



NORDIC  
INVESTMENT  
BANK

# NIB Mandate Rating Framework

**The Nordic Investment Bank is the international financial institution of the Nordic and Baltic countries.**

**We work towards a prosperous and sustainable Nordic–Baltic region.**

# Contents

1	The mandate .....	2
2	Defining a project.....	3
2.1	Investment programmes .....	3
2.2	Loan programmes for financial intermediaries.....	3
3	Assessing productivity gains.....	4
3.1	Technical progress and innovation .....	4
3.2	Human capital and equal economic opportunities.....	5
3.3	Infrastructure improvements .....	5
3.4	Improvements in market efficiency and business environment .....	5
4	Assessing environmental benefits.....	6
4.1	Pollution reduction .....	6
4.2	Preventive measures.....	6
4.3	Resource efficiency .....	6
4.4	Climate change mitigation .....	7
5	Rating the productivity gains .....	8
5.1	Technical progress and innovation .....	9
5.2	Human capital and equal economic opportunities.....	9
5.3	Improvements in infrastructure .....	10
5.4	Market efficiency and business environment .....	10
6	Rating the environmental benefits.....	11
6.1	Qualitative assessment based on sectors .....	11
6.2	Quantitative assessment based on environmental impacts.....	11
6.3	Aggregated qualitative and quantitative assessment.....	12
7	Overall rating .....	14

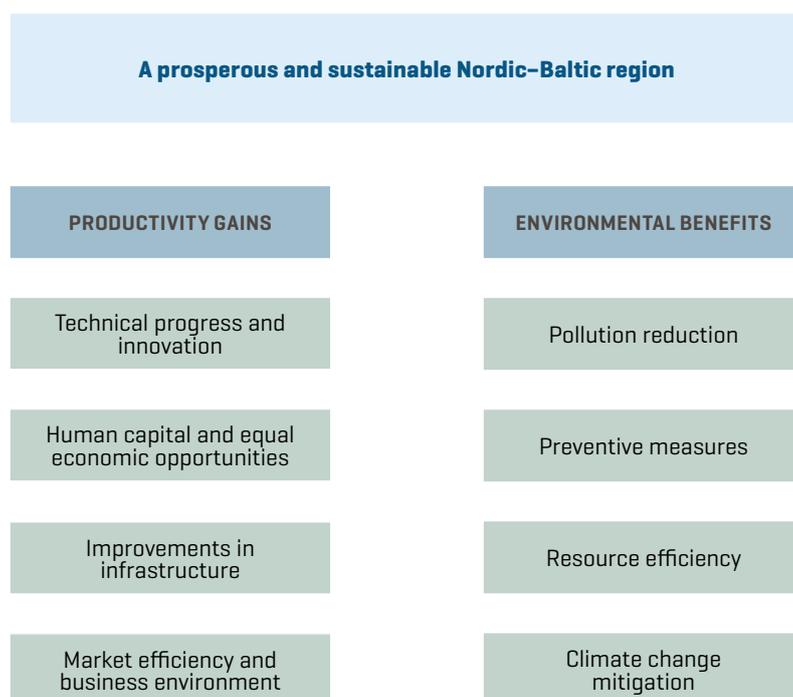
The Nordic Investment Bank is the international financial institution of the Nordic and the Baltic countries, and NIB’s overriding vision is a prosperous and sustainable Nordic–Baltic region. NIB finances projects that improve productivity and benefit the environment of the Nordic and Baltic countries. Further integration between the economies of the Member Countries is also a basic part of the Bank’s purpose.

# 1 The mandate

NIB finances projects that promote **productivity gains** and **environmental benefits** for the Nordic and Baltic countries in order to support a prosperous and sustainable Member Region. NIB’s mandate rating framework is a policy the bank uses to assess whether the projects considered for financing support the vision of the bank. The framework contains guidelines and tools that are used to assess how the projects provide productivity gains and environmental benefits for the Nordic and Baltic countries.

Figure 1 illustrates the drivers the framework recognises for achieving the environmental benefits and productivity growth. The productivity growth drivers are technical progress and innovation, infrastructure improvements, human capital and equal economic opportunities, development and improvements in market efficiency and the business environment. The drivers for environmental benefits are pollution reduction, preventive measures, resource efficiency, development of clean technology and climate change mitigation. Development of clean technology can drive investments with environmental benefits in all identified areas.

**FIGURE 1. NIB’S MANDATE**



In addition to the mandate assessment, all projects also undergo a sustainability review in accordance with NIB's Sustainability Policy and Guidelines. The review is carried out in order to determine that the project complies with internationally and nationally recognised environmental and social standards, and that it is resilient. The resilience refers to the capacity of a project to cope with anticipated and unanticipated changes while retaining its essential function.

## 2 Defining a project

NIB finances investment projects as opposed to operational expenses. An investment or a set of investments must fulfil the following general criteria to be considered a project that can be rated from a mandate perspective:

- It should be quantified in monetary terms.
- It should have a clear and specific objective, preferably one that is measurable.
- It should have a specified timeframe.

These are necessary, although not always sufficient, conditions to permit a mandate rating. In addition, projects should be new or ongoing. The main reason for this is to preserve the link between the Bank's financing and the mandate-related actions. However, projects that have been completed up to one year prior to assessment will still receive a mandate rating.

### 2.1 Investment programmes

If a project consists of a set of investments, e.g. an investment programme or an R&D programme, it is mandate-rated as a single project, provided that it fulfils the project definition. Consequently, in most cases an investment programme with a sufficiently specific objective and a clear delineation in time can be rated as a single project. If the objectives and timing of the measures included in an investment programme are considered more heterogeneous, the programme will normally be divided into several thematic sub-projects, with each component being rated separately.

### 2.2 Loan programmes for financial intermediaries

The financing of smaller companies and projects is facilitated through providing loan programmes with financial intermediaries. A loan programme within member countries is considered as a project consisting of several sub-projects. Mandate rating of a loan programme at the time of approval can only be undertaken, if the objective of the programme is clearly defined, or if a list of expected sub-allocations is known. Mandate rating of a loan programme is based on predefined project categories. For loan programmes in non-member countries, each allocation is generally assessed as an individual project.

## 3 Assessing productivity gains

Increasing productivity has been the main factor driving growth and income levels, which are closely linked to welfare and prosperity. Productivity can be measured as the economy's overall efficiency in the use of its factors of production [for instance, capital and labour]. The productivity gains of an investment may have different impacts in different environments, depending on the stage development of the country, markets and business environment. A number of indicators can be used to assess the drivers of economic growth; among the most common is *labour productivity*, measured as gross domestic product [GDP] per hour worked. GDP per capita grows through increases in labour inputs and more efficient use of this input through investments in tangible or intangible assets. Labour inputs as a source of growth are constrained by the supply of labour, which is determined by demographic factors and the efficiency of labour markets. Hence, most businesses have to take the constraints as given. The basic drivers for productivity increases are linked to improvements in human capital, infrastructure, education, health, and well-functioning markets where individuals have equal opportunities to prosper economically.

The basic drivers for productivity gains are similar in all economies, yet the degree of economic development between and within countries has a significant effect on the relative importance of these drivers. For instance, in the Baltic countries, investments in basic infrastructure and other improvements that foster market efficiency are still needed in the economic convergence process between the Baltic and Nordic countries.

The framework categorises a relevant set of impacts according to four drivers of productivity growth.

### 3.1 Technical progress and innovation

Investments in new physical capital and innovations have historically shown to be the main drivers of growth in GDP per capita in economies where investments have changed toward assets with higher marginal products, and hence, higher labour productivity and income levels.

In particular, research and development activities that turn ideas into successful products and new production techniques have led to significant productivity gains and disrupted entire markets, resulting in significant leaps in companies' ability to create value – and in workers' income levels.

Moreover, knowledge spillover across firms and industries is highly likely to benefit the whole economy. An important element is also the creation of geographical clusters where economic activities, academia, science, technology, talent and industry are concentrated in a way that fosters cooperation between the participants and integration into value-added chains.

## **3.2 Human capital and equal economic opportunities**

The quality of labour inputs and accumulation of knowledge stock in an economy boost productivity in a similar manner as accumulation and improved quality of physical capital. Investments in research, education, training and health care increase the quality and quantity of labour inputs. In this context, furthering equal opportunities for participation in the economies, e.g. through gender equality, are important drivers.

## **3.3 Infrastructure improvements**

The quality of regional infrastructure and infrastructure services shapes the business environment of a region and is known to increase productivity directly by reducing frictions in operations, and indirectly by increasing the efficiency of labour and product markets.

## **3.4 Improvements in market efficiency and business environment**

Few investments directly affect market efficiency and business environment. Yet, such effects tend to occur indirectly through other channels. For instance, investments that streamline business processes and bring productive efficiency and market expansion for one company may well place competitive pressures on other actors in the market. Competition and the economy's ability to sustain new businesses are known to be among the most important dynamics boosting productivity growth and the re-allocation of resources towards sectors/companies with higher productivity.

# 4 Assessing environmental benefits

## 4.1 Pollution reduction

The traditional environmental protection measures entailed in pollution reduction are still important, although significant progress has been made in NIB's member states during recent decades. Increased efficiency in pollution reduction technologies, new types of pollution and stricter environmental requirements are all driving investments in this field.

NIB plays an important role in the protection of the Baltic Sea in line with the objectives of the Baltic Marine Environment Protection Commission (HELCOM) as well as the EU's Water Framework Directive and Marine Strategy Framework Directive. This work delivers a solid stream of lending to investments that reduce the impact on the aquatic environment and its ecosystem services.

## 4.2 Preventive measures

A well-functioning society is dependent on developing and upgrading important infrastructure. Typical projects NIB finances in this area include strengthening electricity transmission and distribution networks, sewage networks and storm water control supporting pollution reduction. This should also be seen in the context of climate change and the need to adapt to the changes in climate. Rising sea levels, changing precipitation patterns and increased flooding will all be severe challenges going forward.

Although NIB member states have well-functioning infrastructure, seen in a global context, the need for re-investments in technical systems that have reached or are close to the end of their technical lifetimes are necessary projects to maintain a resilient infrastructure.

## 4.3 Resource efficiency

With increasing pressure on natural resources and insufficient execution of the waste hierarchy, it is important to implement resource-efficient systems built on effective technologies, improved resource management and changed consumer behaviour. Investing in resource efficiency is an effective way to maintain the value of products, materials and resources in the economy for as long as possible, in accordance with the EU's Circular Economy Policy. This will protect the environment both by liberating some of the pressure on natural resources and vulnerable eco-systems as well as by reducing the pollution load.

Advancing a resource-efficient society in NIB member countries is key for a sustainable future. Projects in this field include investments targeting the minimisation of the use of natural resources (energy, water and materials) and the generation of waste, as well as investments increasing the potential for relative improvements, for example by using secondary raw materials.

## **4.4 Climate change mitigation**

Projects that aim for climate change mitigation are core to NIB's environmental lending and in line with the EU's climate targets and the Paris Agreement. NIB's focus includes projects featuring energy generation from renewable sources, such as added electricity generation from photovoltaic cells, wind turbines and hydro-power stations. Climate change mitigation also entails investments in electrified public transport and energy-efficient solutions.

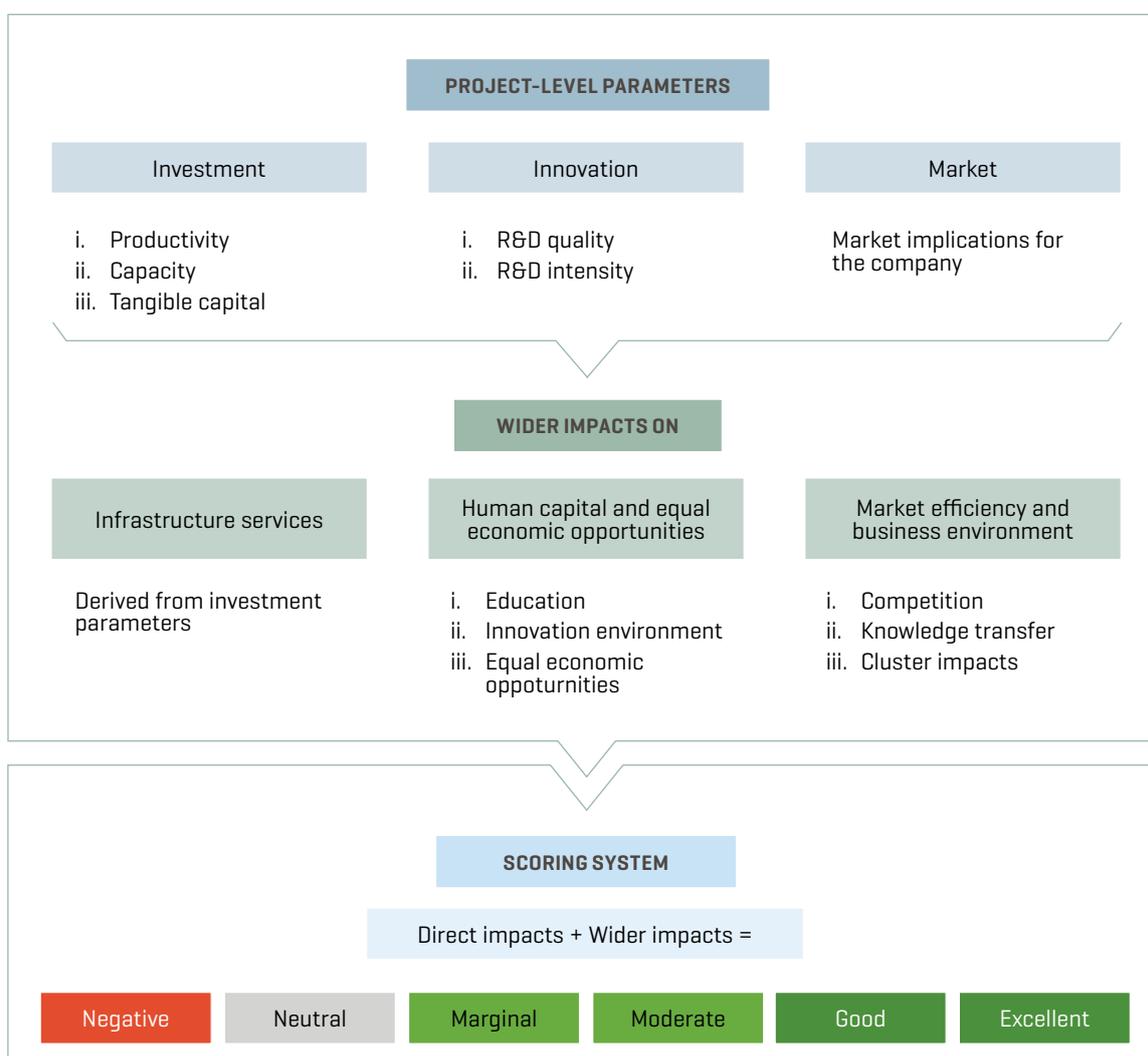
The transition to a low-carbon economy requires considerable investment in all sectors to cut the greenhouse gas emissions, to increase the share of renewable energy and to improve energy efficiency. In particular, more effort is needed in the main emitting sectors, including power generation and distribution, transport, buildings, industry and agriculture. The environmental benefits achieved through the four main drivers presented above are also in general contributing to meet some of the United Nations' Sustainable Development Goals relevant to the Nordic-Baltic region.

# 5 Rating the productivity gains

To build a conceptual framework for the assessment of micro- and economy-wide impacts from investments that facilitates the selection of projects with high expected impacts, the ratings of impacts are organised across two dimensions (direct and wider) according to perceived importance and type of impacts.

In terms of importance of impacts, expected impacts considered to be widely distributed in the economy will receive a higher weight. Rather than just having a direct impact on the project owner, wider impacts consist of often slower-moving underlying factors and spillover effects that affect economies' ability to create value. Wider impacts, such as those from economic integration between member countries, rarely bring immediate business or financial benefits to the owners of investment projects or financiers. They may, therefore, not be taken fully into account in investment and funding decisions. This can create inefficiencies in the financial markets and investment decisions, which NIB, with its long-term funding, can mitigate, providing assistance in reaching policy goals deemed important for member countries. Figure 2 illustrates the structure of the framework and the factors affecting the ratings.

**FIGURE 2. RATING PRINCIPLES FOR PRODUCTIVITY GAINS**



## 5.1 Technical progress and innovation

The rating framework accounts for technical progress using quantitative and qualitative information about projects, borrower characteristics and business environment. The rating of impacts from capital accumulation is based on estimates of the project's contribution to the project owner's stock of tangible capital and capital quality. The magnitude of the potential impacts is evaluated by comparing the effects of the investment on the borrower's existing stock of capital and productivity.

The assessment of projects' contributions to innovation activities involves before-and-after comparisons of the borrower's R&D spending, R&D intensity, capacity and quality, the availability of scientists and engineers, and the number of patent applications. Impacts on R&D investment volumes relate to the borrower's past and expected R&D expenditures, and their estimated impact on productivity. The comparison of R&D intensity uses industrial benchmarks to assess the company's current and expected positioning in its peer group. The impacts on companies' productivity from R&D are quantified using existing quantifications of private and social returns on R&D.<sup>1</sup>

## 5.2 Human capital and equal economic opportunities

Investments that affect human capital and promote equal economic opportunities occur in both the private and public sectors. In the public sector, investments in educational infrastructure and health care have positive impacts directly by increasing the productivity of provisioning of a public service, and indirectly by improving the quality of labour inputs. Investments in high-quality education are, for example, highly likely to eventually provide returns on employment, wellbeing, productivity and growth.

Investments in innovation processes contribute to skills development in the organisations involved, as well as in the entire economy, as the benefits from investments in human capital are widely distributed due to spillover effects through, for instance, labour migration and imitation. Due to these spillover effects, the average social return, [in other words the impact on the productivity of the economy], of investments in R&D tend to be significantly higher than that of an investment in tangible capital where the scope of the return is limited to the investing company.

<sup>1</sup> It should be noted, however, that such project-level quantifications are rough approximations, because estimates from research are mostly sector- and country-specific studies with limited predictive power in evaluating the impacts of individual projects.

## **5.3 Improvements in infrastructure**

The ratings of impacts from investments in infrastructure are quantified in a similar manner as investments in tangible assets, described in the section “Technical progress and innovation”. The rating framework accounts for capital accumulation and technical progress using quantitative and qualitative information about projects’ impacts on the capacity, productivity and quality of the relevant infrastructure services that the infrastructure assets provide. Benefits from infrastructure investments tend to be long-lasting and widely distributed in the economy. Therefore, the rating framework places a higher weight on wider impacts from infrastructure investments than on those from investments in non-infrastructure assets.

## **5.4 Market efficiency and business environment**

The rating framework takes into account the potential impacts on competition and other factors that shape market efficiency in the member area. The impacts from projects that support a correction of market imperfections or support inclusive economic structures through, for instance, availability of finance and lowering barriers to entry are therefore taken into account in the rating framework.

# 6 Rating the environmental benefits

The environmental mandate is assessed using a rating tool that includes qualitative and quantitative factors as inputs in a scoring model. Only environmental benefits affecting the member country region are considered in the mandate rating. Projects in non-member countries may generate relevant environmental benefits for the member countries, e.g. by reducing trans-boundary pollution, such as greenhouse gas emissions and discharges into the Baltic Sea.

## 6.1 Qualitative assessment based on sectors

The qualitative assessment of a project is based on the sector that the project considered for NIB's financing belongs to. NIB has established a list of relevant sectors, where each sector has been pre-rated, mainly based on its potential to contribute to the achievement of international and national targets for pollution reduction, preventive measures, resource efficiency and climate change mitigation.

The sectors are rated in a four-grade scale consisting of dark green, light green, grey and black, indicating their declining potential to contribute to the environmental mandate fulfilment, see Figure 3. The dark and light green sectors are to the extent relevant for the Nordic and Baltic region in line with the draft sustainable taxonomy developed by the EU High-Level Expert Group on Sustainable Finance in 2018.

As shown in Figure 3, the dark green sectors will receive the highest score in the qualitative assessment. Overall, they will be rated Good or Excellent with high likelihood due to their expected high potential to yield environmental benefits, even though in some cases such as preventive measures, quantitative effects cannot always be demonstrated. The light green sectors will receive a lower score and need to demonstrate a sufficient level of positive quantitative environmental impacts to reach a Good or Excellent rating. Grey sectors will score neutral and can be rated from Negative to Good, depending on the magnitude of the quantitative environmental impacts the project can demonstrate. Black sectors are not considered to contribute to NIB's environmental mission and are thus rated "Negative", and scoring on the quantitative assessment is not carried out.

## 6.2 Quantitative assessment based on environmental impacts

The quantitative assessment is based on using selected impact indicators to describe direct and indirect changes in e.g. use of energy, water or raw materials or in emissions of pollutants, due to the implementation of a project considered for NIB's financing. The baseline for the comparison consists, in general, of a "zero alternative" (in line with the approach used in environmental impact assessments). This refers to a forecasted situation without the project being implemented. Local and regional impacts are assessed together on a common scale, whereas global impacts are assessed on a separate scale. The quantitative score is the aggregated result of the local/regional and the global score as indicated in Figure 3.

### **6.2.1 Local/regional impacts**

Examples of local/regional impacts are emissions of nitrogen oxides, sulphur oxides, carbon monoxide, particulate matter and noise, as well as discharges of pollutants with wastewater, like organic compounds, phosphorous and nitrogen. Other parameters may also be relevant, depending on the type of project. Negative scores are given to projects with an increased adverse impact on the environment and positive scores are given to projects with a reduced impact on the environment.

There are projects where it is not possible to assess quantitative benefits entirely based on changes in emissions or discharges. For those projects, the indicators applied may include green building standards, added capacity and efficiency gains.

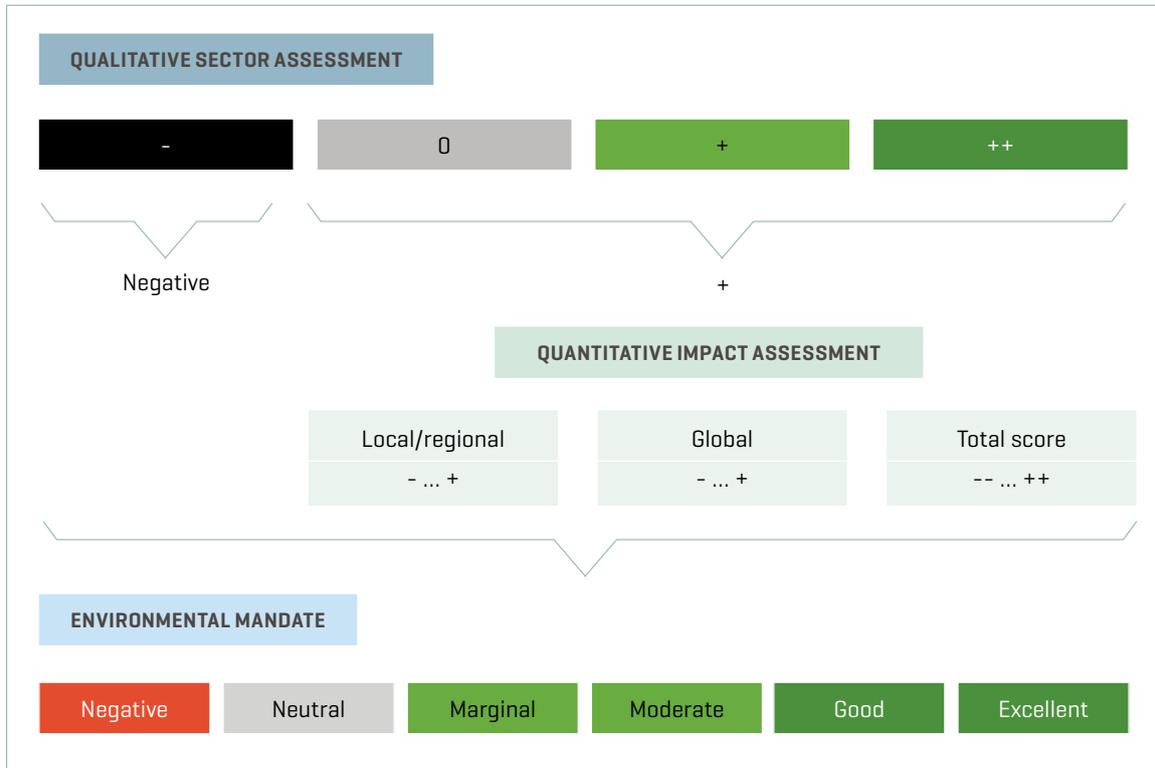
### **6.2.2 Global impacts**

The major global impact to be quantified is changes in emissions of greenhouse gases (GHGs) due to the project implementation. Negative scores are given to projects with increased GHG emissions and positive scores are given to projects with decreased emissions of GHGs.

## **6.3 Aggregated qualitative and quantitative assessment**

As illustrated in Figure 3 both the qualitative and the quantitative part of the assessment can generate the same amount of scores, i.e. they are equally weighted in the assessment. This means that a sector that is generally considered to contribute to NIB's environmental mission, may still receive an environmental mandate without achieving measurable positive absolute impact. Likewise, a sector that as such is not considered to directly contribute to any of the set national or international policy targets may achieve an environmental mandate by showing a significant positive absolute impact on the environment.

**FIGURE 3. OVERVIEW OF THE RATING SYSTEM FOR ENVIRONMENTAL BENEFITS**



# 7 Overall rating

The mandate fulfilment of a project is expressed using the scale shown below in Table 1.

**TABLE 1. SCALE FOR THE MANDATE RATINGS**

MANDATE RATING SCALE
Excellent
Good
Moderate
Marginal
Neutral
Negative

The rating of both mandate components is expressed separately. Moreover, the mandate assessment involves a risk assessment that describes the reasons and the likelihood that the predicted productivity gains or environmental benefits from the completed project will not fully materialise.



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