



GUIDELINE

Application for financial support under the NOx Agreement 2018–2025

Version 5.1 20th October 2023



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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 agreements for the periods 2008–2010 and 2011–2017. The NOx Agreement was extended until 2027 with a signing date of 5 May 2022.

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

If you have any questions, please contact us by using the details provided on our website: https://www.noxfondet.no/en/

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 from the affiliation date. The action plan must then be updated every two years during the period 2018–2027. The purpose is to identify cost-effective NOx-reducing measures which can be implemented with support from the NOx Fund.

The action plan must be kept at the enterprise. The NOx Fund may conduct inspections to check whether an enterprise has complied with this obligation. The NOx Fund accept that enterprises do not have profitable or cost-effective measures in their operations.

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 an environmental aspect that is considered. It is also possible to draw up an action plan for several enterprises together. 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 that are considered relevant for the emissions sources during the period 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, as well as the value of this reduction in the form of lower NOx tax over a three-year period, is high enough to cover the enterprise's costs associated with implementing the measure. Such costs include the enterprises 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 which apply to the industry in question.

When calculating the value of the measure in the form of reduced NOx tax, the current national tax rate on NOx emissions shall be applied.

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 land-based processing industry.

In principle, it is the emission source's owner that applies for support and receives it. Other companies may represent the owner. To which extent this is acceptable is considered on a case-by-case basis. However, it must be documented from 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. The different steps have been described in greater detail in a separate chapter in this document.

| Party | Step | Estimated duration |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Applicant | Write and submit application. Application must be received at least 4 weeks prior to 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 meetings per year |
| NOx Fund | Dispatch of decision letter to 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, calculation of disbursement and dispatch of payment letter to the applicant. | 4–6 weeks |
| NOx Fund | Payment of support in full 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 full 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 measures, in the form of technical installations, both at existing and new emission sources. The support scheme covers both measures which reduce the NOx factor (NOx emissions per unit of energy consumed), measures which reduce 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.

- In principle, no support is given for energy efficiency measures on new buildings.
- In principle, no support is provided for measures that reduce the NOx factor down to IMO Tier III on new buildings in shipping. Any support is handled under a separate support program for fleet renewal.

The NOx Fund Board sets the current support rates.

For new applications for emission reduction measures, the support rate of NOK 500 / kg NOx reduced applies:

Existing commitments from and including 1.1.2018 that have been decided, but not fully verified, are given a 400-rate verification, but without a change in the maximum commitment amount.

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.

Note that support is paid after the measure has been implemented and the actual NOx-reducing effect has been verified by DNV. Support is then paid on the basis of 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.

Examples of costs that can and cannot be included in the support basis are given in the table below.

| Included in the calculation of basis for support | Own work on the project Planning Approval/testing Equipment procurement Equipment transport Installation |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Not included in the calculation of basis for support | Investigations and preliminary studies (or must be applied for separately) Financial costs Loss of income associated with downtime |

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



The NOx Fund may make exceptions from current practice in special cases, including establishing extraordinary conditions/support programmes or introduce 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, hydrogen, 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 shore power on existing vessels
- Energy efficiency measures (incl. Battery hybridization or other similar energy storage systems) on existing sources
 - The combination of a significant energy efficiency measure (incl. Battery hybridization) 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
- Engine replacement
 - Engine replacement is only supported if new engine (s) are combined with additional NOx purification technology (eg SCR or EGR) that provides IMO Tier III level or better on NOx emissions.

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

As a general rule, support from the NOx Fund is not granted if there are specific public support programs for given technologies in given industries (eg at Enova). If the applicant can document rejection / lack of such support opportunities, the NOx Fund will consider support. Support can be given in cases where co-financing from several support schemes is necessary to trigger the measure.

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 Method for determining the energy efficiency effect on mobile sources

The NOx fund calculates the effect of energy efficiency measures (EE measures) according to a standard approach, which means that a certain percentage reduction level is determined in the application phase, when at least this level is probable based on documentation and description of technology and operating conditions. As long as the measure is actually installed and in use, the template level is also used as a basis for verification (after implementation), without the requirement for documentation of 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
 - 20% require that measures involve optimization of power production (reduce SFC2). Technical installations and systems must be included that allow engines to be switched off, in order to be able to cover the shaft requirement with fewer engines with significantly better fuel efficiency than without the measure, for current operation. Other technologies with a similar effect can also be considered relevant if sufficient documentation is available.
 - 20% can also be used for projects where EE measures are the first phase and a prerequisite for specific plans for a later phase 2 with measures that reduce zero emissions within the NOx agreement period.
 - In cases where a 20% effect is allocated, the project's profitability will also be considered in determining the maximum amount of support. The NOx fund will make a strict assessment of the future expected benchmark situation, which is based on support commitments.
- Where the probable effect is lower than 5%, a project-specific calculated degree of reduction below 5% (minimum 2%) 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.

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 contract is signed for delivery of the equipment covered by the NOx measure. 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 on NOx emissions from sources which are covered by the NOx Agreement, and which 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 the likely future NOx-reduction effects from a measure. 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. Land-based industry that is part of the NOx Agreement may also include non-taxable emissions.



It is the activity level that can be documented after carrying out the measure that provides the basis for the final calculation of the NOx reduction and support payment (within the originally granted support limit). If 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, 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 a period up to 12 months.

Duration

The applicant must show to the NOx-fund's satisfaction that relevant Norwegian operation with the NOx-reducing measure in place will last for at least 2 years.

For mobile units, a regular presence in the NOx taxable area is required. A constant presence is not required for mobile units. It is the average annual reduction which is representative for a two-year period or more that forms the basis for the support.

• Public support schemes

Equipment included in support agreements from public funding programs is not supported (however, support can still be given under the fleet renewal program, see separate guidelines on the NOx Fund's website). Exceptions are made where it is deemed appropriate.

Measures that receive support under public support schemes (such as Enova) are not eligible for support from the NOx Fund. Exemptions may be considered in special cases.

Note that state support schemes may reduce or cancel their support if support is granted by the NOx Fund. This should be checked on a case-by-case basis.

The NOx Fund may require that funding opportunity from public support schemes are clarified before the application is finally decided by the NOx Fund.

Statutory requirements

Measures that follows from statutory requirements are not eligible for support from the NOx Fund. This includes, for example, measures that are 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. 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). Thus, Tier III technology as a reference is not only used within the actual geographical scope of the regulations, but for the entire Norwegian coast. The potential for NOx reduction and associated support is therefore small (this does not apply to support under the fleet renewal program, see separate guidelines on the NOx Fund's website).

Tier III may also be used as maximum emission reference level for ships with keel laying before 1 January 2021 in case the relevant operating area requires 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 presume 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. Reference emission level as basis for calculation of NOx-reducing effect will as a maximum be the NOx emission level following from the contracted solution in the winning tender.

County ferry routes

From 1 January 2019, support to ferries tendered by the counties with contract starting date 1 January 2021 or later, is handled in accordance with guidelines applicable for national ferry routes. Reference emission level as basis for calculation of NOx-reducing effect will as a maximum be the NOx emission level following from the contracted solution in the winning tender. This does however not apply to tenders announced before 1 January 2019 or to ferry routes where the NOx Fund already has applications for processing from before 1 January 2019. This does not apply to connections where the possibility of support has been clarified with the county municipality or its transport company in advance of the call for tenders.

• Support ratio and reduction scope

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

Exceptions can be made in individual projects with particularly large and important reductions, where even a lower support share, down to 5%, is considered decisive for a decision on measures. 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 is less than 2% or the measure gives less than 1 ton NOx reduction are not eligible for support. For the 2% limit, particularly significant reductions in absolute terms can provide exceptions.

NOx factor

The NOx factor used in order to calculate emissions without the measure on existing sources, cannot be higher than the factor applied in the quarterly reporting of NOx emissions to the NOx Fund. In case the application process reveals a lower actual reference factor than applied in the NOx emission reporting, this lower actual factor will be applied as basis for calculating the NOx reduction.

• The maturity of the project

Projects that include NOx-reducing measures which qualify for support for more than NOK 100 million, mainly comes from the offshore industry (such as electrification projects) and 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 option for LNG operation is considered standard in any case.

The financial profitability of a measure will be considered for applications that qualify for support over NOK 30 million. Such projects that are particularly profitable without NOx Fund support may get support deduction.

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

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 must be submitted which has been signed by the parties involved in the measure's cash flow, confirming that the parties agree on the distribution of the support disbursed by the NOx Fund (from the owner to the user of the technology).
- The support is based on the investment costs, which must be documented by the owner of the technology.
- The leasing model must be presented, showing that it facilitates procurement after expiry of the lease, as well as providing incentives for such.
- Applications must show how support from the NOx Fund will enable the measure.
- The user of the technology (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 constitutes 50% of the support the measure is eligible for if it is installed permanently.
- Lease period of 3–4 years: Credited NOx and support constitutes 60% of the support the measure is eligible for if it is installed permanently.
- Lease period of 4 years or more: Credited NOx and support constitutes 70% of the support the measure is eligible for if it is installed permanently.
- In connection with procurement of a permanent installation on the ship at the end of the lease: Credited NOx and support constitutes 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.

Support for leased measures will only be granted once per measure, based on the investment cost. 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 have received support, are no longer eligible for support:



- Infrastructure establishment/expansion:
 - Support for LNG infrastructure.
 - Support for land-based installations for shore power unless installations on land and vessels have the same owner and must be viewed as one investment case.
- 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 which are not covered by NACE codes in the new NOx Agreement.
- Support to merely engine replacement (without additional NOx cleaning). The possibility for exceptions ended 1 January 2019.
- Support to specified energy efficiency measures on new build. Support ended from 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 is less than 2% and provides less than 1 ton of NOx reduction and which could be calculated specifically from difference in kwh-consumption with and without the measure in use.
- LED lighting. Applications processed from 24.04.2019 are not granted support.

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 retrofit of 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, 2) Support for annual service at SCR systems on fishing boats, has been replaced by a common support program which in addition includes support for the replacement of components on SCR systems.
- Support program for development projects. Application deadline was 15.05.2020.
- Support programme for urea infrastructure. Application deadline was 31.12.2020.

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. The support will be granted after documented purchasing of urea, with 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 delivery date from 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

We support a maximum of 70% of the cost. For now, support for urea has been decided to apply until 2027."

Conditions for receiving support associated with urea consumption:

- No urea support is given to ships operating in areas where the ship 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 vessels 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 is carried out in accordance with the NOx Fund's measurement and service requirements applicable to SCR systems.
- The emissions measurement must show that the SCR systems provides the level of cleaning it was designed for.
- Emission measurement every 5 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 measurement of the relevant engine and emission parameters is 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 on a case-by-case basis.

In general, 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 that is accredited to perform emission measurements or which has been 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 grated to measurements carried out to check that SCR system functionality is maintained over time. The support is granted with 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.
- NH₃ 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 NH₃ measurement.

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



When vessels have several identical engines, it is enough to perform a measurement on one engine if other documentation indicates that the condition of the engine measured is representative for 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 with 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 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 together) of NOK 25 million for the years 2019 to 2023. The NOx Fund may consider expanding the frame and the time when needed.

The following support conditions applies:

- Support is only given to SCR on ships, fishing vessels and rigs.
- Support is provided after the accrued cost.
- Support for service is given maximum once per calendar year.
- Support for replacement of catalyst elements and components in the SCR-system is given maximum 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 that are not supported by the NOx Fund.

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

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

- 1. NOx factor for engine is determined by on board measurement after 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 the emission factor is determined by a qualified measurement company, the measurements shall be carried out in accordance with 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. For auxiliary engines the emission factor shall be established at 50% engine load.
- 2. NOx factor before and after SCR calculated based on EIAPP certificate and associated NOx Technical File (only applicable to TIER III certified engines).
- 3. In case national or international rules and approval schemes for the installation and operation of continuous measuring equipment for NOx are established, such measurements can be used as a basis for reporting and self-declaration.

If there are several engines on board with different NOx factors, a common NOx factor for the ship can be calculated according to 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 properly and one of the following requirements must be fulfilled related documentation to the NOx Fund:

- 1. On board 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. In order to avoid that 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 that all engines with SCR systems are functioning. Service must be carried out in accordance with 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 range of 50-75% and an auxiliary engine at 50% load. Engine shall be selected by the measuring company 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 NH₃) has been serviced and calibrated in accordance with the supplier's recommendations. Measurement results from the last reporting quarter, must be able to 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 properly.
- 4. EIAPP + NOx Technical file: If the IMO and / or the Norwegian Maritime Directorate provides a regime for control of operational compliance with TIER III requirements, then such a regime can be used to show that the SCR systems perform in accordance with EIAPP and 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 must be operated in NOx taxable speed regardless of how long since 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 kept continuously updated and can be submitted to the NOx Fund on request. Service and preparation of documentation can be carried out by the SCR supplier, specialist in such services or the company itself.

The NOx Agreement requires that NOx measures (including SCR) be operated at a NOx taxable area. This is also specified in a letter of commitment 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

The enterprise fills out the application for support, optionally 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 4 weeks prior to a board meeting of the application shall be handled at this meeting.

4.2 Quality assurance of application and recommendation

The NOx Fund receives and processes the application. Then the application will be evaluated by a third party (DNV) for quality assurance purposes.

If any further information is required or information 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 of applications

When the amount of qualified application for funding exceeds the NOx Fund's available budgets, the NOx Fund must prioritize between applications.

Important aspects which will be considered in the prioritizations are:

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

Prioritizing of applications can give the following results for each application:

- Letter of approval in accordance with ordinary support conditions.
- Reduced compares 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 dispatch the support recommendations to the NOx Fund's Board prior to the board meeting, for subsequent decision 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 also be treated confidentially, the applicant must provide a particularly good reason for this. The NOx fund basically 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

Usually there is not much correspondence between applicant and the NOx Fund during the implementation phase. However, the NOx Fund often receives a short update on the status of the project when major milestones are met. The NOx Fund may also ask for a project status update.

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

4.6 Self-declaration

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

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

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) then consists 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 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 as soon as possible. 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 letter of approval. A postponement of the deadline may be considered if applied for in advance.

Those that 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: post@nox-fondet.no.

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 information that is missing or to check any details and, if necessary, to 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 actual verified NOx reduction multiplied with 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 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 have changed when the measure has been implemented. As a general rule, the NOx reference (emissions without measures) used for calculating the reduction will be re-estimated in verification based on NOx emissions and reduction efficiency in the verification period following the implementation of the measures.

4.7 Disbursement of support

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

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 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 status of the presence 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 the measure was put into operation.
- 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 period of the NOx Agreement 2018–2027.