

Annex 6

Environmental Impact Guidance Matrix - Criteria used as a
basis for the environmental assessments

Criteria used as a basis for the environmental assessments

The individual environmental impacts from the project in question during the construction and operation phase have been systematically assessed based on the following criteria:

- *Magnitude*
- *Geographical extent/Importance*
- *Probability*
- *Duration*
- *Degree of environmental impact*

Magnitude

Magnitude means how strong the environmental impact is, e.g. in terms of how extensive the noise impact will be or how extensive the increased human activity or dust will affect the natural conditions in the area.

The degree of impact is assessed as:

- **High:** The project will cause significant disturbance to the surroundings.
- **Medium:** The project will cause some disturbance to the surroundings.
- **Low:** The project will only cause minor or negligible disturbance to the surroundings.

Geographical extent/Importance

The geographical extent of the impact is understood as the geographical extent that an environmental impact is expected to have, e.g. in the form of the area that will be affected by noise from the project or in how large an area an increased traffic from the project may have an impact.

The geographical extent of the impact is assessed as:

- **International:** The impact will have consequences causing international attention.
- **National/regional:** The impact will have regional or potentially national effects.
- **Local:** Impact is limited to the project license area and immediate surrounding recipient ecosystems.
- **Directly impacted location/Insignificant:** Impact is very local and affects e.g. a minor pond or a hillside.

Probability

Probability means the probability that an environmental impact will occur. This could, for example, be in the form of an assessment of how certain it will be that the noise will increase or that the project will lead to a change of the local freshwater chemistry.

The probability is assessed as:

- **High Likelihood** The environmental impact in question is expected to occur.
- **Medium likelihood:** There is a reasonable probability that the impact will occur.
- **Low likelihood:** There is little likelihood that the impact will occur.

Duration of impact

Duration of impact means how long the impact of the activity in question will extend for, e.g. a one-time blast to remove a barrier or discharge of wastewater for the full production period.

The duration of the impact is assessed as:

- **Long-term (>5 year):** The impact persists for more than 5 years. 'Permanent' effects to e.g. landscape also fits this category.
- **Temporary (1-5 years):** Impact is relevant for a 1-5 year period – typically the main construction phase.
- **Short-term (<1 year):** The impact only occurs for a limited period of time, typically during a particular operation during the construction or operation phase.

Degree of environmental impact

The project's impact on a given environmental topic is assessed on the basis of an overall professional assessment of the environmental impact based on probability, geographical distribution, disturbance and duration of the impact. The assessment is based on the effect that the project is estimated to have with planned operation practices and potential mitigations taken into account.

It is not a fixed calculation or a list of answers, and the final assessment is based on the topic specific professional assessment for each individual environmental topic based on the described extent and intensity of the environmental impact as well as the special nature and sensitivity of the environmental topic.

Generally speaking, an environmental impact is assessed as:

- **Major** when the impacts extend beyond the project area and/or are highly likely to result in either a long to very long-term and high degree of disruption, or a temporary and very high degree of impact.
- **Moderate** when the impact consists of a moderately significant impact in the immediate surroundings of the project area.
- **Minor** when the impacts are so small or short-lived that they are of very limited significance.
- **Negligible/No Impact** when the impacts in practice do not cause any impact or noticeable change on the surrounding environment.

Matrix for high environmental impacts

Magnitude	Importance	Probability	Duration	Degree of impact
High	International importance	High (>75%)	Long-Term (>5 years)	Major Impact
			Temporary (1-5 years)	Major Impact
			Short-term (0-1 years)	Moderate Impact
		Medium (25-75%)	Long-Term (>5 years)	Major Impact
			Temporary (1-5 years)	Major Impact
			Short-term (0-1 years)	Moderate Impact
		Low (<25%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Moderate Impact
			Short-term (0-1 years)	Minor Impact
	National/Regional importance	High (>75%)	Long-Term (>5 years)	Major Impact
			Temporary (1-5 years)	Moderate Impact
			Short-term (0-1 years)	Moderate Impact
		Medium (25-75%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Moderate Impact
			Short-term (0-1 years)	Minor Impact
		Low (<25%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Minor Impact
			Short-term (0-1 years)	Minor Impact
	Local importance	High (> 75%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Moderate Impact
			Short-term (0-1 years)	Minor Impact
		Medium (25-75%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Minor Impact
			Short-term (0-1 years)	Negligible / No Impact
		Low (<25%)	Long-Term (>5 years)	Minor Impact
			Temporary (1-5 years)	Negligible / No Impact
			Short-term (0-1 years)	Negligible / No Impact
	Directly impacted location/insignificant	High (>75%)	Long-Term (>5 years)	Negligible / No Impact
			Temporary (1-5 years)	Negligible / No Impact
			Short-term (0-1 years)	Negligible / No Impact
Medium (25-75%)		Long-Term (>5 years)	Negligible / No Impact	
		Temporary (1-5 years)	Negligible / No Impact	
		Short-term (0-1 years)	Negligible / No Impact	
Low (<25%)		Long-Term (>5 years)	Negligible / No Impact	
		Temporary (1-5 years)	Negligible / No Impact	
		Short-term (0-1 years)	Negligible / No Impact	

Table 1. List of criteria for evaluating **high** environmental impacts, including magnitude graduation wording and colour visualization.

Matrix for medium environmental impacts

Magnitude	Importance	Probability	Duration	Degree of impact
Medium	International importance	High (>75%)	Long-Term (>5 years)	Major Impact
			Temporary (1-5 years)	Moderate Impact
			Short-term (0-1 years)	Moderate Impact
		Medium (25-75%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Moderate Impact
			Short-term (0-1 years)	Minor Impact
		Low (<25%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Minor Impact
			Short-term (0-1 years)	Minor Impact
	National/Regional importance	High (>75%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Moderate Impact
			Short-term (0-1 years)	Minor Impact
		Medium (25-75%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Minor Impact
			Short-term (0-1 years)	Minor Impact
		Low (<25%)	Long-Term (>5 years)	Minor Impact
			Temporary (1-5 years)	Minor Impact
			Short-term (0-1 years)	Negligible / No Impact
	Local importance	High (> 75%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Minor Impact
			Short-term (0-1 years)	Minor Impact
		Medium (25-75%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Minor Impact
			Short-term (0-1 years)	Negligible / No Impact
		Low (<25%)	Long-Term (>5 years)	Minor Impact
			Temporary (1-5 years)	Minor Impact
			Short-term (0-1 years)	Negligible / No Impact
	Directly impacted location/insignificant	High (>75%)	Long-Term (>5 years)	Negligible / No Impact
			Temporary (1-5 years)	Negligible / No Impact
			Short-term (0-1 years)	Negligible / No Impact
Medium (25-75%)		Long-Term (>5 years)	Negligible / No Impact	
		Temporary (1-5 years)	Negligible / No Impact	
		Short-term (0-1 years)	Negligible / No Impact	
Low (<25%)		Long-Term (>5 years)	Negligible / No Impact	
		Temporary (1-5 years)	Negligible / No Impact	
		Short-term (0-1 years)	Negligible / No Impact	

Table 2. List of criteria for evaluating **medium** environmental impacts, including magnitude graduation wording and colour visualization.

Matrix for low environmental impacts

Magnitude	Importance	Probability	Duration	Degree of impact
Low	International importance	High (>75%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Minor Impact
			Short-term (0-1 years)	Minor Impact
		Medium (25-75%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Minor Impact
			Short-term (0-1 years)	Negligible / No Impact
		Low (<25%)	Long-Term (>5 years)	Minor Impact
			Temporary (1-5 years)	Minor Impact
			Short-term (0-1 years)	Negligible / No Impact
	National/Regional importance	High (>75%)	Long-Term (>5 years)	Moderate Impact
			Temporary (1-5 years)	Minor Impact
			Short-term (0-1 years)	Negligible / No Impact
		Medium (25-75%)	Long-Term (>5 years)	Minor Impact
			Temporary (1-5 years)	Negligible / No Impact
			Short-term (0-1 years)	Negligible / No Impact
		Low (<25%)	Long-Term (>5 years)	Minor Impact
			Temporary (1-5 years)	Negligible / No Impact
			Short-term (0-1 years)	Negligible / No Impact
	Local importance	High (> 75%)	Long-Term (>5 years)	Minor Impact
			Temporary (1-5 years)	Negligible / No Impact
			Short-term (0-1 years)	Negligible / No Impact
		Medium (25-75%)	Long-Term (>5 years)	Minor Impact
			Temporary (1-5 years)	Negligible / No Impact
			Short-term (0-1 years)	Negligible / No Impact
		Low (<25%)	Long-Term (>5 years)	Minor Impact
			Temporary (1-5 years)	Negligible / No Impact
			Short-term (0-1 years)	Negligible / No Impact
	Directly impacted location/insignificant	High (>75%)	Long-Term (>5 years)	Negligible / No Impact
			Temporary (1-5 years)	Negligible / No Impact
			Short-term (0-1 years)	Negligible / No Impact
		Medium (25-75%)	Long-Term (>5 years)	Negligible / No Impact
			Temporary (1-5 years)	Negligible / No Impact
			Short-term (0-1 years)	Negligible / No Impact
		Low (<25%)	Long-Term (>5 years)	Negligible / No Impact
			Temporary (1-5 years)	Negligible / No Impact
			Short-term (0-1 years)	Negligible / No Impact

Table 3. List of criteria for evaluating **low** environmental impacts, including magnitude graduation wording and colour visualization.