



# GUIDELINE

Application for financial support under the NOx Agreement 2018–2025

Version 6.7 17<sup>th</sup> December 2024



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#### 1. Introduction

#### 1.1 Introduction

The NOx Agreement for 2018–2025 was signed on 24 May 2017 by the Norwegian authorities and 15 Norwegian business organisations. The NOx Agreement 2018–2025 was approved by the EFTA Surveillance Authority (ESA) on 22 February 2018. This is a continuation of the 2008–2010 and 2011–2017 agreements. The NOx Agreement was extended until 2027 with a signing date of 5 May 2022. ESA approved the Agreement 2026-2027 extension on 11<sup>th</sup> June 2024.

The NOx Fund's support scheme is an instrument designed to meet the obligations in the NOx Agreement.

If you have any questions, please get in touch with us by using the details provided on our website: <a href="https://www.noxfondet.no/en/">https://www.noxfondet.no/en/</a>

# 1.2 Action plan

According to the Participant Agreement, all affiliated enterprises must draw up an action plan containing possible measures to reduce NOx at their enterprise within two years of the affiliation date. The action plan must be updated every two years from 2018 to 2027. The purpose is to identify cost-effective NOx-reducing measures that can be implemented with support from the NOx Fund.

The action plan must be kept at the enterprise. The NOx Fund may inspect whether an enterprise has complied with this obligation. The NOx Fund accepts that enterprises do not have profitable or cost-effective measures.

The action plan may be an independent study or plan. It may also form part of more integrated studies to reduce emissions or management systems (environmental and/or energy management systems), where NOx is considered an ecological aspect. Drawing up an action plan for several enterprises together is also possible. This may be relevant for sectors where all the enterprises have the same type of emission source.

The action plan must contain the following information, regardless of its form:

- Emissions sources from the business(es).
- Emission reduction measures are considered relevant to the emissions sources from 2018-2027.
- Economic assessment of the measures selected for further evaluation, potentially resulting in an application to the NOx Fund.

If cost-effective measures are identified with support from the NOx Fund, a sound reason must be given for why the measure has not been (or will not be) implemented.

A measure is cost-effective if the NOx reduction it provides and the value of this reduction in the form of lower NOx tax over three years is high enough to cover the enterprise's costs associated with implementing the measure. Such costs include the enterprise contribution after it has received support from the NOx Fund, as well as losses from reduced or temporarily interrupted operations or changes in regularity, future operating costs which are not covered by the support from the NOx Fund, and other costs incurred by the enterprise as a result of the measure. Cost-effective assessments must be based on the general investment criteria that apply to the industry.

The current national tax rate on NOx emissions shall be applied when calculating the measure's value in the form of a reduced NOx tax.

#### 1.3 Eligible applicants

The following enterprises may apply for support from the NOx Fund:

• All enterprises with existing or planned taxable NOx emissions in Norway.



• Enterprises without taxable NOx emissions but which are covered by specific NACE codes in the NOx Agreement. This generally covers the land-based processing industry.

In principle, the emission source's owner applies for support and receives it. Other companies may represent the owner. To what extent this is acceptable is considered on a case-by-case basis. However, it must be documented by the actors in the value chain from applicant to owner that they agree on the content of the application and how the grants from the NOx Fund will be paid to and distributed among the parties.

# 1.4 Application processing

An application for support to the NOx Fund follows the procedure outlined below, which also states the estimated duration of the different steps. A separate chapter in this document describes the different steps in greater detail.

| Party          | Step   | Estimated duration   |
|----------------|--|--|
| Applicant      | Write and submit the application. It must be received at least four weeks before the NOx Fund's Board meeting to be handled at the meeting.            | Varies   |
| NOx Fund       | Quality assurance of application and recommendation to the Board   | 4–6 weeks  |
| NOx Fund Board | Funding decision   | About 4-6 board<br>meetings per year   |
| NOx Fund       | Dispatch of the decision letter to the applicant   | 1 week   |
| Applicant      | Implementation of measure  | Varies   |
| Applicant      | Submission of self-declaration documenting the accrued costs, emission measurements, calculation of the NOx reduction and associated operational data. | Varies   |
| NOx Fund       | Quality assurance of the self-declaration, disbursement calculation and dispatch of payment letter to the applicant.                                   | 4–6 weeks  |
| NOx Fund       | Payment of support in whole or part, depending on the period covered by the documented operations data.  | 1 week   |
| NOx Fund       | Follow-up of the use of the measure  | 1 year to set the NOx reduction and final support payment, and the entire NOx agreement period to follow up the obligation to operate the measure. |



# 2. Support rates and terms regarding NOx-reducing measures

# 2.1 General information about support

Support is granted for technical installations at existing and new emission sources. The support scheme covers measures reducing the NOx factor (NOx emissions per unit of energy consumed), measures reducing energy consumption on existing sources (energy efficiency), and measures reducing process emissions from industry.

As emission requirements are tightened and improved technology is increasingly made available and selected for operational/financial reasons, the possibility of financial support from the NOx Fund is reduced.

- No support is given for energy efficiency measures on new buildings.
- No support is provided for measures that reduce the NOx factor down to IMO Tier III on new buildings in shipping.
- Support is not provided for engine replacement to a diesel engine on existing vessels. This applies even if the new engine complies with IMO Tier III requirements.

The NOx Fund Board sets the current support rates.

For new applications for emission reduction measures, the support rate of NOK 600 / kg NOx reduced applies:

The amount of support is calculated as the measure's annual NOx reduction (kg) \* support rate (NOK / kg).

The support is limited to 70% of the cost of the NOx measure and a maximum of 100 MNOK.

Note that support is paid after the measure has been implemented and DNV has verified the actual NOx-reducing effect. Support is then paid based on actual NOx reduction, calculated according to the calculation methods that apply in the verification phase. Calculation methodology in the verification phase may differ from calculations in the application phase.

The table below provides examples of costs that can and cannot be included in the support basis.

| Included in the calculation of the basis for support     | Own work on the project Planning Approval/testing Equipment procurement Equipment Transport Installation  |
|--|---|
| Not included in the calculation of the basis for support | Investigations and preliminary studies (or must be applied for separately) Financial costs Loss of income associated with downtime.  Expenses for alternative production units (for example, replacement vessels) while measures are being implemented. |



The NOx Fund can decide which measures to support and stipulate the conditions for such support.

The NOx Fund may make exceptions from current practice in exceptional cases, including establishing extraordinary conditions/support programmes or introducing lower maximum grants or support rates.

The Ministry of Finance has clarified that financial support from the NOx Fund is a taxable benefit. Payments to the NOx fund are deductible.

#### 2.2 Detailed description of different types of measures that can be supported

- Energy conversion (for example, to LNG, electricity from the power grid (incl. Battery-powered vessels) or other power sources with very low NOx emissions)
- SNCR and SCR (or other NOx purification technology) in land-based industry and fixed installations on the shelf
- SCR (or other NOx purification technology) on existing ships and rigs
- Measures that reduce the NOx factor on gas turbines on the shelf, including turbine replacement
- Measures that reduce NOx emissions from flaring
- Optimization of processes in land-based industry that results in reduced NOx
- Technical adaptation for onshore power aboard existing vessels and onshore power facilities in the port.
- Energy efficiency measures (incl. Battery hybridisation or other similar energy storage systems) on existing sources
  - The combination of a significant energy efficiency measure (incl. Battery hybridisation) and Tier III measures (such as SCR or LNG) on mobile sources can be considered in context.
- Engine conversion that provides a lower NOx factor
- Fleet renewal and logistics optimisation, with new (or newer used) zero- and low-emission ships (Tier III)
  replacing ongoing operations with specific vessels emitting significantly higher pollutants. Support for fleet
  renewal will require well-documented phasing-out effects on existing emissions, which are not otherwise
  expected to occur.

Support for technologies other than those listed above may be considered for existing and new sources. In such cases, the applicant should contact the NOx Fund for clarification prior to a possible application process.

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Note that applications with an overall cost and reduction basis for a combination of measures between Tier III technologies (for example, SCR) and other rebuilding/use of measures will be subject to a strict assessment of which costs can be allocated to the combination measure.

2.2.1 Support for the installation of SCR systems (and similar measures) on existing units

For voluntary investment in SCR alone, the investment is only reimbursed based on the difference between the saved NOx tax and the use cost (including urea). In many cases, this results in repayment periods of 10 years or more, even with a 70% support rate. Because support for measures has a particularly triggering effect, while pure SCR measures generally provide cost-effective NOx reduction for the NOx fund, all support applications are considered potentially significant.

Therefore, applications for support for measures in the form of pure SCR systems may be considered for a support rate of up to 90%. Any increased support rate beyond the ordinary level will be assessed case by case.

This can also apply to other NOx-reducing technologies with similar cost-effectiveness and payback challenges to SCR (such as EGR or SNCR).



#### 2.2.2 Method for determining the energy efficiency effect

The NOx fund calculates the effect of energy efficiency measures (EE measures) according to a standard approach. This means that a percentage reduction level is determined in the application phase when at least this level is probable based on documentation and description of the technology and operating conditions. As long as the measure is installed and in use, the template level is also used as a basis for verification (after implementation) without requiring documentation of the exact effect.

The following template levels can be granted for energy efficiency measures:

- 5% reduction: The application is probable from 5% to <10% reduction
- 10% reduction: The application is probable from 10% to <20% reduction
- 20% reduction: The application proves at least a 20% reduction
  - The 20% requires that the measure involves optimising power production (reducing SFC2). Technical installations and systems must be included that allow for turning off engines to meet power demand with fewer engines and significantly better fuel efficiency than without the measure for the specific operation. Other technologies may also be considered if sufficient documentation is available.
  - The 20% generally requires that the measure is combined with energy conversion or additional technology for NOx abatement (e.g., SCR or EGR) that achieves IMO Tier III level or better on NOx emissions. In cases where 20% efficiency is allocated, consideration will also be given to the project's profitability in determining the maximum support amount. The NOx Fund will conduct a rigorous assessment of the future expected reference situation in the grant decision.
- Where the probable effect is lower than 5%, a project-specific calculated degree of reduction below 5% is determined.

Mrk. for all energy efficiency measures (EE measures): The NOx Fund allocates a maximum of 10% (possibly 20%, see above) in the application process, the total reduction effect from several measures, as a basis for determining the support framework.

#### Main principle for calculating NOx reduction:

NOx reduction: Fuel BEFORE \* NOx factor BEFORE - Fuel AFTER \* NOx factor AFTER

Fuel  $_{\text{BEFORE}}$  is calculated as follows: Fuel  $_{\text{AFTER}}$  / (1 – EE effect), where the EE effect is either 0.1 or 0.05.

Energy efficiency improvements resulting from certain types of significant logistics and fleet optimisation can also be considered based on the NOx Fund's support. This allows for the possibility that the reference emissions for a measure or new vessel may be from a less optimal fleet/logistics system, such as having more boats or more emission-intensive operations and logistics. Measures must involve additional investments in physical installations, vessels, and/or onshore infrastructure. The method of calculating reduction effectiveness will be evaluated on a project-specific basis. New vessels must at least meet IMO Tier III requirements.

# 2.3 Other support conditions

#### Decision status

New applications for investment support to measures that are already implemented or where the decision on implementation is already made and are not eligible for support.

Decision on implementation means that a contract is signed for delivery of the equipment covered by the NOx measure. An exception from this rule can be made if the contract is signed under a specific condition



of financial support from the NOx Fund (i.e., the order may be cancelled in case support is not granted).

#### Sources covered by the Agreement

Support is only granted for measures that impact NOx emissions from sources covered by the NOx Agreement and that are part of the emission reports that provide the basis for the authorities' calculation of total emissions under the agreement.

If available, the Fund will consider historically reported NOx emissions when evaluating a measure's likely future NOx-reduction effects. A higher reference emission level (without the NOx-reducing measure) than what reported emissions indicate must be well justified.

#### • Taxable NOx emissions

The NOx Fund only considers taxable NOx emissions from the emission unit when calculating the NOx reduction achieved and the associated financial support. The land-based industry in the NOx Agreement may also include non-taxable emissions.

The activity level that can be documented after carrying out the measure provides the basis for the final calculation of the NOx reduction and support payment (within the originally granted support limit). Suppose the documented investment costs and/or NOx reduction with the NOx-reduction measure(s) in operation is less than what is stipulated in the support statement. In that case, the support payment will be reduced accordingly. This applies if the actual level of NOx-removal, energy transition or extent of operation is less than expected.

Operational data documenting the NOx-reduction effect must be reported over 12 months.

#### Duration

The applicant must satisfy the NOx-fund that the relevant Norwegian operation with the NOx-reducing measure will last at least two years.

Mobile units are required to be regularly present in the NOx taxable area, but a constant presence is not required. The support is based on the average annual reduction, representing two years or more.

For board-approved applications from 2024 onwards, the NOx Fund will reduce the support by 50% for measures implemented with NOx-reducing effect from January 1, 2027, and progressively down to zero support upon implementation on January 1, 2028, or later. For applications processed by the board before 2024, the conditions for reduction upon implementation on January 1, 2026, or later, as specified in the application's commitment letter, apply.

#### Statutory requirements

Measures resulting from statutory requirements are not eligible for support from the NOx Fund. This includes, for example, measures necessary for compliance with minimum requirements in public tenders, requirements pursuant to the Pollution Control Act, or IMO requirements.

Newly built ships and other maritime units are subject to IMO Tier III requirements if the keel is laid on January 1, 2021, or later, and if they operate in the ECA (Emission Control Area) area south of 62°N (North Sea). Tier III technology is therefore used as the reference state. From the fund's point of view, this applies regardless of the operational area within or outside the designated ECA zone (south of 62°N North Sea). Thus, Tier III technology is used as a reference within the actual geographical scope of the regulations and for the entire Norwegian coast. The potential for NOx reduction and associated support is, therefore, small.



IMO, Tier III will have an expanded geographical area of application (the Norwegian Sea) and will apply to the entire Norwegian coast for new builds with keel laying after March 1, 2026.

Tier III may also be used as the maximum emission reference level for ships with keel laying before 1 January 2021 in case the relevant operating area requires a tier III emission level in other areas (such as American ECAs). This applies, for example, to new cruise ships for which operation in US waters is relevant.

#### National ferry routes

For national ferry routes (tendered by the Norwegian Public Road Administration), the NOx Fund presumes that emission standards in new tenders and contracts are set with the highest possible level of low/zero emission technology, regardless of support opportunity from the NOx Fund. As a basis for calculating the NOx-reducing effect, the reference emission level will, as a maximum, be the NOx emission level following the contracted solution in the winning tender.

#### County ferry routes

County-level ferry routes are generally handled in line with guidelines for tenders on national road routes under the management of the Norwegian Public Roads Administration. This means that the NOx Fund only provides support by NOx reductions beyond what is stipulated in the contracted solution. However, support is possible in cases where this has been clarified with the county or its transport company before the tender announcement.

As regulatory requirements for zero emissions are gradually implemented in tenders (starting with announcements for ferries in 2025), support opportunities are expected to become fewer. If this regulation applies and support is to be provided, the purchaser must then be able to document exemptions from the zero-emission requirement.

#### Support ratio and reduction scope

No support is granted for measures for which support from the NOx Fund constitutes less than 10% of the additional cost.

Exceptions can be made in individual projects with substantial and essential reductions, where even a lower support share, down to 5%, is considered decisive for a measure decision. For a support share lower than 5%, emphasis shall be placed on whether support from the NOx Fund is part of co-financing from other policy instruments.

Measures where the fuel saving effect gives less than 1 ton NOx reduction are not eligible for support.

#### NOx factor

The NOx factor used to calculate emissions without measuring existing sources cannot be higher than the factor applied in the quarterly reporting of NOx emissions to the NOx Fund. Suppose the application process reveals a lower actual reference factor than used in the NOx emission reporting. In that case, this lower actual factor will be applied to calculate the NOx reduction.

#### The maturity of the project

Projects that include NOx-reducing measures and qualify for support for more than NOK 100 million mainly come from the offshore industry (such as electrification projects) and the land-based industry. The NOX Fund requires such projects to have reached a given maturity level before processing the application. To define the maturity level, standard project terms (DG0-DG4, see below) or other similar definitions may be used. DG1 must be passed before the application is processed in the NOX Fund.

• Pre-DG0: Pre-studies and project preparation



o DG0 decision: interesting project

• DG0-DG1: Feasibility analyses

o DG1 decision: Feasible within current decision criteria

• DG1-DG2: Study of the concept

o DG2 decision: Concept selected

• DG2-DG3: Design and preliminary plan

o DG3 decision: Contract awarded

• DG3-DG4: Construction and implementation

o DG4: Start-up operation

Post-DG4: Operation

#### Other restrictions and conditions

Preparation for LNG as fuel is not eligible for support on LNG bunkering vessels and other gas tankers where the option for LNG operation is considered standard.

Applications that qualify for support over NOK 30 million will be considered a measure of financial profitability. Projects that are particularly profitable without NOx Fund support may be eligible for a support deduction.

Modifications, retrofits, and engine replacements required by other conditions (such as breakdowns, necessary maintenance/replacement, or change activity) are not eligible for support. Older units (e.g., ships) rebuilt to a new type of activity are treated as new buildings in relation to support terms.

Whether downsized or not, vessels with engine size below the tax threshold (<750 kW) will not be eligible for support for an engine replacement with SCR to a larger engine exceeding the tax threshold. Engines that have previously been downsized and are upgraded beyond the tax threshold must demonstrate at least one-quarter of taxable NOx reporting to qualify for support.

# 2.4 Support for leased measures

The NOx Fund has decided that support can be granted for leased measures under certain conditions.

The following conditions must be met:

- An agreement signed by the parties involved in the measure's cash flow must be submitted confirming that the parties agree on the distribution of the support disbursed by the NOx Fund (from the technology owner to the technology user).
- The support is based on the investment costs, which the technology owner must document.
- The leasing model must be presented, showing that it facilitates procurement after the lease expiry and provides incentives for such.
- Applications must show how support from the NOx Fund will enable the measure.
- The technology user (the owner of the object, e.g. the ship) must be listed as the applicant and recipient of the support.
- No support is granted for lease periods of less than 2 years.
- Lease periods of 2–3 years: Credited NOx and support constitute 50% of the support the measure is eligible for if installed permanently.



- Lease period of 3–4 years: Credited NOx and support constitute 60% of the support the measure is eligible for if installed permanently.
- Lease period of 4 years or more: Credited NOx and support constitute 70% of the support the measure is eligible for if installed permanently.
- In connection with procuring a permanent installation on the ship at the end of the lease, Credited NOx and support constitute 100% of the support the measure is eligible for if it is installed permanently.

Applications for support for leased NOx measures will be processed like all other measures.

Based on the investment cost, support for leased measures will only be granted once per measure. In other words, no more support will be granted if the installation is leased again.

# 2.5 Closed support schemes

The following measures and operations, which previously received support, are no longer eligible for support:

- LNG-infrastructure establishment/expansion
- Support for LNG on LNG bunkering ships
- Shore power for ships not sailing domestically.
- NOx reduction from offshore vessels operating between platforms on the continental shelf and other modes of operation which are not subject to the NOx tax.
- Non-taxable industrial emissions not covered by NACE codes in the new NOx Agreement.
- Support to merely engine replacement (without additional NOx cleaning). The possibility for exceptions ended on 1 January 2019.
- Support specified energy efficiency measures for new builds. Support ended on 1 January 2019.
- Support for emission reduction resulting from contracts for low and zero emissions in counties.
- Support for measures where the fuel-saving effect provides less than 1 ton of NOx reduction and which could be explicitly calculated from difference in kwh-consumption with and without the measure in use.
- LED lighting. Applications processed from 24.04.2019 are not granted support.
- Support for engine replacement with SCR. This was discontinued on December 10, 2024.

The following support programmes are no longer eligible for support:

- Support program for fishing vessels with 10% additional investment support to fishing vessels that install battery power and/or LNG as fuel. Application deadline was 31.12.2019.
- Support program with 10% additional investment support for the SCR retrofit on fishing vessels applied to applications received during the period 1.1.2018 31.12.2018 and with implementation from 1.1.2018 31.12.2019.
- Support program for retrofitting battery systems on existing PSVs with SCR system. Application deadline was 31.06.2018.
- Support program for offshore rigs. Application deadline was 31.12.2018.
- The two support programs, 1) Support for the replacement of catalyst elements and 2) Support for annual service at SCR systems on fishing boats, have been replaced by a standard support program, which includes support for the replacement of components on SCR systems.
- Support program for development projects. The application deadline was 15.05.2020.
- Support programme for urea infrastructure. The application deadline was 31.12.2020.
- Fleet renewal as a separate support program, with its own support conditions and application deadline by the end of 2023. Fleet renewal can receive support under the regular scheme starting in 2024. The possibility of support for new builds without a commitment to phase out other equipment will be discontinued in 2024.



# 3. Support programmes

# 3.1 Support for urea consumption

#### 3.1.1 Urea consumption on ships and rigs

Support is granted for urea used in SCR systems on ships and mobile rigs. It will be granted after the documented purchase of urea, with a retroactive effect of a maximum of 3 years from the delivery date. Support will not be granted in advance.

#### The support rate is:

- NOK 6.00 per kilogram of urea with a delivery date of November 1, 2023
- NOK 9.00 per kilogram of urea with delivery date from May 1, 2023, to 31 October 2023
- NOK 15.00 per kilogram of urea with delivery date starting from October 1, 2022
- NOK 7.50 per kilogram of urea with delivery date starting from April 1 to September 30, 2022
- NOK 2.5 per kilogram of urea with delivery date before April 1, 2022

The maximum support is 70% of the cost for applications received in 2024 and earlier. Starting in 2025, the maximum support rate will be reduced to 60%.

Conditions for receiving support associated with urea consumption:

- No urea support is given to ships operating in areas where the vessel must meet mandatory Tier III requirements.
- The vessel is not subject to the mandatory Tier III requirements in the North Sea ECA (such vessels will not receive support for urea consumption within the ECA area). Exceptions are made for ships that have received support from the NOx Fund for engine replacement and SCR systems.
- All urea has been consumed before applying for support.
- Urea is used in Norwegian taxable shipping.
- Emissions measurements and service follow the NOx Fund's measurement and service requirements applicable to SCR systems.
- The emissions measurement must show that the SCR system provides the level of cleaning it was designed for.
- Emission measurements every five years must show that the value for NH3 is below 40 ppm. In cases where accredited emission measurement shows that the requirement has not been met, a service report must be prepared documenting that the NH3 value is under control. New accredited measurements of the relevant engine and emission parameters are also satisfactory documentation.

#### 3.1.2 Urea consumption in land-based industry

Support for urea or other NOx reactants used in land-based industry, with the NACE codes stipulated in the NOx Agreement (17.1, 19.2, 20, 23.5, 23.9, 24.1 and 24.4), is assessed case-by-case.

Generally, no support is given for when the reactant cost can be included in the product price.

# 3.2 Support for measuring NOx emissions

The NOx Fund grants support for measurements to improve the documentation of NOx emissions. All measurements must be conducted by a company accredited to perform emission measurements or approved by the Norwegian Maritime Authority or similar authorities for measurements in other sectors than maritime. The NOx Fund can grant support for two measurements per vessel/rig in connection with measures — one



before and one after measures are implemented. Support is also given to measurements to check that SCR system functionality is maintained over time. The support is granted with a backdated effect for a maximum of 3 years, calculated from the time of application and back to the date the measurement was performed. The support schemes for emission measurement will be maintained until at least 2027.

The following support is granted:

- NOx measurements on ships: NOK 60 000 per vessel, max. 70% of costs.
- NOx measurements on mobile rigs: NOK 100 000 per rig, max. 70% of costs.
- NOx measurement on ships with SCR: NOK 60,000 per vessel, a maximum of 70% of costs incurred. Support is provided with an extra NOK 3,000 per engine with extra NOx measurement.
- NH<sub>3</sub> measurement on ships with SCR: NOK 25,000 per vessel, a maximum of 70% of the costs incurred. Support is provided with an extra NOK 3,000 per engine with extra NH<sub>3</sub> measurement.

Support is granted after the measurement has been documented. Support will not be given in advance. Support applications must be sent after the emissions measurement has been conducted, and the measurement report and documentation of the costs must be attached.

When vessels have several identical engines, it is enough to measure one engine if other documentation indicates that the condition of the measured engine is representative of the others. This does not necessarily apply to units with SCR systems. See specific requirements for such systems.

# 3.3 Support for service of SCR systems on vessels and rigs

The NOx Fund has established this support program to help maintain the functionality of the SCR systems and the NOx reduction over time. However, note that the companies are obliged to maintain the NOx-reducing effect by 2027 for measures which have received support from the NOx Fund, as stated in the Participant Agreement (section 2d) on which the company has signed.

The support program includes support for the following service of SCR systems on vessels and rigs:

- Investigations and adjustments of SCR systems performed by external service personnel.
- Replacement of catalyst elements.
- Replacement of other components.
- Supplementation with new components.

The following applies to the scope of the support:

- Support is granted for 50% of the documented costs, up to a limited amount of NOK 500 000 per vessel, within a rolling period of 5 years based on when the service took place. The support is given with a backdated effect for a maximum of 3 years, calculated from the time of application and back to the date the service was performed.
- Support is provided within a total support frame (for all applicants) of NOK 25 million for 2019 to 2023. The NOx Fund may consider expanding the frame and the time when needed.

The following support conditions apply:

- Support is only given to SCR on ships, fishing vessels and rigs.
- Support is provided after the accrued cost.
- Service support is given a maximum of once per calendar year.



- Support for replacing catalyst elements and components in the SCR system is given a maximum of every 5 years.
- When supporting new components which are not on the SCR system upfront, it must be proved likely that this will improve the SCR system functionality.
- Support is not provided for service on Tier III certified engines with SCR, which the NOx Fund does not support.

# 3.4 Specific requirements for emission measurement and service of SCR systems 3.4.1 Measurement requirements for new SCR systems supported by the NOx Fund

When installing a new SCR system, one of the following options for determining the NOx factor shall be used:

- 1. The NOx factor for the engine is determined by onboard measurement after the SCR system with and without urea dosing.
- a. Where multiple main and auxiliary engines of the same type are installed on a ship, it is enough that measurements from one engine are used to calculate the NOx factor for all similar engines.
- b. If a qualified measurement company determines the emission factor, the measurements shall be carried out by NOx Technical Code 2008, 6.3 "Simplified measurement method". For main engines, the emission factor shall be calculated from the weighted values for the current test cycle. The emission factor shall be established at 50% engine load for auxiliary engines.
- 2. The NOx factor before and after SCR is calculated based on the EIAPP certificate and the associated NOx Technical File (only applicable to TIER III-certified engines).
- 3. In case national or international rules and approval schemes for installing and operating continuous measuring equipment for NOx are established, such measurements can be used as a basis for reporting and self-declaration.

If several engines on board have different NOx factors, a common NOx factor for the ship can be calculated by weighting according to installed power or average fuel flows. The NOx Fund shall be informed through self-declaration or when requesting background data for quarterly reporting of NOx emissions.

The NOx Fund does not require measurement and service on Tier III certified engines with SCR.

#### 3.4.2 Measurement requirements after 5 years of operation

After 5 years of operation of the SCR systems, optionally 5 years after the previous 5-year inspection, it must be documented that the SCR is still functioning correctly, and one of the following requirements must be fulfilled related documentation to the NOx Fund:

1. Onboard measurement: Measurement of NOx and  $NH_3$  emissions on all engines with SCR systems in operation. One main engine is tested at all loading points, while the remaining equal main engines are tested at a representative load point. All auxiliary engines with SCR must be tested at 50% load. To avoid a large part of the fleet risks not being approved in a transitional phase, the threshold value for  $NH_3$  is set at 40 ppm (at 15% O2) at the beginning, but with a long-term goal of reducing this limit value to 20 ppm over time.



- 2. Service on SCR systems and limited on-board measurement: Service report showing that the SCR systems have been examined, service performed, and all engines with SCR systems are functioning. Service must be carried out by the supplier's recommendations on scope and frequency. In addition, NOx and  $NH_3$  must be measured on at least one main engine at an engine load in the 50-75% range and an auxiliary engine at 50% load. The measuring company shall select the engine from the engines available for operation.
- 3. Continuous measurement: The company shall document on all engines with SCR that the continuous measurement system (for NOx and, if relevant, NH<sub>3</sub>) has been serviced and calibrated in accordance with the supplier's recommendations. Measurement results from the last reporting quarter must be presented. In addition, there must be confirmation from an external competent body (e.g. SCR supplier) that the SCR systems and measuring equipment are functioning correctly.
- 4. EIAPP + NOx Technical file: If the IMO and/or the Norwegian Maritime Directorate provide a regime for controlling operational compliance with TIER III requirements, such a regime can be used to show that the SCR systems perform in accordance with EIAPP and the associated NOx technical file.

For ships located outside Norwegian waters, the 5-year time limit may be postponed until the ship is back in permanent operation in Norway. The NOx agreement requires that NOx measures be operated at NOx taxable speed regardless of how long ago the measure was implemented.

#### 3.4.3 Service Requirements

Documentation must be available from the company that SCR facilities supported by the NOx Fund follow the supplier's recommendations for service. The documentation must be continuously updated and can be submitted to the NOx Fund upon request. The SCR supplier, a specialist in such services, or the company itself can carry out service and prepare documentation.

The NOx Agreement requires that NOx measures (including SCR) be operated at a NOx taxable area. This is also specified in a commitment letter related to the NOx Fund's support.

A separate application form is available on the NOx Fund's website.

# 4. Application review steps

#### 4.1 Application

Optionally, the enterprise fills out the application for support with the help of other parties. The NOx Fund will answer questions during this process if needed.

The application for support for NOx-reducing measures must be sent through the NOx Funds application digital portal.

The NOx Fund must receive the application at least four weeks before a board meeting. The application will be handled at this meeting.

# 4.2 Quality assurance of application and recommendation

The NOx Fund receives and processes the application. Then, a third party (DNV) will evaluate the application for quality assurance.

If further information is required or needs to be changed, this will be done in conjunction with the applicant.



The quality assurance results in a recommendation from the third party regarding support.

# 4.3 Prioritizing applications

When the amount of qualified applications for funding exceeds the NOx Fund's available budget, the NOx Fund must prioritise between applications.

Essential aspects which will be considered in the prioritisation are:

- Effective rate of support. This means that measures with a low cost for the NOx Fund per kg NOx reduced will have a positive effect on the support opportunities.
- High degree of certainty regarding the duration of the measure. This means that reliable technical function and the likely presence of the emission source in a taxable area will positively affect the support opportunities.
- The size and duration of the NOx reduction effect during the Agreement period. This means that significant reductions with a high degree of certainty throughout the entire Agreement period will positively affect the support opportunities.
- The applicant's total applied and granted support amount within a given period, including the number of applications and total support. In the case of particularly large or several applications, deduction of support compared to ordinary support conditions can be introduced.

In addition to the above points, the NOx Fund can consider other issues specific to the emission unit, technology, or applicant.

Prioritising applications can give the following results for each application:

- Letter of approval by ordinary support conditions.
- Reduced compared to what follows from ordinary support conditions.
- Postponement and new consideration at a later board meeting. In this case, the applicants with a high effective support rate will be encouraged to re-apply with a lower requested amount of support to ensure a higher prioritisation in the next round.
- Rejection, even if the measure initially qualifies for support.

#### 4.4 Decision and letter of approval

The NOx-Fund Administration dispatched the support recommendations to the NOx Fund's Board prior to the board meeting for subsequent decisions the Board at the board meeting. The NOx Fund writes a letter of approval (or denial) and sends it to the enterprise.

The NOx Fund publishes information about grants which have been approved on its website.

All applications received will be treated confidentially until the NOx Fund has decided on support. If the applicant wants the decision to be treated confidentially, the applicant must provide a particularly good reason for this. The NOx fund wants transparency about the support awarded. If a decision is set as confidential, this applies until the enterprise has made an investment decision.

#### 4.5 Implementation

During the implementation phase, there is usually little correspondence between the applicant and the NOx Fund. However, when major milestones are met, the NOx Fund often receives a short update on the project's status, and it may also ask for one.

If the measure is cancelled, the NOx Fund must be informed immediately. This is important to release allocated funds in order to incentivise other measures.



# 4.6 Self-declaration

The enterprise must submit a self-declaration that documents the measure's implementation, the emission reduction achieved during operations, and the costs.

The applicant may submit several self-declarations and receive partial support disbursements throughout the verification period to report operations data for up to 12 months.

The normal (but not required) procedure is for the first self-declaration to confirm the complete installation of the measure, documentation of the costs, emission measurements, and the first period of operations data. This usually happens 3 months after the measure has been put into operation. The following declaration(s) consist of a quarterly operational data update.

If the operational data is sent periodically, the disbursements will be made after the self-declarations have been received. For example, operations data for the first three months may qualify for 25% of the support, 50% after 6 months and 100% after 12 months.

Typical operational data to be reported are the consumption of relevant types of fuel and electricity, urea consumption, continuous emission measurements (if available), and other indicators of the use and effect of the NOx-reducing measure in question.

The enterprise must send a self-declaration with all relevant documentation immediately. The NOx Fund may withdraw all the support granted if the enterprise significantly breaches its obligation to submit self-declarations, including:

- If the NOx Fund has not received the first self-declaration within 6 months of completion and deployment of the measure.
- If the measure has not been implemented within 12 months of the implementation date stated in the approval letter. A postponement of the deadline may be considered if applied in advance.

Those who have applied through the fund's application web portal shall deliver the self-declaration at the same site. For others, self-declarations can be sent to <a href="mailto:post@nox-fondet.no">post@nox-fondet.no</a>.

A third party (DNV) will perform quality assurance of the self-declaration for the NOx Fund. If necessary, DNV will contact the enterprise and ask for any missing information or to check any details and, if required, correct the information. The result of the self-declaration submitted and DNV's review and calculations will lead to a verified NOx reduction level from the measure, which will provide the basis for the support disbursement from the NOx Fund. The recommended support will be calculated based on the verified NOx reduction multiplied by the support rate, upwards limited to the maximum share of the actual documented costs and not exceeding the maximum grant stated in the support statement letter.

Note that the NOx reduction used as a basis for payment will be calculated based on the methods described in the decision letter and otherwise described in this guideline and according to the NOx Finds established practices. The data provided by the applicant during the application phase will not be used if these changes when the measure has been implemented. The NOx reference (emissions without measures) for calculating the reduction will generally be re-estimated during verification based on NOx emissions and reduction effectiveness during the verification period after the implementation of measures, according to the activity level that is relevant at that time.



# 4.7 Disbursement of support

The NOx Fund will write a disbursement letter based on the verified result of the self-declaration and email it to the applicant.

The amount stipulated in the disbursement letter from the NOx Fund will be sent for disbursement. Applicants do not need to confirm or sign this information.

# 4.8 Subsequent follow-up

After the support is disbursed, the NOx Fund may follow up on the emission unit's presence in Norway (for mobile sources) and its use of the measure.

The applicant must notify the NOx Fund if the presence status in Norway changes considerably compared with the operations specified in the support disbursement document if this happens within 24 months of the measure being put into operation.

Full or partial repayment of the support must be expected if:

- The object where the measure is installed is taken out of service less than two years after it was installed.
- The object is sold abroad and will no longer operate in a NOx-taxable area if this happens less than two years after the measure was put into operation.
- The object is moved elsewhere for long-term operation without any possibility of NOx-taxable operation if this happens less than two years after the measure was put into operation.

Sanctions from the NOx Fund must also be expected if the enterprise breaches its obligation to operate the emission-reducing measure in NOx-taxed area throughout the entire NOx Agreement 2018–2027 period.