



**Methodology and basis for calculations regarding emission
reductions and environmental impact within
NEFCO's project portfolio**

March 2008

1. INTRODUCTION

The purpose of this review is to describe how NEFCO **evaluates environmental impact** of projects as well as typical indicators used for projects, and on what basis these indicators are selected, calculated and reported. The evaluation is done on a sectoral basis (e.g. municipal water projects, industry, energy, waste, agriculture) and is in principle the same for all projects. A project's environmental impact is quantified through a number of indicators. The situation prior to the implementation of a project is the starting point for benchmarking. Expected reductions are calculated during the pre-study or the business planning stage. Actual reductions resulting from the implementation are then compared quantitatively with the expected levels and levels prior to implementation.

The basis for the establishment of the environmental methodology is NEFCO's Environmental Guidelines as presented in Appendix 2. NEFCO, along with the other European IFIs, is signatory to the Guidelines within the context of the Declaration on European Principles for the Environment (EPE). EPE's aim is to follow EU Environmental Directives in the operations of the European IFIs outside the EU (Appendix 3). During 2008, the EPE will produce a handbook with interpretations of all directives related to the environment. The handbook will form part of NEFCO's environmental methodology.

To analyse whether or not an **environmental benefit** is significant enough to warrant NEFCO's participation, investment costs are compared to the expected emission reductions of the project and to the cost of achieving equivalent emission reductions within the Nordic countries. The estimated costs for the Nordic countries are based on so-called Nordic shadow prices. The calculations are based on the Seville Process Reference Protocol.¹

All projects with NEFCO participation are required, according to mandate, to provide an annual **Project Environmental Report** (PER). The PER monitors any eventual differences between the expected and actual environmental impacts within the project. The requirement for an annual environmental report is mandatory as long as NEFCO is financially involved in the project, for instance, through loans or equity. In the event that the actual environmental impact is significantly less than expected, an investigation is required to evaluate the underlying reasons. NEFCO's need and opportunity to act and remedy are described within the financial agreements to ensure that the expected environmental benefit is achieved.

To be able to evaluate in advance whether added value exists for a project a "Unit Abatement Cost" (UAC) is calculated for the relevant environmental indicators. Added value exists if the project cost is lower than the corresponding cost in a Nordic country. The UAC is calculated so that the total investment is discounted over a 10-year period using an interest rate of 5% and calculated against a specific environmental indicator. Alternatively, several indicators are taken into account and summed up. The latter allows an overall cost-effectiveness to be considered for a given project (See Chapter 3.1 below).

¹ European Commission, DG Joint Research Centre, IPTS, Sustainability in Industry, Energy and Transport; European IPPC Bureau. Integrated Pollution Prevention and Control; Reference Document on Economics and Cross Media Effects, May 2005.

2. ENVIRONMENTAL IMPACT ASSESSMENT

2.1. Environmental indicators

The over-arching aim of NEFCO's operations is to contribute to a **reduction of pollutants and improve energy efficiency of both renewable and non-renewable resources**. This is achieved through the participation in projects leading to a reduction in emissions to water courses, reduction in air pollution (incl. greenhouse gas emissions), improved processing procedures for waste and chemicals, etc. NEFCO primarily participates in projects that have a direct or indirect positive **cross-border environmental impact** for the Nordic countries in addition to the positive impacts that are achieved locally. NEFCO also participates in projects whose environmental impact is restricted to the local area where a desired **reference or model-specific effect** is achieved.

NEFCO's operations cover all types of actions that lead to the reduction of environmental impact and to wider environmental security through, for instance, improved environmental management, introduction of different environmental standards, or modernization of industrial processes. However, it is important that the emphasis within the projects is on achieving environmental additionality. Priority is given to projects with a quantifiable direct or indirect environmental impact.

A number of relevant indicators that describe the set environmental targets and enable follow-up evaluations must be agreed for each NEFCO project.

The indicators are quantified through available and accepted methods. In certain circumstances the indicator cannot be measurable due to methods of analysis not being available or due to any other lack of information. Under such circumstances current **indicators have to be estimated** or calculated based on known values from equivalent facilities/technological solutions (so-called "emission factors"). In some cases it might be appropriate to introduce **a different indicator**, for example, the introduction of an environmental standard, e.g. EMAS or FSC (Forest Stewardship Council), to achieve better environmental control, biodiversity, sustainable forestry, etc.

Under some circumstances an **indirect environmental impact** might also be achieved. Such impacts are achieved for instance in the next user stage, which is common in industrial projects. For example the manufacturing of environmental equipment and equipment designed to achieve more efficient energy consumption. A Nordic company that starts production, through a joint venture or equivalent, within one of the countries where NEFCO operates and via its production, achieves a reduction in emissions from the actions of their customers in the country in question.

Simultaneously, there is a transfer of new technological knowledge which facilitates the switchover to more effective environmental actions. Other examples of an indirect positive environmental impact can be to offer services within the area dealing with the environment and energy, such as consultancy services that contribute to the creation of improved conditions for the implementation of environmental actions. The indicators in these circumstances are based on estimates of the amount of equipment sold and what it replaces.

Environmental indicators are selected to ensure that they help to evaluate the **existing environmental situation** prior to the implementation of the project. The selected indicators are followed up in the annual **environmental reporting process**.

2.2. Sector-specific environmental indicators

The table below provides a short summary of the most important environmental indicators for different sectors.

| Sector | Environmental indicators | Comment |
|--------------------------------------|---|---|
| Municipal water and sewage treatment | BOD, COD, Ntot, Ptot, SS More effective resource usage (e.g. reduced water usage) | In certain circumstances NEFCO can participate in financing only potable water projects where this is seen as a pre-condition to allow later investments in relation to sewerage treatment. |
| Energy | SO ₂ , NO _x , CO ₂ , heavy metals (HM), Hg, dust, kWh; more efficient resource usage, radioactivity, certification e.g. EMAS | The creation and emission of any type is handled through a combination of: <ul style="list-style-type: none"> • Energy efficiency • Process modification • Choice of fuels that cause less polluting emissions when combusted • Introduction of emissions control • Improved resource and waste management processes |
| Industry projects | Established on a case-by-case basis in relation to water, air and waste. POPs/HM, ODS, GHG, nutrients; more efficient resource and energy usage, incl. the management of chemicals; certification e.g. EMAS | Environmental impacts should be both direct and indirect. |
| Waste | Heavy metals, incl. Hg, ODS-GHG, incl. CH ₄ , CO ₂ ; SO ₂ , VOC, particles, NO _x , nutrients (N, P) PCB/POPs, reduced radiation (radon etc.) | The management of waste from households, industries, ashes and spent fuel from energy production as well as contaminated soil. |
| Agriculture, forestry | N, P, pesticide, CH ₄ ; energy and resource usage, certification e.g. EMAS, FSC | The choice of indicator depends on the type of the project: <ul style="list-style-type: none"> • waste handling • water discharge • air-based effluents • effects from poisonous pesticides • ecological consequences • diseases • air-based effluents |

3. ENVIRONMENTAL BENEFIT

3.1. Methodology

To allow NEFCO to participate in the financing of a project the environmental benefit to the Nordic countries has to be sufficiently significant.

The environmental benefit is generally analysed in terms of how cost-effective an investment is compared to similar investments in the Nordic countries.

NEFCO uses two primary methods to evaluate environmental cost-effectiveness in relation to investments: calculation of the marginal cost, so-called Unit Abatement Cost (UAC), and environmental payback time. Both of methods uses Nordic comparative costs, the so-called Nordic (or European) shadow prices (See Appendix 1). The difference between the two methods is that the UAC is calculated separately for each environmental indicator whereas the calculation of environmental payback time allows for an overall summary of all environmental indicators, which therefore means that the investment is measured by its overall cost-effectiveness.

The UAC calculation is used primarily when assessing the cost-effectiveness of selected indicators, e.g. carbon dioxide for energy projects, phosphorus and nitrogen for sewage treatment and agricultural projects. The reason for this is that there is a wealth of historical information regarding the cost-effectiveness of such types of projects. For most projects the environmental payback time is also of significant interest during the analysis of the cost-effectiveness of the project.

The calculation methods above are applicable in all cases where indicators are quantifiable or can be estimated, which apply to nearly all NEFCO projects. In cases where it is not feasible to quantify or estimate the cost-effectiveness or where the cost-effectiveness is very low, e.g. biodiversity projects, projects aimed at improving drinking water quality, certain industrial projects, etc., but where, nevertheless, the environmental benefit is significant or in accordance with Nordic environmental policy, an investment can still be considered to provide sufficient environmental benefit.

3.2. Calculation of UAC

The following parameters are required when calculating investment UAC against a specific indicator:

The investment cost

The total investment, normally provided in euro. Depending on the setup of the investment, it could be relevant to limit the calculation to the part of the project which is related to NEFCO. For example if a factory is being renovated and NEFCO provides financing for enabling the building of a sewerage treatment plant connected to the factory, it is reasonable to carry out a calculation solely based on the cost for the treatment plant.

Change in annual operational cost

This refers to the change of the situation before and after the project has been implemented and become operational. This parameter is primarily calculated in one of two ways; i) changes to EBITDA² based on a financial project analysis, ii) calculation of the annual saving based on a technical analysis of the project.

Annual emissions reduction/resource efficiency gain)

The expected annual reduction in the indicator compared to the project baseline prior to implementation, normally expressed in a mass unit [e.g. kg, tons].

The first step in the calculation is to calculate an annual annuity for the investment. This requires both a repayment time/depreciation time (“capital recovery time”) and an internal interest rate. For all projects using the UAC method a UAC value is calculated using a repayment time/depreciation time of 10 years and an interest rate of 5%. The interest rate is in line with (or slightly higher than) what is used in the Nordic countries for similar calculations. When the investment has a long depreciation time, e.g. infrastructure projects, the socio-economic situation needs to be taken into consideration and therefore it might be justified to use a longer repayment time of up to 20 years when calculating the UAC.

The annual change in operational costs is deducted from the annuity-based investment cost. This subtraction is divided by using the annual emissions reduction to provide a UAC value as per euro/ton of emissions reduction. This is expressed as per the following formula:

$$\text{UAC} = \text{annuity} - \text{annual change in operational costs (in certain cases EBITDA}^3) / \text{emissions reduction}$$

The calculated UAC value is then compared to the Nordic shadow price for the indicator to analyse the cost-effectiveness of the investment.

3.3. Environmental payback time

It is easier to calculate the environmental payback time than the UAC and it is primarily used in relation to projects where several quantifiable indicators are used, which then makes it possible to provide an overall cost-effectiveness analysis.

The first step in the calculation is to multiply the reduction in emissions from the various indicators against their respective Nordic shadow prices. The values are summed up and the euro amount indicates what the cost of achieving the same environmental impact would have been in the Nordic countries.

Thereafter the total investment cost is divided by the above sum which provides the environmental repayment time. When calculating both the environmental repayment time and the UAC an analysis should be carried out as to what is reasonable in terms of the total investment cost.

In contrast to the UAC, no direct Nordic shadow values exist for the comparison of the environmental payback time. NEFCO’s guidelines are that the environmental payback time must not exceed 10 years.

4. ENVIRONMENTAL REPORTING PROCESS AND CONTROL

4.1. Environmental reporting

All projects where NEFCO is involved must provide an annual environmental report (the Project Environmental Report, PER) for as long as NEFCO is financially involved in the project through loans or share holding, for example.

It must be ascertained prior to the project approval that the information required by NEFCO will be available after completion to allow calculation of the project-based environmental impact. Normally a standardised reporting format is agreed on, a priori, and becomes part of the overall project agreement with the client.

In the event that the actual environmental impact is significantly less than expected, an investigation is required to evaluate the underlying reasons. NEFCO's need and opportunity to act and remedy are described within the financial agreements to ensure that the expected environmental benefit is achieved. Based on the environmental reporting process NEFCO produces an annual summary of how the company's investments are performing in relation to their respective expected environmental impacts.

The summary contains the calculation of an environmental key fact as well as its relation to the economic performance of the project. The calculation includes summarised Nordic shadow prices for each project indicator, and these prices are compared to the annual investment cost for the project.

4.2. Administration of environmental data and quality control

The most important aspects of NEFCO's processing of environmental data include the calculation of environmental indicators for each project, the date when entered into the environmental database as well as information on how the requirements in relation to the annual environmental audit are communicated to the client.

When calculating environmental indicators, particularly in relation to industrial projects, it is important to consider not only those indicators that were intended for mitigation within the project, but also other parameters, such as production data, to allow for a follow-up in relation to selected environmental indicators and whether or not they correlate to the production data.

One problem which can emerge is how to establish what is measurable by the client subsequent to the implementation of a project. In certain countries difficulties may arise as a result of incorrect data due to, amongst other things, legislation, low quality measurements, the high cost of analysis for certain parameters, etc. In these cases existing data must be recalculated to comparable units based on a technology-based estimation despite the original assumption that the environmental indicator should be measured.

To ensure as high a degree of reliability as possible in relation to the accuracy of the figures, at least two persons from the environmental department or an external consultant should audit the figures before they are entered as environmental indicators. This audit should be carried out prior to the project being brought to the NEFCO Board for final approval.

The selected environmental indicators, including possible complementary indicators, are summarised in a tabular format with emissions data prior to implementation as well as expected

emissions data post implementation. If estimates are used to calculate the environmental indicators the method of calculation must be included. The table provides the foundation for what is entered into the environmental database.

Where loan and equity agreements are negotiated the table is included in the section on follow-up. The agreement should clearly state that the values in the table are those that have been agreed to and that the client is responsible for providing an annual report at the end of each year.

Where necessary the client will be visited and the results audited by the environmental department or designated consultant.

APPENDIX 1

NORDIC SHADOW PRICES

This Appendix presents a summary of the Nordic investment costs in relation to a range of emissions-reducing actions across different sectors. The costs provided are average costs for the most common indicators in relation to NEFCO projects. Additional indicators for mercury emissions, for example, are available in relation to a large number of processes (industry and energy production). Costs are continually monitored and revised when necessary.

Nordic Shadow Prices

| Indicator | Euro/unit | Unit | Comment | Reference |
|-----------------------|--------------|------|----------------------------------|-----------|
| CO ₂ | 40 | ton | Energy and industry projects | 1 |
| SO ₂ | 1,500 | ton | Energy and industry projects | 2 |
| NO _x | 4,000 | ton | Energy and industry projects | 2 |
| BOD | 320,000 | ton | Municipal and industry projects | 3 |
| Ntot, not agriculture | 125,000 | ton | Municipal and industry projects | 3 |
| Ntot, agriculture | 37,000 | ton | | 4 |
| Ptot, not agriculture | 1,790,000 | ton | Municipal and industry projects | 4 |
| Ptot, agriculture | 2,739,000 | ton | | 4 |
| SS | 10 | ton | Municipal and industry projects | 3 |
| Dust/particles | 10 | ton | Industry and energy | 3 |
| Waste | 100 | ton | | 3 |
| Energy | 20 | MWh | | 5 |
| Raw material/resource | 2 | ton | E.g. water or other raw material | 3 |
| VOC | 5,000–10,000 | ton | Industry projects | 3 |

The list is an excerpt from an internal, more detailed NEFCO publication

References

1. The economic valuation of carbon. EIB and SEI. Unpublished report
2. The Swedish National Licensing Board. Sweden
3. Regional environmental publications 411, 2006. Development plan for water management in Birkaland.
4. Action and consequence analysis in relation to the introduction of environmental quality standards for phosphorus in lakes, Swedish Environmental Protection Agency report No. 5289 as well as Arheimer et al. *Ambio* 34, 7: 2005
5. Vartiainen et al. 2002. Gaia Group, ISBN 952-91-4465-2

NEFCO ENVIRONMENTAL GUIDELINES

Environmental Policy

In order to fulfil its task in the environmental recovery of Eastern Europe, NEFCO will pursue the following environmental policy priorities:

- to verify that all the projects to be financed have a direct or indirect positive environmental impact on local as well as Nordic environment;
- to promote in all of its activities environmentally sound and sustainable development;
- to identify and quantify positive environmental impacts in the projects to be financed and to ascertain that possible negative environmental impacts are identified and assessed and all relevant mitigation measures are considered;
- to adopt adequate environmental assessment, management planning, audit and monitoring procedures throughout its activities.

Environmental Procedures

Overview

Purpose of Procedures

The purpose of these procedures is to ensure that NEFCO projects comply with appropriate international and local standards and the environmental requirements of the host country, and that:

- procedures are followed throughout the project approval and implementation process;
- potential environmental liabilities are avoided;
- all relevant mitigation measures and efficiency improvements are identified and considered;
- environmental costs are estimated along with other costs and liabilities; and
- all significant environmental issues are adequately addressed prior to submission of project documents to the Board of Directors.

Procedures

This chapter outlines the process by which NEFCO determines the adequacy of the Project Sponsor's environmental investigations of proposed project and works with the Project Sponsor to address environmental issues associated with the project.

1. Request for Environmental Information

Description

NEFCO's initial involvement in a project occurs at varying stages in project development. NEFCO can be approached for financing (1) before a feasibility study has been prepared, or (2) after completion of a detailed feasibility study. In both cases NEFCO must have sufficient information on the environmental aspects of the project to allow for proper preparation of indication of interest, project screening and determination of the level of environmental information required. Initial request for information on a proposed project should also include a summary of key environmental issues associated with the project. The key issues to be required are as follows:

- Environmental benefits and positive impacts of the project on local and Nordic environment, e.g. energy savings/environmental improvements
- Anticipated main negative impacts of the project and proposed environmental controls/technology to mitigate negative impacts
- Potential environmental liabilities/concerns associated with the project or the property
- Available environmental information, such as environmental audits or environmental impact assessments

Responsibility

The Investment Manager is responsible for requiring environmental information. Every effort should be made during project identification to ensure that this information is provided as early as possible. Project Sponsors are responsible for providing adequate information.

Documentation

The documentation of environmental issues provided by the Project Sponsor is kept in the project file by the Investment Manager.

2. Screening

Description

If a project proceeds beyond the indication of interest stage, NEFCO will screen the project to determine the nature and extent of the environmental work required. Screening serves two purposes: (1) to determine which projects need further environmental consideration and (2) to eliminate those unlikely to have negative environmental impacts.

During screening, two questions will be asked of each project:

1. Does the project need an environmental impact assessment (EIA)?

The purpose of an EIA is to identify scope and assess environmental impacts and to identify and propose adequate mitigation measures.

An EIA is normally needed for projects involving any of the following:

- development on a greenfield site;
- industrial developments;
- manufacture of products;
- expansion of an existing facility to undeveloped land;
- public infrastructure projects (e.g. water supply, sanitation, transport, energy);
- projects which have the potential to cause environmental impacts outside the area occupied by the project;
- whenever required by law.

An EIA is normally not needed for projects involving any of the following:

- education (e.g. facilities, training);
- establishment of consulting and engineering firms;
- telecommunications, research;
- technical assistance;
- institutional development.

2. Does the project need an environmental audit (EA)?

The purpose of an EA is to identify any environmental concerns that may be a potential liability, either to the Sponsor or to NEFCO.

An EA is normally a requirement for projects that involve:

- expansion and modernization of a property;
- transfer or lease of a property.

Based on the answers to these two questions, the project will be given two codes, which are entered on the environmental screening memorandum:

- A or B refers to whether the project requires an EIA (A) or no EIA (B).
- 1 or 2 refers to whether the project needs an EA (1) or does not need an EA (2).

Category A: Project may result in diverse environmental impacts. EIA is required. Large-scale industrial or infrastructure projects normally require full EIA. Other projects may require a partial EIA that can be a separate study or a part of feasibility study.

Category B: Project does not result in essential environmental impacts. No EIA is required.

Category 1: EA required.

Category 2: No EA required.

Responsibility

Screening is carried out before the feasibility study, after the Indication of Interest has been passed by the Board. Screening is initiated and carried out by the Investment Manager. When necessary, the Environmental Adviser is consulted.

Documentation

The Environmental Screening Memorandum is created during the screening process. It should record the following information:

- Project title
- Investment Manager
- Brief description of the project
- Preliminary environmental information
- Environmental issues apparent at screening
- Environmental Screening Category
 - Environmental impact assessment (A or B)
 - Environmental audit (1 or 2)
- Reason for screening into the chosen category
- Other issues
- Actions

3. Environmental Investigations

Description

Following approval of an indication of interest, NEFCO is likely to request that more comprehensive feasibility study is undertaken. The Environmental Investigations belong to this stage of the project cycle. Projects which require some form of environmental investigation will be identified through the screening process described in the previous chapter.

Project Sponsor is normally the responsibility of the preparation of environmental investigations. The Project Sponsor and NEFCO should agree as early as possible, normally immediately after approval of the Indication of Interest, on any required environmental investigations, schedule, and contents (terms of reference, TOR), as appropriate. This is because findings should be directly integrated into project design. In many projects, especially in those involving process modernizations, EIA and EA are often linked and overlapping. EA e.g. should not focus on those issues of the present situation which are not relevant in the new situation or which will be covered in the EIA. Because projects normally differ quite much from each other, the detailed contents of the investigations should be defined for each project separately.

When defining the comprehensiveness and the contents of the investigations national EIA and EA regulations should be respected, level and the procedures of public participation should be defined etc. The investigations should also be co-ordinated with other financiers.

Environmental impact assessment (EIA)

Environmental impact assessment is an examination of the potential environmental impacts of a project. Contents of an EIA can vary considerably depending on the type of project. It can be a major study conducted by a team of specialists. As to projects financed by NEFCO, the environmental issues can normally be successfully managed through a less extensive assessment. The contents of EIA should be specified for each project separately.

Regardless of the level of detail, EIA involves normally the following basic tasks:

- Identification of alternatives and their environmental impacts
- Scoping
- Prediction of impacts
- Evaluation of impacts
- Identification of mitigation measures
- Preparation of environmental monitoring plan
- Presentation of results

The process and the results of the EIA are described in a formal document.

Environmental audit (EA)

Environmental audit is a method to determine the nature and extent of all environmental areas of concern at an existing facility. It consists of observations, interviews and reviews of records to determine if there is reason to suspect contamination or other environmental liability issues associated with a property.

The process and the results of the EA are described in a formal document.

Responsibility

Responsibility for undertaking an environmental investigation rests with the Investment Manager. The preparation is normally the responsibility of the Project Sponsor. The Project Sponsor and the Investment Manager should agree as early as possible, normally immediately after approval of the Indication of Interest, on any required environmental investigations, schedule, and contents (terms of reference), as appropriate. This is because findings should be directly integrated into project design.

Documentation

For projects requiring environmental impact assessment and/or environmental audit, the following documentation will, typically, be required in the project file:

- Terms of reference and contract with consultants if hired directly by NEFCO.
- Copy of the environmental audit report.
- Copy of the environmental impact assessment report.
- Copy of Project Sponsor's response to the report(s), including the Sponsor's response to recommendations made in the report(s).

4. Environmental Review

Description

On completion of the environmental investigations, their adequacy and compliance with the terms of reference need to be reviewed. There are two complementary sets of criteria for reviewing an environmental investigation study:

1. Review of adequacy of studies

Does the EIA and/or EA study satisfy the terms of reference?

Do the reports adequately cover all significant environmental consequences, or is further investigation required?

Do the reports:

- adequately cover all significant environmental impacts and potential liabilities ?
- clarify which impacts are unavoidable and which can be mitigated ?
- identify and recommend mitigation measures ?
- summarize recommended actions ?

2. Review of recommendations and conclusions from the environmental investigations

The following questions should cover the review:

- Are there environmental concerns which suggest that the project should not proceed ?
- Are there any environmental covenants which need to be built into the agreements ?

Responsibility

The Project Sponsor should review the EIA and/or EA to ensure that the consultants who prepared the study followed the terms of reference. Before the Board presentation the Investment Manager will review all the information associated with the project and prepare an Environmental Review Memorandum. Also The Board of Directors will review the project for its environmental implications.

Documentation

Documentation in the project file consists of Environmental Review Memorandum and environmental conditions in the agreements. Contents of memorandum are as follows:

- Environmental information reviewed
- Key environmental issues
- Adequacy of proposed mitigation
- Compliance with pollution control standards
- Unresolved issues
- Further information requirements (if any)
- Further actions required by NEFCO staff and by Project Sponsor

5. Incorporation of Environmental Covenants into Agreement

Description

Environmental covenants arising from the environmental review of the project as well as penalties in cases of non-compliance will be incorporated into funding agreements.

Responsibility

The Investment Manager is responsible for the preparation of covenants and for their inclusion in the agreements.

Documentation

Documentation in the project file consists of environmental covenants in the agreements.

6. Environmental Supervision

Description

NEFCO supervises the environmental performance of projects in its investment portfolio. Environmental supervision will constitute a part of overall project supervision during the transaction. The supervision is carried out to assure NEFCO that the Project Sponsor is executing the project in compliance with the agreements made with NEFCO and with any relevant national environmental procedures.

Supervision may occur in one of the following ways:

- Review of monitoring reports prepared by the Project Sponsor.
- Supervision missions carried out by NEFCO or a third party appointed by NEFCO.

In the case of non-compliance, the Investment Manager discusses an appropriate course of action with the Managing Director. Initially the Project Sponsor will be requested to take corrective action within a set time frame. The penalties in cases of non-compliance may include freezing disbursements and notifying the proper authorities and co-financiers whom may also apply penalties.

Responsibility

Environmental supervision is the responsibility of the Investment Manager, who may request assistance from the Environmental Adviser to review monitoring reports, to initiate an independent review or to recommend actions in cases of non-compliance.

Documentation

Documentation in the project file consists of monitoring reports and reports on independent reviews.

7. Environmental Evaluation

Description

At the completion of the project, NEFCO will review all environmental information and prepare an Environmental Evaluation Memorandum that summarizes and evaluates the positive and negative impacts of the project on the environment. Environmental evaluation can be an integral part of the project evaluation. Environmental evaluation process establishes whether the project has achieved its overall environmental objectives, and if not, what lessons there are to be learned. Secondly, it can determine whether the environmental procedures were being implemented effectively.

Evaluation studies can be made during the project's operation and/or at the end of it. If environmental issues are particularly prominent in the project, it may be appropriate to commission an Environmental Audit as a specific study within the evaluation.

Responsibility

It is the responsibility of the Investment Manager together with the aid of the Environmental Adviser to ensure that environmental considerations are properly incorporated into the evaluation process.

Documentation

Documentation for the project file consists of potential Environmental Audit report(s) and Environmental Evaluation Memorandum at the end of the project.

Contents of the Environmental Evaluation Memorandum could be as follows:

- Environmental issues identified at initial and final review
- Environmental issues arising during the transaction
- Summary of environmental monitoring and supervision
- Summary of public participation/consultation
- Current environmental status
- Action items
- Comments/implications for future transactions

NEFCO/20.03.2000

Declaration

The European Principles for the Environment

We, the Signatories of the Declaration, hereby endorse and reinforce the European consensus on the values attached to the fundamental right for both present and future generations throughout the world to live in a healthy environment.

This Declaration, recognizing the common approach taken by the Signatories to environmental management and to the integration of environmental considerations in their respective operations and mandates, is based on the identification and recognition of a particular EU policy approach to the environment in accordance with the “European Principles for the Environment” (EPE) as defined below.

We underline the importance of the EPE, which promotes the EU approach to environmental sustainability, and we are committed to applying EU principles, practices and standards to all projects financed by the Signatory institutions.

The EPE are defined as the guiding environmental principles enshrined in the EC Treaty and the practices and standards incorporated in EU secondary legislation on the environment. The principles include, in particular, the precautionary principle, the prevention principle, the principle that environmental damage should as a priority be rectified at source, and the polluter pays principle².

The geographical scope of the EPE covers, at least the respective regions of operations of each Signatory institution, or any other geographic area it deems appropriate, including the EU 25 and European Economic Area (EEA) countries, the EU Acceding, Candidate and potential Candidate Countries and the Countries that are covered in the “European Neighborhood and Partnership Instrument”, implemented according to the following modalities.

In the Member States of the EU, the EEA countries, the EU Acceding, Candidate and potential Candidate Countries, the Signatories hereby agree to provide financing to public or private sponsors of projects only where the projects comply with the above principles and the relevant secondary EU legislation³. Of the EU secondary legislation particular emphasis is given to:

- The EU Directive on Environmental Impact Assessment (EIA);
- EU Directives related to industrial production, water and waste management, air and soil pollution, occupational health and safety, and the protection of nature, where these can be applied to specific projects.

We also agree that projects in this region should comply with any obligations and standards enshrined in relevant Multilateral Environmental Agreements (MEAs), according to applicable EU law (e.g. biodiversity, climate change, the ozone layer, wetlands, persistent organic pollution, trans-boundary air pollution, endangered species and environmental information, and others that may be ratified from time to time).

² Treaty Establishing the European Community 2002, Article 174 (2).

³ In some countries, a phased approach with certain requirements of the *Acquis Communautaire* may be adopted in accordance with negotiated accession agreements.

In all other countries, projects financed by the Signatories are expected to comply with the appropriate EU environmental principles, practices and standards, with due respect for the European Neighbourhood Policy and the EU policy towards Russia, subject to local conditions. In such financing, we will apply the EPE, with reference to such factors as the costs of application, the local conditions that prevail and the time frame for the phased application for implementing the EPE. In the case of co-financed projects, we will work together to agree a common approach to the project, where possible, based on or consistent with the EPE and its methods of implementation as outlined above.

We also aim as part of the EPE to promote best EU practice in the fields of environmental management, transparency, public consultation and reporting⁴.

As we move forward with the EPE process, the Signatories of the Declaration will encourage other European-based institutions to share the common approach to environmental sustainability as well as work together on specific topics in the interests of greater coherence.

Luxembourg, 5 April 2006

⁴ The EU "Environmental Management and Audit Scheme" (EMAS) is an example of such best practice.