Reconstruction, Development and Stabilisation
CBS	Central Bureau of Statistics
CFCA	Central Financing and Contracting Agency for EU Programmes and Projects
CODEF	Central Office for Development Strategy and Coordination of EU Funds
CW	Croatian Waters
DG	Directorate-General
EC	The European Commission
EPEEF	Environmental protection and Energy Efficiency Fund
EPOP	Environmental Protection Operational Programme (IPA)
ERDF	European Regional Development Fund
EU	European Union
EUROSTAT	Statistical Office of the European Communities
EWG	Evaluation Working Group
FB	Final Beneficiary
GDP	Gross Domestic Product
GoRC	Government of Republic of Croatia
HRD OP	Human Resources Development Operational Programme
IB	Intermediate Body
IPA	Instrument for Pre-Accession Assistance
IPARD	IPA Rural Development Programme
ISPA	Instrument for Structural Policies for Pre-accession
KE	Key Expert
MA	Managing Authority
MC	Monitoring Committee
MoA	Ministry of Agriculture
MoE	Ministry of Economy
MENP	Ministry of Environmental and Nature Protection
MFEA	Ministry of Foreign and European Affairs
MFIN	Ministry of Finance
MIS	Monitoring Information System
MoC	Ministry of Culture
MRDEUF	Ministry of Regional Development and EU Funds
NAO	National Authorising Officer
NGO	Non-Governmental Organisation
NIPAC	National IPA Coordinator
NKE	Non-Key Expert
NPIEU	National Programme for the Integration of the Republic of Croatia into the European Union
NSRF	National Strategic Reference Framework
OP	Operational Programme
OPE	Operational Programme Environment
PA	Priority Axis
PD	Project Director



PIU	Project Implementation Unit
PSC	Project Steering Committee
RCOP	Regional Competitiveness Operational Programme
SAPARD	Special Accession Programme for Agriculture and Rural Development
SCF	Strategic Coherence Framework 2007 – 2013
SDF	Strategic Development Framework for 2006 – 2013
SEA	Strategic Environmental Assessment
SF	Structural Funds
SWOT	Strengths – Weaknesses – Opportunities – Threats
TAT	Technical Assistance Team
TP	Technical Proposal
TOP	Transport Operational Programme
UNDP	United Nations Development Programme



PROJECT SYNOPSIS

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1. EXECUTIVE SUMMARY

Objectives and scope of evaluation

According to the methodological working paper¹ that focuses on the content and organisation of Ex-Ante Evaluation of Operational Programmes for the 2007-2013 programming period, the Evaluation should answer the following questions:

- Does the Programme represent an appropriate strategy to meet the challenges confronting the region or sector?
- Is the strategy well defined with clear objectives and priorities and can those objectives be realistically achieved with the financial resources allocated to the different Priorities?
- Is the strategy coherent with policies at regional, national (including the National Strategic Reference Framework) and Community level? How will the strategy contribute to the achievement of the Lisbon objectives?
- Are appropriate indicators identified for the objectives and can these indicators and their targets form the basis for future monitoring and evaluation of performance?
- What will be the impact of the strategy in quantified terms?
- Are implementation systems appropriate to deliver the objectives of the Programme?

The conclusions of the Ex-Ante Evaluation must provide a response to these broad questions.

The following methodology informed the development of this Ex-Ante Evaluation Report:

- Desk-based review of background literature, Programme texts, other documentation, including policy documents (Appendix C outlines the main documents reviewed);
- Data analysis of Programme performance indicators, along with wider labour market and socioeconomic data;
- Strategic consultations with each of the key stakeholders and other members of the Evaluation working group. Consultations were undertaken with officials from the Ministry of Environment and Nature Protection (MENP), Ministry of Agriculture (MA), Ministry of Regional Development and EU Funds (MRDEUF), Central Finance Contracting Authority (CFCA), Croatia Environmental Agency, ECOFUND and Croatia Water through a mix of individual and group meetings. (Appendix B identifies the participants in these consultations);

The Operational Programme Environment (OPE) has been prepared to absorb the EU funds allocated for the implementation of the EU cohesion policy in the environment sector in Croatia covering a rolling seven year period 2007-2013. The programme was prepared under the coordination of the Managing Authority for the OPE, the Ministry of Environment and Natural Protection (MENP).

The main **findings** of this Evaluation are presented below:

Rationale & Consistency of Intervention Logic

The Ex-Ante Evaluators have the following comments on the socio-economic analysis:

¹ EC, DG Regional Policy. "The New Programming Period 2007-2013. Working Document No 1: Indicative Guidelines on Evaluation Methods: Ex-Ante Evaluation. (August 2006)".



- The Programme document presents reasonable detailed baseline analysis, capable of serving its main purpose – identification of needs for intervention, in order to achieve maximum cost-effective improvement in key aspects of the environment in Croatia.
- The analysis convincingly demonstrates that the waste and water sectors (and particularly the lack of technical infrastructure) constitute critical challenges for effort to improve environmental quality and to achieve compliance with environmental protection standards required by the EU acquis.
- The baseline analysis does not pay particular attention to the broader socio-economic environment. Note however, that in evaluators opinion, the missing description of the socio-economic context did not have negative impact on the overall soundness of the analysis, its conclusion and consequently on the OP's rationale and proposed strategy.

SWOT analysis

The SWOT analysis derives from the socio-economic analysis and is presented in autonomous sections for environmental situation in general, and for waste and water sectors in particular. The construction of the SWOT analysis putting main emphasis on the two identified key sectors helps to highlight most important S,W,O, and T statements relevant for the developing a rationale for the design of strategy for interventions.

Relevance of the strategy to the identified needs

As indicated above, the Programme document appears to have reasonable detailed baseline analysis, capable of serving its main purpose – identification of needs for intervention, in order to achieve maximum cost-effective improvement in key aspects of the environment in Croatia. Considering the high investment-intensity of interventions necessary for addressing those identified needs, the presented strategy rationally concentrates on interventions where the limited national financial resources constitute critical barrier to their implementation (i.e. interventions of critical importance for achieving of environmental policy goals that would not be possible to implement in foreseeable future without external financial assistance).

Rationale & Consistency of Intervention Logic

The OP Environment outlines two Priority Axis, each with individual strategic objective further specified into several operational goals. The rationale for limited focus on two key priorities (waste and water) instead of broader range of environmental issues (suitable candidates being e.g. air and nature and biodiversity) is justified in Programme document. Both priority sectors are of key importance not only from environment protection point of view, but have also wide social and economic connotations. At the same time, the interventions capable of delivering a substantial change of current unsatisfactory situation are highly investment-intensive, and therefore difficult for Croatia to implement without external (international) assistance. Furthermore, both water and (to a less extent) waste sectors have also potential for contributing to the solution of existing environmental problems with trans-boundary dimensions (trans-boundary pollution of watercourses, maritime pollution, trans-boundary shipments of hazardous wastes, and the like), which again can provide rationale for making them priority targets in the framework of strategy serving for allocation of resources from the EU Structural Funds.

Strategy's External Coherence with other Policies (national, NSRF, EU)

The OP Environment has been demonstrably prepared with regard to all key national and EU policy documents.



Adequacy of System of Indicators

The design of the system of indicators reflects specific characteristics of the OP Environment, namely its limited temporal, and financial scale (comparing to similar national-level OPs), as well as the fact that the OPE is to be implemented principally through a relatively small number of clearly envisaged projects (mainly infrastructural investments). The Programme document does not present Context Indicators, neither it introduces an autonomous set of Programme Indicators as suggested by relevant methodological guidelines

Main Findings with regard to Expected Outcomes & Impacts

Considering the nature of the interventions envisaged under the OP Environment, it can be expected with high degree of certainty, that the OP's implementation will have variety of predominantly positive impacts both in terms of fulfilling of the stated environment-related goals, and indirect positive impacts on other thematic areas (regional development, social cohesion, competitiveness).

Appraisal of Structures and Procedures for Programme Implementation

The proposed implementation system can be assessed as follows:

- The proposed delivery system will contribute to a sound and efficient management and monitoring of the interventions.
- The division of the work between the Monitoring Committee, the Management Authority and the intermediate bodies seems transparent.
- Clear demarcation should be made in the role of Managing Authority and Central Coordination Authority otherwise there is a risk of organisational inefficiency or duplication (implementation responsibilities are shared)
- Responsibility for Priority Ax1s 1 management should be stated. It is recommended to maintain the responsibility for PA1 management within the MA at the Ministry of Environment.
- Clear information on the responsibility for Management and Information System (MIS) is missing.
- It is difficult to assess the competitiveness and transparency of the selection procedures of non-major projects already now. It is clear that all procedures will follow the provisions within the EU regulations.
- Control and audit measures, as much as can be learned from the OP, are also in line with national and community regulations.
- All relevant institutions will be involved in the implementation. It is important to involve the social partners as beneficiaries.
- As a whole, it may be concluded that the quality of the description of the implementation of the OP is satisfactory.

The main **conclusions** of this Evaluation are presented below:

- The March 2012 draft of the Operational Programme Environment 2007-2013 may be qualified as a document that meets the EU standards.
- The Programme document presents reasonable detailed baseline analysis, capable of serving its main purpose – identification of needs for intervention, in order to achieve maximum cost-effective improvement in key aspects of the environment in Croatia.
- The baseline analysis does not pay particular attention to the broader socio-economic environment. Note however, that in evaluators opinion, the missing description of the socio-economic context did not have negative impact on the overall soundness of the analysis, its conclusion and consequently



on the OP's rationale and proposed strategy.

- Considering the high investment-intensity of interventions necessary for addressing those identified needs, the presented strategy rationally concentrates on interventions where the limited national financial resources constitute critical barrier to their implementation (i.e. interventions of critical importance for achieving of environmental policy goals that would not be possible to implement in foreseeable future without external financial assistance).
- The OP introduces a consistent set of complementary priorities supporting not only the main Programme objective, and the priorities' own respective objectives, but also with potential for mutually reinforcing effects resulting from their simultaneous implementation.
- The strategy and interventions are coherent with EU and national policies, including complementarity with the other Operational Programmes.
- Indicators presented are largely appropriate to measure the changes in relation to the specific objectives of the Programme.
- The expected impact of the Programme is broadly in line with the objectives set. Socio-economic impacts are limited by the relatively modest amount of financial resources allocated to the Programme.
- The future Programme implementation bodies already take actions that should lead to the timely preparation of necessary OS descriptions and start of the Compliance Assessment.

Based on the overall evaluation of the Programme document, following **recommendations** are suggested:

- Regarding the socio-economic analysis: To expand the baseline analysis and to include a brief outline of main relevant socio-economic trends.
- It is recommended to introduce context indicators in the OP for both sectors of waste and water (see section 5.1.3)
- Regarding the expected results and impact: as has also been recommended by the Commission, the quantification of its main objective (the amount of persons covered by the Programme) should be improved and supported by a well-explained quantification of the results for the main key areas of intervention, which is especially lacking.
- Regarding the implementation: the demarcation among the role of MA and Central Coordination Authority should be clearly designed. It is to decide on responsibility for PA2.
- It is recommended to revise and further develop Chapter 3.4 to reflect the changes in design of NSRF and all OPs.



2. INTRODUCTION

Based on the requirements of the Financing Agreement for the Operational Programme Environment 2007 – 2013 (OPE), the Contracting Authority (Central Financing & Contracting Agency - CFCA) launched the Ex-Ante Evaluation of the OP as part of Project EuropeAid/130401/D/SER/HR, seeking to provide independent analysis of the Programme Document and to formulate recommendations for adjustments in order to ensure good Programme performance and optimise the impact of Structural and Cohesion Funds absorption and management.

The **overall objective** of this Project is to contribute to the effective implementation and management of EU Cohesion Policy funds in Croatia, in line with the EU requirements.

The **purpose** of this Project is to undertake evaluation activities for the purpose of programming EU assistance, in line with Council Regulations No. 1083/2006, 1698/2005, 74/2009 and 1198/2006, and to establish capacity for evaluation of EU co-funded Programmes on Croatia's EU accession.

The Ex-Ante Evaluation is compulsory for every OP according to the regulatory framework for the period 2007-2013. This Report satisfies this requirement and has been prepared as an output under Component I of the Project.

In particular, Component I delivers ex-ante evaluations of NSRF and related Cohesion Policy OP's and Programme Documents under the EU Fisheries Policy and Rural Development Policy, by performing as follows:

1. Ex Ante Evaluation of the SF Operational Programme Transport 2007-2013;
2. Ex Ante Evaluation of the SF Operational Programme Environment 2007-2013;
3. Ex Ante Evaluation of the SF Regional Competitiveness Operational Programme 2007-2013;
4. Ex Ante Evaluation of the ESF Operational Programme Human Resources Development 2007-2013.
5. Ex Ante Evaluation of the SF Operational Programme Fisheries 2007-2013.

Thus, the scope of the particular Report covers the support provided by the Project to the MRDEUF though the prospective appraisal of the SF environment Operational Programme 2007-2013, aiming to optimise the allocation of budgetary resources under the OP and improve programming quality.

Another part of Component I has assessed the implementation progress of counterpart IPA2007-2013 Operational Programmes, by providing separate evaluations during the period of implementation linked to the monitoring of OPs under IPA Components III and IV. A preliminary review of Programme Documents indicates that the IPA and respective SF OP present many similarities in strategy and content of interventions, mostly as a result of the specific situation of Croatia in terms of timing of the EU accession procedure.



Thus, the findings and the recommendations of the current Report - besides being considered as essential inputs of the planning process aiming at the finalisation of the Structural Funds OP – draw lessons learned from the effective and efficient use of IPA funds. This way the strong connection between the Interim Evaluation Report and the Ex-ante Evaluation Report of the Operational Programme Environment funded by the 2013 allocations of ERDF becomes evident.

Implementation of evaluation activities have been carried out in accordance with the timing and other arrangements set out by the Terms of Reference and the provisions of the approved Inception Report of the Project. Evaluation took place between March 19 2012 and June 11 2012. Current report has been drafted by Dr. Marie Kaufmann as a non-key expert employed by the Contractor, supervised by the Team Leader and Key Expert, responsible for Component I., Dr. Anthony Mousios.

The main text of this Report contains six Chapters, including the Executive Summary. In particular, the subsequent Chapters of this Report are structured as follows:

- in Chapter 3 we elaborate on the applied Evaluation methodology.
- in Chapter 4 we outline the objectives of the OP Environment, describing the organisation and structure of the OP around the Priority Axes and the Measures.
- in Chapter 5 we assess the foundation of Programme strategy and appraise the coherence between identified needs, Priority Axes, activities and allocation of financial resources, assess the relevance of the system of indicators, analyse expected outcomes and impacts and review the quality of management structures, implementation procedures and monitoring arrangements foreseen for the OP.
- in Chapter 6 we present our conclusions and recommendations.



3 METHODOLOGICAL PROCESS & CONTENT OF EX-ANTE EVALUATION

3.1 OBJECTIVES & SCOPE OF THE EVALUATION

According to the methodological working paper² that focuses on the content and organisation of Ex-Ante Evaluation of Operational Programmes for the 2007-2013 programming period, the Evaluation should answer the following questions:

- Does the Programme represent an appropriate strategy to meet the challenges confronting the region or sector?
- Is the strategy well defined with clear objectives and priorities and can those objectives be realistically achieved with the financial resources allocated to the different Priorities?
- Is the strategy coherent with policies at regional, national (including the National Strategic Reference Framework) and Community level? How will the strategy contribute to the achievement of the Lisbon objectives?
- Are appropriate indicators identified for the objectives and can these indicators and their targets form the basis for future monitoring and evaluation of performance?
- What will be the impact of the strategy in quantified terms?
- Are implementation systems appropriate to deliver the objectives of the Programme?

The conclusions of the Ex-Ante Evaluation must provide a response to these broad questions.

Within this context, however, those responsible for drawing up Programmes are encouraged to develop detailed evaluation questions to be answered in relation to the national, regional or sectoral strategies to be evaluated. As such this Project's Terms of Reference reflect the status of the Report as an Ex-Ante Evaluation of the OP Environment. It sets out the following seven core analytical tasks which must be performed as part of the Evaluation, forming the basis of the evaluation approach and method that we adopted:

1. Analysis of the implementation of pre-accession Programmes (components III and IV of IPA) in Croatia.
2. Analysis of existing administrative capacity, in the bodies designated for the management of the OP.
3. Appraisal of the socio-economic analysis in terms of strengths and weaknesses, and the relevance of the resulting needs assessment.
4. Appraisal of consistency of the strategy and of the rationale behind the Priority Axes and their operations.
5. Identification of relevant indicators in order to appraise the potential impact of Programme strategy on the achievement of the objectives.
6. Analysis of the expected impacts and of their with the allocation of financial resources
7. Assessment of the quality and appropriateness of the programme management structures and monitoring arrangements foreseen for the OP.

² EC, DG Regional Policy. "The New Programming Period 2007-2013. Working Document No 1: Indicative Guidelines on Evaluation Methods: Ex-Ante Evaluation. (August 2006)".



3.2 EVALUATION PROCESS

The Ex-Ante Evaluation of the SF OP Environment 2007-2013 is performed before Programme implementation which takes place after Croatia's EU accession on July 1st, 2013, lasting till the end of that year. The Evaluation's objectives are to assess whether planned interventions are consistent with regard to identified needs (of the particular sector and its beneficiaries), as well as coherent with reference to planned aims and the ways these will be implemented. It also includes the assessment of context, the identification of potential difficulties, as well as the diagnosis of target group needs and expectations, taking into account the programming and implementation experiences gained and lessons learnt from the IPA counterpart OP. It is noted that particularly in OP Ex-Ante Evaluation funded by structural funds, the issues of consistency, policy complementarity, and relevance in strategy development, prospective Programme implementation efficiency and prior assessment of impact on gender, minority and environment are emphasized.

Usually an Ex-Ante Evaluation is elaborated in parallel with the respective OP, involving the sequential provision of interim appraisals and recommendations per OP's section by the Evaluator to those who are responsible for the preparation and elaboration of the Programme Document. In this case however, the assimilation of IPA-funded activities by the SF OP underscores the relevance of the Interim Evaluation of the IPA counterpart OP, as it provided the setting for the cooperation between the Ex-Ante Evaluator with the management/programming team in a couple of ways. In particular, the Ex-Ante Evaluator participated in key meetings with the management/programming team dealing with implementation experiences as well as with programming decisions, and passed over to the management/programming team written recommendations on Programme improvement through the Interim Evaluation Report.

In essence, the Evaluation has examined each of the Priority Axis and Measures in the SF OP Environment Draft version March 2012, in terms of the evaluation questions specified above. The Evaluation activity has been designed to prospectively justify the proposed Priority Axes, assess their efficiency and the likely impact of the OP Environment in the beneficiary country. The Evaluation activity also provided an opportunity to:

- Assess the extent to which the Programme is achieving alignment between the SF Framework and domestic (national) policy priorities
- Utilise any lessons learnt and opportunities for improvement to inform future provision of
- Assess Programme sustainability in the light of future resource constraints

Further, the Terms of Reference note that conclusions and recommendations must be underpinned by the analysis and findings of the Evaluation. This is a particular challenge for the OP Environment given the number and range of stakeholders involved in the Programme, coupled with the number of evaluation issues raised by the Terms of Reference. To ensure that we achieved this requirement we adopted the following approach:

- we took the analytical tasks as set out in the Terms of Reference as the key Ex-Ante Evaluation issues;
- we translated the tasks in the Terms of Reference into evaluation criteria, against which the OP and its contents were systematically assessed;



- we fine-tuned the criteria as a series of relatively standardised Questions to be asked about each individual Measure;
- we utilised the work programme to systematically provide the basis of an assessment in relation to each criterion.

The evaluation process has had four stages: planning and structuring; obtaining data; analysing information; and evaluative judgement. During the four stages, the following methods and techniques have been used (for more details see Appendix A. Key Analysis Instruments):

- Use of secondary source data;
- Use of administrative data;
- Stakeholder consultation;
- Logic models.

The following methodology informed the development of this Ex-Ante Evaluation Report:

- Desk-based review of background literature, Programme texts, other documentation, including policy documents (Appendix C outlines the main documents reviewed);
- Data analysis of Programme performance indicators, along with wider labour market and socioeconomic data;
- Strategic consultations with each of the key stakeholders and other members of the Evaluation working group. Consultations were undertaken with officials from the Ministry of Environment and Nature Protection (MENP), Ministry of Agriculture (MA), Ministry of Regional Development and EU Funds (MRDEUF), Central Finance Contracting Authority (CFCA), Croatia Environmental Agency, ECOFUND and Croatia Water through a mix of individual and group meetings. (Appendix B identifies the participants in these consultations);

In closing, the Ex-Ante Evaluation was to a large extent based on information and opinions provided by the interviewed stakeholders. Its quality depends also on the scope and reliability of Programme data. All significant findings have been double checked and verified by referring to both secondary data and additional interviews. At the end it can be stated that all consulted stakeholders had an open and positive approach towards the evaluation. The reliability of findings is underlined also by the fact that there have been no essential discrepancies identified between the views and statements of the stakeholders.



4 PROGRAMME DESCRIPTION & VALUE ADDED OF THE EX-ANTE EVALUATION

4.1 CONTEXT & BACKGROUND OF THE OPERATIONAL PROGRAMME

Croatia applied to become an EU Member State in March 2003 and in June 2004 officially received a candidate country status. The EU accession negotiations with Croatia started in October 2005. In second half of 2011, the Republic of Croatia concluded the accession negotiations with the EU and signed Accession Treaty, that it has continuously been harmonising with the EU standards and that it will become the full EU Member State on 1 July 2013.

As of 2007, previous pre-accession assistance programmes (CARDS, Phare, ISPA, Sapard) were replaced by the single integrated programme 'Instrument for Pre-Accession Assistance' (IPA), which provides assistance to building institutional capacity for efficient implementation of the acquis and prepares a candidate country for the management of Structural, Cohesion and Agricultural Policy instruments. IPA Components III and IV (Regional Development and Human Resource Development) are based on structural instruments, management principles and practices. For utilising IPA III and IV EU funds, Croatia has prepared the Strategic Coherence Framework 2006-2013 and four Operational Programmes, which were adopted by the European Commission in November/December 2007. The Croatian authorities have established an institutional framework for management of IPA and designated relevant bodies and operating structures.

In consultations with the EC services, Croatia has prepared the Environmental Protection Operational Programme (EPOP) 2007-2009, which was adopted by the Croatian Government in September 2007 and the European Commission on 29 November 2007 respectively.

In accordance with the multiannual rolling three-years programming cycle, the EPOP interventions and indicated budget have been modified resulting in 131.3 MEUR for 2007-2013. After accession to the EU, Croatia will be eligible for EU Structural and Cohesion Funds (SCF) under Council Regulation (EC) No 1083/2006. The financial assistance from the SF will be organised and channelled through several Operational Programmes (OPs) within the framework of National Strategic Reference Framework (NSRF). The Operational Programmes are being designed in compliance with the national strategic priorities.

The Operational Programme Environment (OPE) has been prepared to absorb the EU funds allocated for the implementation of the EU cohesion policy in the environment sector in Croatia covering a rolling seven year period 2007-2013. The programme was prepared under the coordination of the Managing Authority for the OPE, the Ministry of Environment and Natural Protection (MENP).

The OPE 2007-2013 is based on the EU Council Regulation 1083/2006, which encompasses the general provisions on the use of the ERDF and the SF resources. Furthermore, the activities planned within this OP are in conformity with the Regulation (EC) No 1080/2006 of the European Parliament and of the Council of 5



July 2006 on the ERDF providing eligibility rules of expenses issued by the ERDF. In addition, the OPE is fully consistent with the European Community Strategic Guidelines on cohesion. According to the SF regulation, regions corresponding to the level NUTS II whose gross domestic product (GDP) per inhabitant measured by the purchasing power parity for the last three available years is less than 75% of the EU average may be supported within the aim “Convergence” from the SF. The whole territory of the Republic of Croatia falls within this category being therefore eligible to make use of these financial resources.

4.2 PROGRAMME BUDGET, OBJECTIVES AND INDICATORS

The indicative budget for the Operational Programme Environment 2007-2013 funded by ERDF envisages 140 MEUR. The evaluated Programme Document dated March 2012 does not yet includes financial table that is going to be completed once the revised financial envelope for Croatia is published. The table bellow demonstrates the financial plan of the OP, giving for the whole programming period, the amount of the total financial allocation per each Fund, and the national counterpart by Priority Axis.

Table: Priority axes by source of funding, in EUR:

Priority Axis	Fund	Community Contribution	National resources	Resources in total	Level of co-financing (%)
PA 1. WASTE	IPA / ERDF	75.000.000	13.000.000	88.00.000	85
PA 2. WATER	IPA / ERDF	195.000.000	35.000.000	230.000.000	85
PA 3. TECHNICAL ASSISTANCE	IPA / ERDF	6.929.877	1.222.919	8.152.796	85
<i>In total</i>	IPA+ERDF	276.929.877	49.222.919	326.152.796	85
<i>In total</i>	IPA	136.929.877	24.164.105	161.093.982	85
<i>In total</i>	ERDF	140.000.000	25.058.814	165.058.814	85

The presented budget meets requirements of concentration and feasibility. The financial framework is in line with the planned outputs and results based on the indicators. The allocation for the second Priority Axis (water) doubled up comparing with the PA 1 (waste). This situation fully corresponds with lower absorption capacity in the waste sector as it was assessed by the Interim Evaluation. It must be noted however the risk to lose funds has been assessed high. Planning, risk management and reporting should be improved.

The OP Environment 2007-2013 logically concurs IPA funded Environment OP and defines corresponding overall, two specific objectives and technical assistance. Indicative list of projects in pipeline for funding within the OPE is presented in Appendix D including estimated volume.

The overall objective of the OPE is “Improving access to, and the efficient delivery of environmental services and facilities in waste and water sub-sectors”. This strategic goal stems from the current situation analysis, accession process and Accession Treaty stipulations related to environment sector as well as national and EU policy documents. The analysis indicates that financially and institutionally demanding interventions are



highly needed. SF assistance in this programming period will therefore be focused on those obligations i.e. respect of the transition periods, continuing and building upon support provided through IPA priority subsectors (i.e. waste and water).

In order to contribute to the overall objective, the OPE sets forward two specific objectives to be attained through the following Priority Axes:

Priority Axis 1: Developing waste management infrastructure for establishing an integrated waste management in Croatia. This axis will support activities for development of new waste management infrastructure (waste management centres and related infrastructure) for waste treatment and disposal, including rehabilitation of incompliant landfills and highly polluted sites.

Priority Axis 2: Protecting Croatia's water resources through improved water supplies and integrated wastewater management systems. This axis will support investments in water utility infrastructure - construction/reconstruction/upgrading of drinking water supply networks, water conditioning (treatment) plants, municipal sewerage systems and wastewater treatment plants, minimization of leakage from drinking water supply systems and sewerage systems .

Project preparatory activities are foreseen for both Priority Axes.

Priority Axis 3: Technical Assistance. This axis will support the effective management of the OP and preparation for the next programming period.

The first two specific objectives consist of two **Key Areas of Operations (KAO)**.

From strategic point of view, the priority was given to the investments necessary for compliance with the acquis in the environment sector, with emphasis on waste and water sub-sectors. Due to short programming period, other sectors like air and atmosphere, nature protection and energy will not be directly addressed through this OP, but it will provide a platform for building capacities and experiences needed for extension of assistance to new priority areas in the next programming period. See more Chapter 4.3.

The Programme Document provides the indicators to monitor and evaluate performance at the level of Priority Axes. The description of three result indicators relating to waste management and to water management including the two PA 3 indicators harmonize with the indicators' set up of the Environment OP funded by IPA.

Baseline data are missing. Targets are provided for some of the indicators, and the organisation responsible for supplying the data is always given. Moreover, the EPOP's set of indicators is accompanied by group of Output Indicators assigned to individual Measures specified within the respective Priority.

As it is stated in the Programme Document IPA OP, the final target achievements under most of the Priorities are set on the basis of the projects envisaged to be carried in the programming period covered by this Operational Programme³. It has been anticipated, in the Programme Document, that the targets will be

³ For that reason 2007 is taken as a baseline year and majority of baseline values are zero. On the other hand the final targets present what is expected to be achieved during the given period (2007-2013), but those could be even exceeded.



possible to assess at the end of the Programme due to the nature of project envisaged in the OP (large scale infrastructure projects that require certain time to be implemented). The main source for data gathering would be monitoring reports (project, annual and final reports on implementation).

No impact indicators at Programme level have been provided. However, since projects funded contain well-known technical parameters, such as quantity of waste water purification and quantity of waste etc., these project characteristics enable easy estimation of mid-term and long term impacts (sustained impact indicators). Especially in relation to waste water, it should be assessed how the improvement of waste water is going to impact on quality of water in rivers, coastal and sea water. A related observation concerns the **lack of context indicators** describing situation in the Priority Area.

4.3 EVALUATION FEEDBACK BASED ON DRAFT VERSIONS OF THE OP

A common practice in Ex-Ante Evaluation Report is to include section which reflects the interim results of the evaluation process during the course of OP preparation, which summarizes key recommendations from the Evaluator and responses from the side of the programming team in an iterative fashion. Given that we are working with the March 2012 version of the SF OP, we have chosen to analyse the previous version of Programme document, dated in January 2012, focusing on differences among the two documents.

From a comparison of both drafts of Programme Documents no major difference are found, with the only minor differentiation identified in relation to National Strategic Reference Framework's description and identification of specific number of OPs funded by NSRF (Chapter 3.4 'Demarcation with similar interventions under other Ops and EU Funded Projects'). Following the five thematic priorities of NSRF, initially five OPs have been considered as a result of strategic planning process. Namely: Transport, Regional Competitiveness, Environment, Human Resources and Employment and the fifth OP under initial consideration was Administrative Capacity Development.

The administrative capacity development is one of the thematic priorities within the NSRF that is currently under finalisation. The only publicly accessible draft version of NSRF covers 2012-2013 is dated June 2010 when the Programme was under public consultation process.

The goal of the administrative capacity development thematic priority is to contribute to the improvement of the efficiency of the public administration and the rationalisation of the public services. In other words, to increase the capacity of the Croatian public institutions contribution to the country's overall socio-economic development. This is in line with the NSRF overall objective, to accelerate economic growth rate, higher rates of employment and to promote sustainable development. These are very ambitious goals considering the global economic slow-down resulted in negative growth of Croatian economy and growth of unemployment rate to 17.4% in recent years.

Due to limited time of implementation of the related interventions (till December 2016), the NSRF strategy underlines the need for concentrating interventions to the most mature projects. Attention is focused towards sectorial interventions that have priority in this short-term. All four sectorial OPs 2007-2013 have designed a Technical Assistance Priority Axis with the main objective to facilitate effective and efficient management and implementation of the OP, strengthening of administrative capacity and finally to support successful preparation for the next programming period after 2014.



Strengthening of administrative capacity is a horizontal issue. Support shall be given to the consolidation of the new administrative procedures and to interventions related to the improvement of the organisational structures in the state administration. It is recommended to revise and further develop Chapter 3.4 to reflect the changes in design of NSRF and all OPs.



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5. ASSESSMENT OF FINAL DRAFT OF THE OP

5.1 APPRAISAL OF SOCIO-ECONOMIC ANALYSIS & RELEVANCE OF STRATEGY

This section reviews the analytical part of the Programme document, thus providing basis for the evaluation of the OP's rationale. It must be noted, that while the Baseline Analysis of the OP provides coherent and detailed information on the environmental situation of Croatia (with particular focus on waste and water sectors), it lacks adequate description of the socio-economic conditions that form the external environment for the OP Environment. Therefore, basic information on recent socio-economic trends is outlined below in order to establish a context for further analysis of the strategy's relevance.

Corrections occurring in main **macroeconomic indicators** unfortunately signalize that the past promising trends (i.e. stable GDP growth, declining unemployment rate) will be difficult to maintain in the upcoming years. While Croatia has witnessed a steady growth of GDP and in the period 1995-2006 the average real GDP growth rate amounted to 4.4%, the global economic slow-down resulted in negative growth of Croatian economy in recent years.

Year	2007	2008	2009	2010
GDP growth	5,1%	2,2%	-6,0%	-1,2%

Croatian Bureau of Statistics, 2011

A corresponding negative trend in the last years can be observed in the **growth of unemployment rate** from 13.2% in 2008 to 17.4% in 2010 (calculated as the ratio of unemployed persons to the total active population - Croatian Bureau of Statistics, 2011). This development is in contradiction with the unemployment trend expected by the analysis presented in the previous programming period OP (IPA EPOP), which has indicated constant decreasing in unemployment reaching as low as 11.2% in 2006 (measured by ILO labour survey methodology). The reversion of the positive trend appears also in Eurostat data.

Year	2007	2008	2009	2010	2011
Unemployment rate	9.0 %	8.4%	9.1%	11.8%	13.5%

Eurostat

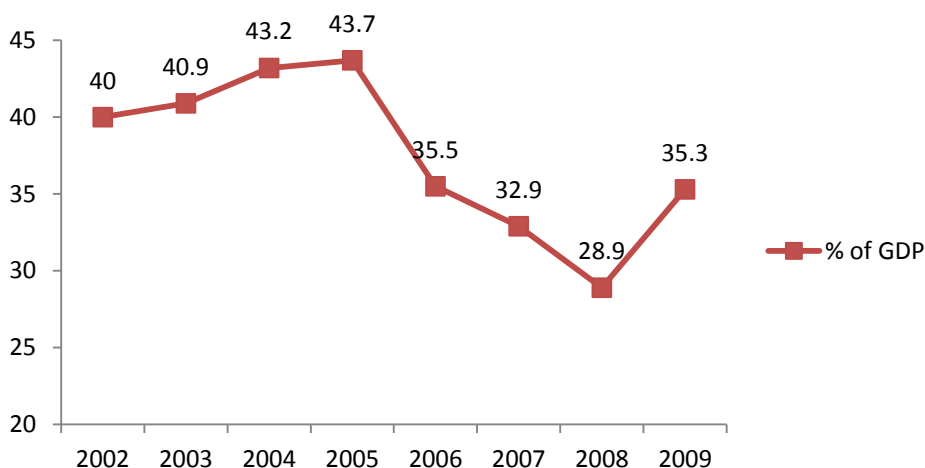
The reversal of a previous positive trend is apparent on investment data also (Gross fixed capital formation), with a previous growing trend reaching the share of investments in GDP of 29.8% in 2006 that declined to 25.4 % in 2009 and 21,6 % in 2010, with prediction of further decrease to 19 % for years 2011 and 2012 (Eurostat 2011). Similar behaviour is displayed by other related macroeconomic indicators (e.g. Government debt).

General government gross debt of Croatia in Percentage of GDP

Years	2002	2003	2004	2005	2006	2007	2008	2009
% of GDP	40%	40,9%	43,2%	43,7%	35,5%	32,9%	28,9%	35,3%



General government gross debt of Croatia in Percentage of GDP



Source: Eurostat

Above sketched shift in external macroeconomic conditions that are currently generally less favourable than anticipated by the previous analyses will, among other effects, certainly have negative impact on the availability of **national sources for the environmental expenditures and investments**. According to Eurostat data, the Croatian public sector's Environmental expenditure amounted only 0,02 % of GDP in both 2008 and 2009, thus being the lowest from all European countries with available statistics. The previous environmental Programme document (IPA EPOP) in contrast indicated values an order of magnitude higher, around 0,3 % in 2001, and 2003 respectively (also based on Eurostat data).

On the other hand, the above indicated change in socio-economic context will most probably have no immediate (within the time horizon of the evaluated strategy) implications for most of the key driving forces responsible for the development of the environmental situation as analysed in the Programme document. The stagnation in population growth is confirmed by recent data.

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population (thousands)	4.445	4.443	4.442	4.444	4.443	4.442	4.436	4.435	4.426	4.412

Eurostat

Relatively stable is also the basic geographical distribution of population. Despite of quite large number of settlements (about 6.800), the population is concentrated in urban centres – 49% of all citizens live in 5 largest counties: City of Zagreb and County of Zagreb, Split-Dalmatia, Osijek-Baranja and Primorje-Gorski Kotar counties. Potential effects of internal migration (e.g. further concentration of the population in urban centres and depopulation of rural and peripheral areas and the smallest settlements) will be possible to analyse only after the detailed data from the 2011 national census will be available.

The economic downturn and its impact on general population's affluence were probably reflected by the decrease in volumes of generated municipal waste.



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Municipal waste generation

Year	2004	2005	2006	2007	2008	2009	2010
kg per capita Waste generated	295	326	372	387	403	393	369
Deposit onto or into land	n.a.	n.a.	275	372	390	382	348

Eurostat

However, this should not be regarded as a new environmentally favourable trend, as it is not likely to have a lasting effect, since the **general consumption** (and municipal waste generation) patterns of Croatian population are likely to follow those of more affluent EU societies (displaying generally significantly higher waste generation figures). It can be even speculated, that reduction of purchasing power of the general public can result in change in consumer's preferences towards the more affordable but less durable consumption goods, which in turn can lead to increased volumes of municipal waste.

The level of recycling remains significantly below the EU standards.

Material Recycling of Municipal Waste

kg per capita/ year	2007	2008	2009	2010
Croatia	9	8	6	12
EU 27 average	116	123	123	121

Eurostat

The above indicated changes in macroeconomic context will have **no major impact on the results of water sector** analysis as presented in the Programme document. The main challenge of water management policy remains the uneven distribution of water sources spatially and temporally, which is especially problematic in coastal areas and islands during the dry seasons. The missing infrastructure for both water supply and wastewater treatment constitutes a major obstacle in reaching the standards required by the environmental acquis.

The OP Environment's lack of acknowledgement of the above described development in the socio-economic context, however, does not need to be regarded as a major deficiency of the Programme Document from the substantial point of view (see below). From the formal point of view, nevertheless, it must be recommended to include brief description of the socio-economic situation and key trends in the OP Environment Baseline Analysis section.

Analysis of needs

As pointed out above, the Baseline Analysis in the Programme Document provides solid background information on environmental situation of Croatia and allows for convincing analysis of the key problems and areas for improvement, thus enabling formulation of needs for intervention. It can be summed up, that specific Croatian environmental characteristics resulting from geophysical location (long coastal; uniquely large karst area, with specific hydrology) constitute one of the major assets of economic and social capital driving economic development (through tourism) in the country. It is generally accepted, that the overall state of environment in Croatia is relatively good (Croatian Environment Agency latest report covering the



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period 2005-2008), while, on the other hand, the degree of environmental protection is still lower than in other developed EU countries. Consequently, the expected trajectory of economic development (notwithstanding the current economy crisis) bringing about expansion of transport and tourism, increased energy consumption, etc., is very likely result in increasing demands for interventions in order to relax environmental pressures, and secure functioning of essential environmental services such as water supply and the disposal of waste water, the management of solid waste, maintaining a clean air environment, clean sea and preserving the natural habitat.

Specific attention is paid in the Baseline Analysis to the key environmental issues of Air quality and climate, Nature and biodiversity, Waste, and Water.

As far as the air quality is concerned, despite generally satisfying results in reduction of pollution from industrial sources during recent two decades, the situation remains more complex in 6 inhabited areas/agglomerations - Zagreb, Sisak, Kutina, Rijeka, Osijek and Split. These inhabited areas often record elevated concentrations in parameters such as NO_x, benzene, ozone, suspended solids, H₂S, SO₂, depending on the proximity of local sources of pollution (oil refinery in Sisak and Rijeka, soot factory in Kutina). In the period May-July, the whole territory of Croatia is under increased risk of exposure to high concentrations of the ozone above the prescribed limit 40 µg/m³. Still, generally it can be argued that except for localised sources of pollution in certain urbanised centres, the air quality is satisfactory and to large extent falls under category I (best air quality according to the applied national scale). The main sources of pollutants' emissions are industry, energy (including combined heating-power plant), household heating and transport.

The riches of the Croatian nature and biodiversity are under increasing pressures associated with the economic development, such as degradation and loss of habitats; intake of alien species in ecological systems; environment pollution; spatial urbanization (including infrastructure and traffic); global climate changes and other. At the same time however, substantive steps are made to ensure effective protection of remaining assets. Protected areas, including ones under preventive protection cover about 7.54% of Croatian territory or 10.97% of the land and 1.30% of territorial sea. In line with the EU legislation, within recent years the grounds for establishment of the *NATURA 2000* network has been laid, extending the area protected by the environmental legislation to 47% of the land and 39% of the marine part of Croatian territory.

The analysis of Waste sector convincingly demonstrates needs for improvement of the existing waste management practices and relevant infrastructure, which is underdeveloped and lacking capacity to handle generated volumes of wastes in manners adequate to the EU standards. Organised collection of municipal waste services in 2010 covered 96% of the population of Croatia, which is a big increase in relation to the estimated 86 % in 2004 and especially 57 % in 1995.

Landfilling remains the main disposal option for municipal waste in Croatia and landfills absorb the biggest quantities of waste produced. Almost all collected municipal waste is disposed and the potentials for recycling, organic treatment (composting) and energy recovery are unexploited. At the same time, the landfilling infrastructure often lacks even rudimentary protection and monitoring measures ensuring environmentally sound manner of the waste disposal. As to the wastes from other than municipal sources, it is estimated that almost 50% of non-hazardous production (technological) waste generated is deposited at illegal dumpsites. The Waste Management Strategy and Waste Management Plan of the Republic of Croatia identified nine priority locations ("hot spots") of high risk created by long-term inappropriate management of industrial (technological) waste. Furthermore, the construction waste is almost entirely deposited in an uncontrolled manner on landfills or dumpsites.



The need for throughout improvement of the waste management standards in Croatia was acknowledged. The country's Accession Treaty with the EU, has set transitional periods for gradual reduction of deposition of waste on existing landfills that are not aligned with the Directive on the Landfill of Waste, and gradual reduction of biodegradable component of municipal waste which is deposited on landfills in order to reach target set by the Directive. To address these pressing needs, the national key waste policy documents (National Waste Management Strategy and Waste Management Plan) have envisaged establishment of new waste management centres (WMC) on county/regional level. WMCs will encompass new landfills for municipal and non-hazardous production (technological) waste. Landfills within WMCs are to replace scattered and non-compliant landfills, and will introduce pre-treatment of waste prior to landfilling. Introduction of modern waste treatment technologies will at the same time reduce volumes of waste deposited on landfills and enable to achieve the target set for reduction of the biodegradable component of the landfilled municipal waste.

Main challenge for water management policy in Croatia remains the uneven distribution of water sources spatially and temporally, which is especially problematic in coastal areas and islands during the dry seasons. As demonstrated in the Programme document Baseline analysis, the missing infrastructure for both water supply and waste-water treatment constitutes a major obstacle in reaching the standards required by the environmental acquis. The share of population connected to public systems is estimated to be 74% (significantly lower than EU average of 90 %). However, there are significant differences in coverage between regions and counties - supply of the population is higher in the Adriatic basin (91%) than in the Black Sea basin (77%); connection rate is lowest in Bjelovar-Bilogora county (31%) and the highest in Istria County (99%). A problem of key concern is water losses in the water distributing system caused by inadequate and out-dated infrastructure (and, to a less extent, by an un-registered consumption (e.g. water for flushing pipelines, fire-fighters)).

Efficiency of water supply in Croatia per county in mil. m3 and %

Rank	County	Scoped	Delivered	Waste	Waste in %
1	Zadarska	30,5	9,9	20,6	68
2	Šibensko-kninska	23,3	9,4	14,0	60
3	Karlovačka	15,8	6,5	9,4	59
4	Splitsko-dalmatinska	73,3	35,8	37,5	51
5	Brodsko-posavska	7,9	4,0	3,9	49
6	Krapinsko-zagorska	8,2	4,2	4,0	49
7	Dubrovačko-neretvanska	17,0	8,7	8,3	49
8	Grad-zagreb	137,3	71,7	65,6	48
9	Vukovarsko-srijemska	12,7	7,1	5,6	44
10	Međimurska	8,0	4,6	3,4	42
11	Osječko-baranjska	24,1	14,1	10,0	42
12	Ličko-senjska	4,6	2,7	1,9	41
13	Virovitičko-podravska	4,8	2,9	1,9	39
14	Istarska	29,7	19,0	10,7	36
15	Bjelovarsko-bilogorska	4,6	3,1	1,5	32
16	Primorsko-goranska	40,4	28,0	12,4	31
17	Sisačko-moslavačka	9,9	7,0	3,0	30
18	Varaždinska	12,2	8,7	3,5	28
19	Požeško-slavonska	4,3	3,2	1,1	26
20	Zagrebačka	5,7	4,5	1,2	21
21	Koprivničko-križevačka	4,7	4,3	0,4	8



Total	478,9	259,2	219,6	-
Average	22,8	12,3	10,5	46%

Source : Croatian Institute of Public Finance

Efficiency of water supply in Croatia per county is significantly different from most inefficiency county of Zadar with 68% till most efficiency county of Koprivnica-Križevci with only 8 percent waste of water in transmission system. Generally Croatian water takes from the national water capacity 478,9 mil. m³ from which lose 259,2 mil. m³ in transmission system and achieves 46 percent waste of water. According to the latest data, the estimated losses are somewhat less, about 44%⁴, however, these figures clearly demonstrate importance of the problem, both from the point of view of economic efficiency and water pollution risk reduction⁵.

The second key water-related issue is the collection and treatment of waste-waters. The quality of public sewerage system in Croatia is underdeveloped with the average connection rate to the public sewerage systems only 43,6%. Rate of connection of population to public sewerage systems can be regarded as satisfactory in the settlements bigger than 10,000 inhabitants, where the rate of connection was about 75-80%. The major problems with the wastewater sewerage are in minor settlements up to 2,000 inhabitants, inhabited by 40% of the population⁶. Of particular concern are 5,387 settlements with less than 500 inhabitants, amounting in total for about 800,000 inhabitants, where construction and operation of centralized public sewerage systems is not feasible due to economic as well as technical constraints resulting in low cost-effectiveness of such investments.

Only 28 % of the generated volume of municipal wastewaters (representing 27 % of population) is treated in waste-water treatment (WWT) facilities, which is far below the EU standards (in majority of the EU member states this ratio is not below 60-70%). Out of 28% of the population's waste water quantity treated in Croatia, 43% is treated in the pre-treatment and primary treatment level, while 57% of wastewaters is treated in the secondary treatment level. Out of total 108 WWT facilities that were operational in 2009, only 6 plants have the tertiary level of wastewater treatment.⁷

SWOT

The above outlined key issues analyzed in detail within the Baseline Analysis section of the Programme Document are reflected also within the SWOT analysis section of the OP. The SWOT analysis is presented in autonomous sections for environmental situation in general, and for waste and water sectors in particular. The construction of the SWOT analysis putting main emphasis on the two identified key sectors helps to highlight most important S,W,O, and T statements relevant for the developing a rationale for the design of strategy for interventions.

Relevance of the strategy to the identified needs

In the following section, the adequacy of the OP's strategy is reviewed in the context of identified needs for interventions resulting from the analysis. As indicated above, the poor quality and incompleteness of basic environmental infrastructure, namely in the water and waste sectors constitute a key environment-related

⁴ Croatian Environmental Agency: 'Odabrani pokazatelji okoliša u RH 2011'

⁵ Problem with losses in the network has to be tackled by modernization and renewal of supply infrastructure, but it also calls for institutional/procedural reforms in terms of more concentrated water supply systems and more efficient management, since a relatively high number of small and under-capacitated companies impede rationality and reliability of the operations.

⁶ Water Management Strategy, 2008

⁷ Croatian Environment Agency: 'Odabrani pokazatelji okoliša u RH 2011'



structural problem of Croatia, threatening to cause significant decrease in still relatively high quality of the environment (namely through increasing pressures on both surface and ground water resources, water habitats and natural biodiversity, both land and maritime). Furthermore, in addition to the direct environmental considerations, the availability of appropriate water and waste infrastructure is also critical factor influencing the quality of social and economic conditions (enabling a decent standard of living of individual citizens, as well as enabling commercial (industrial, agricultural, etc.) activities to comply with environmental standards. Therefore it is rational from the strategy design point of view to concentrate the available resources on overcoming the above described infrastructural deficiencies, because the interventions aimed at improvement of the water and waste infrastructure will likely deliver not only relatively rapid and measurable improvement in certain environmental aspects (decreasing levels of pollution, reduction in polluting emissions and health risks, increase in access to safe water), but also potential broader benefits in terms of improving social as well as economic conditions.

Secondly, to focus the strategy on overcoming the infrastructural problems (namely related to water and waste sectors) is clearly a rational step with respect to the Croatian international obligations adopted during the country's EU accession process. Considering that the measures envisaged for the implementation of the environmental acquis in water and waste sectors are particularly investment-intensive (comparing e.g. with measures focusing on air or biodiversity protection), it can again be argued, that the strategy adopted by the OP (including its objectives), focusing on the two priority areas (waste and water sectors), is fully adequate to the identified needs.

As indicated above, the Programme document appears to have reasonable detailed baseline analysis, capable of serving its main purpose – identification of needs for intervention, in order to achieve maximum cost-effective improvement in key aspects of the environment in Croatia. The analysis convincingly demonstrates that the waste and water sectors (and particularly the lack of technical infrastructure) constitute critical challenges for effort to improve environmental quality and to achieve compliance with environmental protection standards required by the EU acquis. Considering the high investment-intensity of interventions necessary for addressing those identified needs, the presented strategy rationally concentrates on interventions where the limited national financial resources constitute critical barrier to their implementation (i.e. interventions of critical importance for achieving of environmental policy goals that would not be possible to implement in foreseeable future without external financial assistance).

The baseline analysis does not pay particular attention to the broader socio-economic environment. Especially the reflection of current economic crisis, as suggested above, would provide better context for description of the OP's rationale and strategy. Therefore the evaluator suggests to expand the baseline analysis and to include a brief outline of main relevant socio-economic trends. Note however, that in evaluators opinion, the missing description of the socio-economic context did not have negative impact on the overall soundness of the analysis, its conclusion and consequently on the OP's rationale and proposed strategy.

5.1.1 Rationale & Consistency of Intervention Logic

The OP Environment outlines two Priority Axes, each with individual strategic objective further specified into several operational goals. The rationale for limited focus on two key priorities (waste and water) instead of broader range of environmental issues (suitable candidates being e.g. air and nature and biodiversity) is justified in Programme document (as discussed above in previous section). Both priority sectors are of key importance not only from environment protection point of view, but have also wide social and economic



connotations. At the same time, the interventions capable of delivering a substantial change of current unsatisfactory situation are highly investment-intensive, and therefore difficult for Croatia to implement without external (international) assistance. Furthermore, both water and (to a less extent) waste sectors have also potential for contributing to the solution of existing environmental problems with transboundary dimensions (trans-boundary pollution of watercourses, maritime pollution, trans-boundary shipments of hazardous wastes, and the like), which again can provide rationale for making them priority targets in the framework of strategy serving for allocation of resources from the EU structural funds.

The objective of the Priority Axis 1. Waste infrastructure is formulated as follows:

Reduction of waste being generated and land filled, providing adequate infrastructure for waste management and reduction of the risk from waste.

This objective is divided into two operational goals:

- i) establishment of new waste management centres as key infrastructural precondition for integrated waste management system,
- ii) remediation and rehabilitation of non-compliant landfills and sites highly polluted by waste

The formulation of the objective is soundly grounded in the results of the analysis presented in the Programme Document. The lack of adequate waste management infrastructure has been identified as a key problem preventing any improvement in terms of achieving goals of national waste-related policy as well as to ensure compliance with the relevant EU acquis. Envisaged investments are necessary for altering undesired but so far widely applied practices of waste disposal, that are not meeting standards for the sound waste management. In line with the outlined rationale, the operational goals aim at both prevention of continuation in environmentally unsound waste treatment and disposal practices (though offering a functional infrastructure complying with environmental standards), and at remediation of already existing environmental burdens resulting from the past waste management practices (e.g. polluted dumpsites).

The objective of the Priority Axis 2. Water Infrastructure is formulated as follows:

Provision of quality drinking water with raised connection levels, improved rational use of water resources and achieving and maintaining good status of water protection through improved wastewater collection, treatment and connectivity to sewerage.

This objective is divided into the following two operational goals:

- i) establishment of modern water supply systems and networks,
- ii) construction of WWTPs for domestic and industrial wastewaters and upgrading sewerage network.

The Priority Axis's content is fully in accordance with the OP's strategy rationale, i.e. it addresses the main challenges of the water sector identified within the Programme Document's analytical part. Ensuring the security and accessibility of water supply is a key step for the improvement of basic quality of life of the people. At the same time, to provide necessary infrastructure for wastewater collection and adequate treatment forms the complementary condition for the maintaining the long-term sustainability of the water resources utilization, on local, national and international levels.

As indicated above, the OP's Priorities have been developed in response to the pressing needs identified in the Programme analysis. In addition to addressing the primary objectives set out by the Programme, the two



Priorities are also complementary to each other to a large extent. Interventions aiming at establishing environmentally sound waste management and remediation of the polluted environmental hot-spots will have certainly significant positive effects in terms of reduction of contamination of water (both surface and ground waters). In addition, the interventions aiming at improving country's wastewater treatment infrastructure will lead to the increased production of specific wastes (sludges produced by the wastewater treatment facilities) that will require adequate treatment. Thus, it is possible to conclude, that the OP introduces a consistent set of complementary Priorities supporting not only the main Programme objective, and the Priorities' own respective objectives, but also with potential for mutually reinforcing effects resulting from their simultaneous implementation.

5.1.2 Strategy's External Coherence with other Policies (national, NSRF, EU)

The OP Environment has been demonstrably prepared with regard to all key national and EU policy documents. The Programme document provides detailed description of links between the OP Environment and relevant policy documents.

On the national level it is namely the Strategic Development Framework 2006-2013 (SDF) outlining the course of actions for each sector in order to contribute to the main strategic goal, which is growth and employment in a competitive market economy acting within a European welfare state of 21st century. The key relevance for the OP Environment has the thematic area "Space, Nature, Environment and Regional Development". Among the nature and environment related instruments and actions identified by the SDF there are:

- "care for the environment and the protection of existing biological diversity and the maintenance of natural resourcesbeing an integral dimension of the development of the infrastructure, energy, agriculture.....",
- "establishment an integral computerized system for waste management, to remediate and close existing and "wild" landfills, and establish centres for waste management"
- "preservation of water quality,improvement the level of coverage of the country with the public water system, to improve the quality of waste water treatment, and the availability of the sewage network, but also to improve the quality of the flood defence system"

The OPE will also directly support and contribute to the implementation of the Strategy for Sustainable Development of the Republic of Croatia (SSD) adopted in 2009, namely to its sections_2) Environment and natural resources; and 3) Promoting sustainable production and consumption.

The Environmental Strategy (2002) formulates top priorities of environmental protection, with water and waste holding the first and second position in terms of urgency for action. The current OP therefore directly tackles these two top priorities – waste and water management.

As regards national sectoral strategies objective of this Operational Programme directly corresponds and will contribute to the achievement of the strategic goals set in the:

- a) Waste Management Strategy by provision of:
 - Reduction of waste disposed at landfills and reducing proportion of biodegradable waste in communal waste;
 - Establishment of a comprehensive system of waste management and construction of centres for waste management and adequate waste treatment.
- b) Water Management Strategy by provision of :



- Construction of drinking water supply infrastructure which will enable increase of the connection level of the public water supply system and improve the water supply system efficiency
- Creating preconditions for investments in the flood protection measures
- Construction of waste water infrastructure will enable increase of the connection level of the public waste water system and adequate treatment of waste waters

At the EU level, of particular relevance for the OP preparation are the Community Strategic Guidelines (CSG) setting out a strategy for EU regional and cohesion policy that contributes to sustainable development. The CSG on Cohesion for the programming period 2007–2013 assign three major objectives of the EU Cohesion Policy:

1. Making Europe and its regions a more attractive place to invest and work
2. Improving knowledge and innovation for growth
3. Creating more and better jobs

Interventions envisaged under this OP Environment are consistent with the CSG and mainly contribute to the first objective, namely one of its priorities aiming to 'Strengthen the synergy between environmental protection and growth'. The strategy of this OP is focused on the investment in the environmental structures that respond to identified needs and ensure fulfilment of international obligations of the Republic of Croatia. These investments are increasing the attractiveness of regions and contributing to long-term sustainability of economic growth through reduction of external environmental costs to the economy and stimulation of job creation.

The renewed EU Lisbon Strategy reaffirms the commitment to sustainability principle and outlines seven priority areas:

- Climate change and clean energy
- Sustainable transport
- Sustainable consumption & production
- Conservation and management of natural resources
- Public Health
- Social inclusion, demography and migration
- Global poverty and sustainable development challenges

Projects proposed under the OP Environment will contribute namely to the fourth and fifth priority areas: Conservation and management of natural resources (improvement of resource efficiency) and Public Health.

The **Europe 2020 Strategy** sets three priority areas:

- Smart growth, developing an economy based on knowledge and innovation;
- Sustainable growth, promoting a low-carbon, resource-efficient and competitive economy; and
- Inclusive growth, fostering a high-employment economy delivering social and territorial cohesion.

As mentioned above, the actions envisaged by the OP can in the long run lead to the improvement of resource efficiency (both materials and water). Remediation of old landfills also helps to reduce greenhouse emissions arising from the landfill. This can partially enable Croatia to meet the Europe 2020 targets for reducing greenhouse gas emissions and combating climate change more easily.

The key strategic document for the use of Structural Funds in Croatia post-accession is the NSRF which defines priorities to be jointly financed by EU and national resources. As described in the Programme



document, the NSRF defines three **key strategic objectives**:

- Faster economic growth based on market integration and institutional reform
- Higher employment – faster creation of jobs
- Promotion of sustainable development

And **five thematic priorities**:

- Development of modern transportation networks and increased accessibility of the regions
- Investment in environment infrastructure for sustainable development and improvement of nature and living environment
- Increasing competitiveness of the Croatian economy
- Employment and development of human capital
- Administrative capacity development

This OP Environment focuses on the 2nd thematic priority, i.e. ‘Investment in environment infrastructure for sustainable development and improvement of nature and living environment’ which is in connection with the 3rd key strategic objective on promotion of sustainable development through environmentally friendly growth. Interventions under this OP will promote balanced regional development through provision of adequate environmental infrastructure, as one of key prerequisites for increased competitiveness and regional development as well as for attractiveness and quality of life.

5.1.3 Adequacy of System of Indicators

The design of the system of indicators reflects specific characteristics of the OP Environment, namely its limited temporal, and financial scale (comparing to similar national-level OPs), as well as the fact that the OPE is to be implemented principally through a relatively small number of clearly envisaged projects (mainly infrastructural investments). The core component of the system of indicators is the set of monitoring indicators provided at the level of Priority Axes. In addition, a variety of environmental indicators is used and referred to across the analytical section of the Programme document, however no clear link is established between them and the monitoring indicators (i.e. the Context Indicators are not introduced in the system of indicators).

Priority-level indicators

The OPE presents the description of monitoring indicators for both specific Priority Axes. For each Priority a set of Result Indicators is given. The indicators are presented in sufficient detail, with description comprising name/definition, measurement unit, baseline value, quantified target, source of data, and periodicity.

Moreover, the EPOP’s set of indicators is accompanied by group of Output Indicators assigned to individual Measures specified within the respective Priority.

The set of indicators is clearly designed with respect to the nature of the projects envisaged by the OPE, with an emphasis on the Output Indicators focusing on expected progress in constructing of the planned environmental infrastructure. In this context, the outlined target values provide a realistic guide for the OPE performance evaluation, as they were set out with the advanced knowledge of the technical parameters of the projects envisaged by the OPE.



The Priority-level Result Indicators are adequate to the overall context and provide sufficient reflection of the changes triggered by the implementation of IPA OP. Consideration can be given to including further indicator(s) focusing on reduction of pollutants discharged to the surface waters (reflecting the upgrading WWTPs) and/or reduction of drinking water losses (upgrading existing water distribution infrastructure). However, bearing in mind the scale of the envisaged projects (as indicated by target values of relevant existing indicators), the added value of such indicators in monitoring the EPOP implementation would not be significant.

An issue of concern can be the missing baseline values (adoption of zero values as a starting point for monitoring), as it diminishes the information value of the indicators, especially when OPE does not systematically present Context Indicators, allowing for better evaluation of the OPE contribution to the achieving of the declared environmental goals. However, considering the above mentioned specifics of the OPE (limited scale), this does not constitute a critical problem from the point of view of the general purpose of the OPE monitoring system. It should be also noted, that similar national Operational Programmes in countries such as the Czech Republic or Bulgaria adopted the same approach (i.e. setting baseline values for the majority of Result Indicators to zero).

Context Indicators

The Programme document does not present Context Indicators as suggested by relevant methodological guidelines (E.g. EUROPEAN COMMISSION, DIRECTORATE-GENERAL REGIONAL POLICY, THE NEW PROGRAMMING PERIOD 2007-13: METHODOLOGICAL WORKING PAPERS, WORKING DOCUMENT NO. 2, INDICATORS FOR MONITORING AND EVALUATION: A PRACTICAL GUIDE, 1 JUNE 2006). As mentioned above, despite fact that the analytical part of the OPE provides specific information (including quantitative) on the situation in the concerned areas of intervention (water, waste) as well as the SWOT analysis, the analysis is not supported by a set of Context Indicators helping to evaluate environmental quality progress resulting from the EPOP interventions.

Programme Indicators

The OPE does not introduce an autonomous set of Programme Indicators in addition to the Priority-level indicators, as suggested by the relevant methodology (see above). However, considering the narrow focus of the OP and limited number of planned intervention types, the Priority-level Result Indicators seem to provide adequate information, thus limiting significantly the need for an autonomous level of Programme Indicators. On the other hand, the inclusion of several Impact Indicators (as an extension of applied Output and Result Indicators) might improve information value of the OPE system of indicators. The Impact Indicators can be introduced either as a part of the existing set of Priority-level indicators, or can be used as Programme Indicators.

Impact Indicators

As indicated above, given the specifics of the OPE it is problematic to measure impacts of the OP interventions by standard Impact Indicators applicable in similar national-level Programme Documents. With respect to the scale of the interventions, they will probably have measurable impacts predominantly on a local level – in the geographical areas of their implementation, while quantification of impacts by means of national-level aggregate indicators will not necessarily provide useful information from the point of view of OP management and evaluation. Nevertheless, in line with established methodology, it is possible to recommend including few Impact Indicators either as a part of the existing set of Priority-level indicators, or as an autonomous set of Programme Indicators.

Suggestions for improvement of the OPE system of indicators:



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As described above, the current system of indicators as described in the Programme document is adequately designed with respects to the specifics of the OPE, namely its relatively small scale of application (temporal, financial), its narrow focus (two Priority areas of intervention – waste and water), and limited range of applied Measures (consisting of several major investment projects). Yet, several suggestions for improvement of the system of indicators can be made, in order to ensure its optimal functioning as well as maximum consistency and comparability with other Operational Programmes.

It is recommended to introduce respective context indicators in both sectors of waste and water. The relevant indicators used in Structural Funds Operational Programmes and national and EU strategic documents are the following:

Waste Sector Context Indicators Definition	Type	Measure. unit	Frequency of reviewing	Data source
Municipal waste generated	Context	thousands of tons	annually	CEA
Municipal waste collected	Context	thousands of tons	annually	CEA
Municipal waste landfilled	Context	thousands of tons	annually	CEA
Volume of municipal waste	Context	thousands of tons	annually	CEA
Ratio of utilized municipal waste (material, energy use)	context	%	annually	CEA
Total capacity of waste disposal facilities	context	tons/year	annually	CEA
Number of waste disposal facilities/landfills not complying with relevant environmental legislative	context	Nr.	annually	CEA

Water Sector Context Indicators Definition	Type	Measure. unit	Frequency of reviewing	Data source
Population connected to water supply network	context	%	annually	MoA
Population connected to sewerage network with WWTF complying with EU standards	context	%	annually	MoA
Number of municipalities with more than 2000 equivalent inhabitants without connection to the WWTF complying with EU standards	Context	Nr.	annually	MoA

Also, introduce impact Indicators either at Priority-level, or as an autonomous set at Programme-level.

Definition	Type	Measure. unit	Frequency of reviewing	Data source
Number of polluted dumpsites/hot spots with need for remediation	Impact	Nr.	annually	CEA
Discharge of untreated waste water into the surface waters	Impact	%	annually	CEA

5.2 MAIN FINDINGS WITH REGARD TO EXPECTED OUTCOMES & IMPACTS

The studies focused on identifying impacts of ERDF interventions usually demonstrate effectiveness in relation to specific aspects, such as GDP growth, transport and environment infrastructure.⁸

⁸ (EC, Mapping progress, Key findings from the updates of the mid-term evaluations European Cohesion Policy, 2007.)



Considering the nature of the interventions envisaged under the OP Environment, it can be expected with high degree of certainty, that the OP's implementation will have variety of predominantly positive impacts both in terms of fulfilling of the stated environment-related goals, and indirect positive impacts on other thematic areas (regional development, social cohesion, competitiveness).

Direct impacts:

- Improvement of the physical infrastructure (waste, water) with positive effects on reduction of pollution both from municipal and business sectors, reduction of health risks, and pressures on the environment.
- Introduction of complex waste management facilities will contribute to the development of the overall waste management system, capable not only of reducing the environmental risks, but also contributing to the increase resource efficiency of the economy. Improvement in water infrastructure will also result in better economic efficiency of the water sector.

Indirect impacts:

- Improved waste management system will reduce the costs for businesses to comply with the environmental standards.
- Improved accessibility to basic services (water supply, sewerage, waste collection) will improve standard of living of inhabitants as well as social cohesion.
- Infrastructural investments under the OP will generate demand for both short-term and long-term jobs and provide business opportunities for local suppliers.

5.3 APPRAISAL OF STRUCTURES AND PROCEDURES FOR PROGRAMME IMPLEMENTATION

The design of implementation of OP Environment under Section 4 of the Programme Document (March 20120) has been analysed. Following the Regulation (Council Regulation (EC) No 1083/2006 of 11 July 2006), the description includes: Designation of authorities, Compliance with the principle of separation of functions, Accounting, monitoring, financial reporting in computerised form, System of reporting and monitoring Arrangements for auditing, Systems and procedures to ensure an adequate audit trail and Reporting and monitoring procedures for irregularities. The description has been considered sufficient in most of relevant parts; it deserves an adjustment in several aspects only as stated below.

Designation of authorities

According to the OP:

- The institutional system for implementation of structural instruments is set up in the Government Decision on the Strategic Documents and Institutional Framework for the Utilization of the Structural Instruments dated 6 October 2010 .
- The overall responsibility for *'correct and efficient implementation of the commitments embodied in the documents concerning the SF and CF is ensured by Government of Republic of Croatia, represented by*
 - the Ministry of Regional Development and EU Funds (MRDEUF),
 - the Ministry of Finance,
 - the Agency for the Audit of EU Programmes' Implementation System and the Managing



Authorities.

- **The MRDEUF** is designed to perform the role of Central Coordinating Authority for the NSRF ensuring strategic coherence across the EU and national policies, complementary use of national and EU financial resources;
- **The MRDEFU** should coordinate and support programming, monitoring and evaluation of Cohesion policy funding and assist with horizontal issues in EU funds management, thus ensuring absorption of EU assistance in cooperation with all relevant state institutions.
- the function of **Certifying Authority** has been designated to the National Fund at the Ministry of Finance for all OPs, in line with the requirements of Article 59 of General Regulation No. 1083/2006;
- the function of **Audit Authority** for OPE and for all OPs has been designated to the Agency for the Audit of EU Programmes' Implementation System, in line with the requirements of Article 59 of General Regulation No. 1083/2006. The Audit Authority is operationally independent from the Managing Authorities and of the Certifying Authority
- the role of **Managing Authority** for the OP Environment has been assigned to the Ministry of Environment. The Programme Document stipulates the responsibilities and functions according the Regulation (Art.60).
- the function of **Intermediate Body** is designated to the Ministry of Agriculture for operations in water management sector (PA2). Some further detail would be useful regarding the responsibility for management of operation in waste sector (PA1).
- **the Beneficiaries:** the potential beneficiaries of operations envisaged by OPE are public institutions involved in the management and implementation of OP (MA, IB) and other public institutions and agencies, namely Croatian Water and Environment Protection and energy Efficiency Fund (ECOFUND).

Apart of designation of bodies, the Programme Document contain details on the implementing provision, monitoring and evaluation system, publicity and procedures for computerised data to meet payment, monitoring and evaluation requirements. Since the quality of these implementation systems is essential for the achievement of the objectives of the Programme, the Evaluator has assessed the implementing provisions proposed, examined previous experiences and presents the following observations:

Designation and responsibilities of authorities

Aside to the responsibility of MRDEUF to perform coordination activities (Central Coordination Authority for the NSRF), the description introduces '*additional support in programming, monitoring and evaluation including absorption*'. This should be clarified and clear demarcation should be made in the role of MA and CCA. How the principle of separation of functions between and within the authorities and bodies is to be respected should be explained. There is a risk of organisational inefficiency or duplication in a system where implementation responsibilities are shared.

When agreed within the Governmental bodies, clear responsibility for PA1 management should be stated. Due to the limited scope of the EOP there is a sound possibility to maintain the responsibility for PA1 management within the MA at the Ministry of Environment. Within the description of accounting, monitoring, financial reporting in computerised form, the clear information on the responsibility for Management and Information System (MIS) is missing.



Examination of previous experiences

One important aspect of developing the implementing system for the new Programme is learning from the lessons of past Programmes. These lessons have clearly influenced the development of the implementing system, and, the Programme Document makes this explicit link.

An overview of the past EU external assistance dated back to 1996 has been provided. Croatia benefited from programme OBNOVA, CARDS, PHARE. Ministry of Environment and Nature Protection was like other line ministries beneficiary of many technical assistance projects, resulting, among others, in preparation of draft National Waste Management Strategy, Guidelines for Environmental Impact Assessment (EIA), drafts of county and municipality Waste Management Plans etc. Since 2005 the Programme ISPA became available and offered possibility to finance major infrastructure measure in transport and environment sectors.

Within the ISPA Strategy, two investment projects in environment sector had been constructed and one technical assistance project: Bikarac Regional Waste Management Centre, phase 1 (6 MEUR from ISPA), Karlovac water and waste water programme (22.5 MEUR from ISPA) and Technical Assistance for IPA Pipeline Preparation (1MEUR from ISPA). As it is stated in the Programme Document, the importance of ISPA programme is obvious:

- The institutional set up for the implementation of infrastructure projects was put in place and initial experience was gathered, providing valuable lessons for IPA but also for Structural funds programmes. There are eight projects included in the actual pipeline of projects that were initiated by ISPA interventions and their projects' documentation has been under development.
- Works on Bikarac Regional Waste Management centre has finished at the end of 2011, and new landfill was constructed, in accordance with Landfill Directive requirements.
- Further activities on establishment of an integrated system for respective County are to continue with construction of transfer stations and introduction of waste treatment technologies. Currently, so called WMC 'Bikarac' in Sibenik-Knin county - Stage II is under intensive preparations for SF funding.

In terms of acquired experience and lessons learned from implementation of IPA funded Environment OP 2007-2013 (EPOP/IIIb), the Programme Document formulates relevant conclusions that are coherent with the Interim evaluation findings. The institutional structure dedicated to managing the EU accession process in Croatia in the field of environment, has been instrumental in the following:

- EPOP, receiving accreditation on 29 October 2008 with the Commission Decision C(2008)6201 that concluded that the Operating Structure Environment Operational Programme has designed internal control procedures in a manner that would ensure satisfactory results in practice, thus there were no blocking elements to the conferral of management powers, allowing implementing bodies to start with activities under decentralised management with ex-ante control by the EU Delegation.
- Dividing organizationally by function and by issuing management attention to all areas of the policy life cycle, notably on financial management & control and implementation, but also on programming, procurement and monitoring. In particular:
 - Body Responsible for the Operational Programme – BROP – Ministry of Environment and Natural Protection (MENP),
 - Bodies Responsible for the Priority/ Measure - BRPM - Ministry of Environment and Natural Protection (MENP),



- Ministry of Environment and Nature Protection (MENP) for the waste related projects – Priority Axis 1 (Measure: establishment of new waste management centers), and Technical Assistance – Priority axis 3 (Measure: TA for the Management of Operational Programme and Capacity Building)
 - Ministry of Agriculture (MA) for the water related projects – Priority Axis 2 (Measures: Establishment of Modern Water Supply Systems and Networks & Construction of WWTPs for Domestic and Industrial Wastewaters and Building/Upgrading of Sewerage Network)
 - Implementing Bodies - IBs
 - Environmental Protection and Energy Efficiency Fund (EPEEF) - for the waste related projects – Priority Axis 1
 - Croatian Waters (CW) for the water related projects – Priority Axis 2
 - Central Finance and Contracting Agency (CFCA) – for technical assistance projects – Priority Axis 3
- Securing access to vital human resources: detailing the staff requirements and providing the conditions for recruiting, retaining and training qualified staff, especially for the key staff positions managing the IPA Funds. Ministry of Environment prepares regularly staff analysis.
 - Developing internal systems, procedures, manuals, guidelines and other tools in order to increase productivity, efficiency, consistency and quality of work.
 - Developing competencies in the following fields: reporting, evaluation of projects, public procurement, financial control and auditing.
 - Establishing Internal Audit Units that perform system-based audits and disseminate their findings in the form of lessons learned.
 - Practicing to deal with financial irregularities is an indication of the ability of the OS to take this matter seriously. The publishing of records on financial irregularities, a track record on appropriate measures and the existence of a competent and active unit of auditors are also indicators of well-established financial management and control.

According to the Programme Document and Interim Evaluation findings, the experiences and capacities developed during the implementation of EU assistance programmes are built into the OP Environment and have influenced the strategic choices and funding options selected under this Programme Document. Special attention was paid to the lessons learned from ISPA and IPA IIIb because this SF OP **represents “extended continuation” of those two Programmes.**

Thy system for future use of EU funds built around the IPA structure emphasizes the leading role of the Ministry of Regional Development and EU Funds (former CODEF). This is a highly centralized structure that should focus on reduction of legislative barriers and maximal simplification in implementation of SF and CF. One of the overarching objectives of the current regulatory amendments is simplification. Management and control system should find a balance between costs and the risks involved. It is further recommended to put more emphasis on proportionality and a risk based approach. It is highly desired, Croatia authorities learn from the errors and increase of administrative burden of EU Member States in the implementation of SF Programmes.



6 CONCLUSIONS & RECOMMENDATIONS

6.1 CONCLUSIONS

The main **conclusions** of this Evaluation are presented below:

- The March 2012 draft of the Operational Programme Environment 2007-2013 may be qualified as a document that meets the EU standards.
- The Programme document presents reasonable detailed baseline analysis, capable of serving its main purpose – identification of needs for intervention, in order to achieve maximum cost-effective improvement in key aspects of the environment in Croatia.
- The baseline analysis does not pay particular attention to the broader socio-economic environment. Note however, that in evaluators opinion, the missing description of the socio-economic context did not have negative impact on the overall soundness of the analysis, its conclusion and consequently on the OP's rationale and proposed strategy.
- Considering the high investment-intensity of interventions necessary for addressing those identified needs, the presented strategy rationally concentrates on interventions where the limited national financial resources constitute critical barrier to their implementation (i.e. interventions of critical importance for achieving of environmental policy goals that would not be possible to implement in foreseeable future without external financial assistance).
- The OP introduces a consistent set of complementary priorities supporting not only the main Programme objective, and the priorities' own respective objectives, but also with potential for mutually reinforcing effects resulting from their simultaneous implementation.
- The strategy and interventions are coherent with EU and national policies, including complementarity with the other Operational Programmes.
- Indicators presented are largely appropriate to measure the changes in relation to the specific objectives of the Programme.
- The expected impact of the Programme is broadly in line with the objectives set. Socio-economic impacts are limited by the relatively modest amount of financial resources allocated to the Programme.
- The future Programme implementation bodies already take actions that should lead to the timely preparation of necessary OS descriptions and start of the Compliance Assessment.

6.2 RECOMMENDATIONS

Based on the overall evaluation of the Programme document, following recommendations are suggested:

- Regarding the socio-economic analysis: Consider to expand the baseline analysis and to include a brief outline of main relevant socio-economic trends.
- It is recommended to introduce context indicators in the OP for both sectors of waste and water (see section 5.1.3)
- Regarding the expected results and impact: as has also been recommended by the Commission, the quantification of its main objective (the amount of persons covered by the Programme) should be improved and supported by a well-explained quantification of the results for the main key areas of intervention, which is especially lacking.
- Regarding the implementation: the demarcation among the role of MA and Central Coordination



Authority should be clearly designed.

- It is recommended to revise and further develop Chapter 3.4 to reflect the changes in design of NSRF and all OPs.



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APPENDIX A. KEY ANALYSIS INSTRUMENTS

The most important methods and techniques used in Ex-Ante Evaluation of OP Environment funded by ERDF have been the following:

- **Use of secondary source data:** Existing information gathered and interpreted by the evaluator. Secondary data consists of information drawn from the IPA OP monitoring system, produced by statistics institutes and provided by former research. The most important sources of secondary data are listed in Appendix C. Key Documents Consulted.
- **Use of administrative data:** Information relating to the administration of the Programme collected through a structured monitoring process and analytical works conducted mainly by ----- . Main sources of administrative data have been the Annual Implementation Reports, Organisational Development Strategy and Workload Analysis prepared for the IPA counterpart OP.
- **Stakeholder consultation** (See Appendix B. Evaluation Consultees): A Project office has been located at the Ministry of Regional Development and EU Funds. Daily ad hoc consultations with sectoral counterparts as well as with Project Implementation Unit helped the evaluator in identifying relevant contact persons within Operating Structure and possible sources of information Interviews have been structured according to the following topics:
 - Progress in implementation of the IPA counterpart OP Priority axis / Measures
 - Contribution of IPA to sectoral programmes and strategies and relevance of these strategies
 - Level of cooperation within the Operating Structure
 - Benefits taken from the Technical Assistance projects, including the status of “project pipeline”
 - Experiences with different contracting forms (service contracts, supply contracts, grant schemes, direct awards, framework contracts, twinning contracts)
 - Challenges and opportunities (What can be done in a better way?), including preparation for the management of the ERDF.
- **Observation:** the evaluator participated several EPOP project monitoring meetings as observer what contributed to increase of understanding of the roles of individual actors and their performance
- **Logic models:** Generic term that describes various representations of programmes linking their contexts, assumptions, inputs, intervention logics, implementation chains and outcomes and results. In this particular evaluation it has been used for analysis of the op Environment intervention logic.



APPENDIX B. EVALUATION CONSULTEES

Name and Surname	Department / Unit in the Ministry of	Date and time of meeting
1. Mr. Damir Tomasevic	Ministry of Regional Development and EU Funds	17.04.2012, On-going consultations
2. Ms. Željka Medven	Ministry of Regional Development and EU Funds	17.04.2012, On-going consultations
3. Mr. Theodor Klobučar	Ministry of environmental and nature protection	19.04.2012, On-going consultations
4. Ms. Irena Ciglar Grozdanić	Ministry of environmental and nature protection	19.04.2012
5. Ms. Petra Kekez	Ministry of Agriculture, <i>Directorate for water management</i>	20.04.2012
5. Mr. Davor Hađim	Ministry of Agriculture, <i>Directorate for water management</i>	20.04.2012
6. Ms. Ivana Varga	Ministry of Finance, National Fund	08.05.2012
7. Mr. Daniel Peić	Ministry of Finance, National Fund	08.05.2012
8. Mojca Kulšič	Croatia Water	08.05.2012
9. Željka Zgaga	Delegation of European Union	08.05.2012
10. Katarina Jarža	CFCA	09.05.2012
11. Ms Vedrana Aužina	Ministry of Environmental and Nature Protection, Service for preparation and implementation of EU projects	10.05.2012
12. Mr Dražen Babić	Ministry of Environment and Nature Protection, Service for preparation and implementation of EU projects Department	10.05.2012
13. Ms Andreja Neral Lamza	Environmental Protection a and Energy Efficiency fund	10.05.2012
14. Ms Suada Mustajbegović	Environmental Protection a and Energy Efficiency fund	10.05.2012
15. Jasna Kufrin	Croatia Environmental Agency	14.05.2012
16. Oto Hüsken	JASPERS	14.05.2012 23.05.2012
17. David Tagg	JASPERS	14.05.2012 23.05.2012
18. Inesis Kiškis	Twinning advisors	23.05.2012
19. Gyene Gyöngyvér	Twinning advisors	24.05.2012
20. Zoran Kostić	Delegation of EU	28.05.2012
21. Luc Faber	Delegation of EU	28.05.2012



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APPENDIX C. KEY DOCUMENTS CONSULTED

- Monitoring Report Environmental Operational Programme 2007-2011, covering period
 - 01.01.2008 – 01.10.2008
 - 01.10.2008 – 14.04.2009
 - 15.04.2009 – 01.10.2009
 - 01.10.2009 – 01.04.2010
 - 01.04.2010 – 30.09.2010
 - 30.09.2010 – 01.04.2011
 - 01.04.2011 – 30.09.2011
- Sectoral Annual Implementation report of EPOP 2007-2009 for 2010, 2009, 2008, 2007
- Request for Modification of EPOP 2007-2009 dated 14 January 2010
- Terms of Reference
- Multi-annual Indicative Planning Document (MIPD) 2007-2009 for Croatia
- Multi-annual Indicative Planning Document (MIPD) 2008-2010 for Croatia
- Multi-annual Indicative Planning Document (MIPD) 2009-2011 for Croatia
- Multi-annual Indicative Planning Document (MIPD) 2011-2013 for Croatia
- Multi-Annual Indicative Financial Framework for 2008-2010 (MIFF)
- Multi-Annual Indicative Financial Framework for 2009-2011 (MIFF)
- Multi-Annual Indicative Financial Framework for 2010-2012 (MIFF)
- Multi-Annual Indicative Financial Framework for 2011-2013 (MIFF)
- 2009 Country Program Interim Evaluation of EU Pre-accession Assistance to Croatia. Report prepared by Economisti Associati to the European Commission Directorate General for Enlargement, 12 March 2010
- Croatia, country profile. European Environmental Agency, 2011
- Country Programme Interim Evaluation of EU Pre-accession Assistance to Croatia, February 2012
- Speech Commissioner for Regional Policy Johannes Hahn, Brussels Press Club, 14 September 2011, European regional policy: investing in the benefit of us all.
- UNDP reports
- OECD Environmental Outlook to 2030
- Croatian Bureau of Statistics, 2011
- 2012 Pre-Accession Economic Programme, Zagreb, February 2012 , http://www.mfin.hr/adminmax/docs/ENG_PEP%202012-2014.pdf
- Project Results, European Union Twinning Project , Implementing the Water Framework Directive in the Republic of Croatia. Project Beneficiary: Ministry for Regional Development, Forestry and Water Management; Croatian Waters (Hrvatske vode). Project No: HR/2004/IB/EN/01. Implementation Period: September 2007 – September 2009
- Project Final report ~Technical Assistance for Management of the Environmental Protection Operational Programme (EPOP)~. CFCA, April 2012.
- Technical Assistance for Management of the Environmental Protection Operational Programme (EPOP). Project Inception Report, 2011. CFCA
- European Union Twinning Project , Implementing the Water Framework Directive in the Republic of Croatia. Project Beneficiary: Ministry for Regional Development, Forestry and Water Management;



Croatian Waters (Hrvatske vode). Project No: HR/2004/IB/EN/01. Implementation Period:
September 2007 – September 2009

- JASPERS Action Plan 2012
- JASPERS Guidance note on CBA preparation



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APPENDIX D. INDICATIVE PROJECT PIPELINE

Operational Programme Environment 2007-2013 (1.7.2013 - 31.12.2013) Waste Sector - Indicative Project Pipeline					
Number	Project Title	Final beneficiary	Estimated project value (in mil euros)	Project preparation status	
			Total value	Current level of project readiness (list of prepared project documentation)	TOTAL COST of project preparation
Priority Axis 1 - Waste management sector					
Waste management centres and remediation of sites highly polluted by waste					
1	RWMC Piškornica (Zagorsko-krapinska, Varaždinska, Međimurska, Koprivničko-križevačka County)	Piškornica d.o.o.	50.000.000-70.000.000	Technical-technological solution, EIA, Decision on integrated environmental protection requirements, conceptual design, draft FS with CBA and PA (need to be amended)	4 170 000
2	Zadarska and 50% of Ličko-senjska county - RWMC Biljane Donje	Eko d.o.o.	30.000.000-45.000.000	Special geo-topographic survey for WMC, technical-technological solution, EIA, conceptual design for WMC, draft FS with CBA and PA (need to be amended)	3 770 000
3	Šibensko-kninska county - RWMC Bikarac (II phase)	county/county utility company	14 400 000	Preparation of project documentation for phase II ongoing (procured in feb. 2012.). Contract duration 6 months.	550 000
4	Remediation of site highly polluted by waste (' hot spot ') " Lemić brdo " near to Karlovac	Republic of Croatia	2 000 000	Conceptual and Main design prepared	280 000
Remediation of landfills					
Šibensko-kninska county					
4	Remediation of municipal waste landfill of City of Vodice- " Leć "	LSU	3 130 000	Conceptual and Main design prepared	219 100



5	Remediation of municipal waste landfill of City of Knin- "Mala Promina"	LSU	2 450 000	Conceptual and Main design prepared	171 500
5	Remediation of municipal waste landfill of City of Skradin- "Bratiškovački gaj"	LSU	350 000	Conceptual design prepared	24 500
6	Remediation of municipal waste landfill of City of Drniš- "Moseć"	LSU	1 500 000	Conceptual and Main design prepared	105 000
6	Remediation of municipal waste landfill of Municipality of Kistanje- "Macure Jelenik"	LSU	440 000	Conceptual design prepared	30 800
7	Remediation of municipal waste landfill of Municipality of Murter- "Hripe"	LSU	2 660 000	Conceptual design prepared	186 200
Primorsko-goranska County					
8	Remediation of municipal waste landfill of City of Rab - "Sorinj"	LSU	3 190 000	Conceptual design prepared	223 300
9	Remediation of municipal waste landfill of City of Čabar - "Peterkov Laz"	LSU	200 000	Conceptual design prepared	14 000
10	Remediation of municipal waste landfill of City of Delnice - "Sović Laz"	LSU	2 200 000	Conceptual design prepared	154 000
11	Remediation of municipal waste landfill of Municipality of Mrkopalj - "Mrzle drage"	LSU	280 000	Remediation programme prepared	19 600
12	Remediation of municipal waste landfill of City of Vrbovsko - "Cetin"	LSU	870 000	Conceptual design prepared	60 900
13	Remediation of municipal waste landfill of City of Mali Lošinj - "Kalvarija"	LSU	2 510 000	Conceptual and Main design prepared	175 700
14	Remediation of municipal waste landfill of Municipality of Matulji- "Osojnica"	LSU	1 140 000	Conceptual design prepared	79 800
15	Remediation of municipal waste landfill of City of Cres- "Pržić"	LSU	1 760 000	Conceptual design prepared	123 200
Istarska County					
16	Remediation of municipal waste landfill of Municipality of Višnjan- "Palovac"	LSU	30 000	Remediation programme prepared	2 100
17	Remediation of municipal waste landfill of Municipality of Višnjan- "Šuma Dubrava"	LSU	40 000	Remediation programme prepared	2 800



18	Remediation of municipal waste landfill of City of Buzet- "Mašimova škuja"	LSU	500 000	Remediation programme prepared	35 000
19	Remediation of municipal waste landfill of City of Pula- "Kaštijun"	LSU	5 500 000	Conceptual and Main design prepared	385 000
Priority Axis 1 - TOTAL			125.150.000 - 160.150.000		10 782 500

Operational Programme Environment 2007-2013 (1.7.2013 - 31.12.2013) Waste Sector - Indicative Project Pipeline					
Number	Project Title	Final beneficiary	Estimated project value (in mil euros)	Project preparation status	
			Total value	Current level of project readiness (list of prepared project documentation)	TOTAL COST of project preparation
Priority Axis 2 - Water management sector					
1	Porec: sewerage & Waste Water treatment plant	Hrvatske Vode	58 206 000	Application submitted to EC on 1.8 2011. Project Appraisal ongoing. Reply on EC comments in progres. Preparation of tender docs in progress.	
2	Vukovar: water supply, sewerage and Waste Wate treatment for Vukovar	Hrvatske Vode	52 286 479	Draft feasibility study prepared under PHARE 2006 project. Finalisation of Feasibility study as well as project application ongoing based on JASPERS comments. All preliminary and main designs prepared. 80% of permits obtained.	
3	Osijek: water supply, sewerage & Waste Wate treatment plant	Hrvatske Vode	72 508 560	Draft feasibility study prepared under PHARE 2006 project. Feasibility study as well as project application based on JASPERS comments prepared. It is expected that Application form will be sent to EC in July 2012. Preparation of tender docs. in progress. All designs and permits obtained.	



4	Čakovec: water supply, sewerage & Waste Water treatment plant	Hrvatske Vode	43 729 970	Draft feasibility study prepared. Project is under assesment of JASPERS. All location permits obtained. All building permits in approval procedure.	3 935 697
Priority Axis 2 - TOTAL			226 731 009		20 405 791





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