

Ministeriet for Grøn Trepart Styrelsen for Grøn Arealomlægning og Vandmiljø

Research Programme for Climate Measures (Klimatiltagsprogrammet) 2026-2029

Call for Applications

English version

This is an unauthorized translation. Please refer to the original Danish version.

Research Programme for Climate Measures (Klimatiltagsprogrammet) 2026-2029

This call has been prepared by The Agency for Green Transition and Aquatic Environment (Styrelsen for Grøn Arealomlægning og Vandmiljø) in 2025

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1. Call for applications

The research funds disbursed through this program are part of the 2025 agreement on the distribution of the research reserve (*Aftaler om fordeling af forskningsreserve mv. i 2025*). The aim is to strengthen the development and implementation of climate technologies and measures in agriculture.

Approximately DKK 235 million will be made available through the program in 2025.

Applications are invited for projects that support the development of various climate measures through:

- Documentation of climate effects
- Screening of potential climate effects
- Testing, scaling, and demonstration to indicate the potential of climate measures once fully developed
- Identification of significant negative side effects on the environment and human health

This is a call for research project applications. For each climate measure mentioned in this call, a specific funding range is indicated.

Grants are subject to compliance with relevant national regulations and must adhere to the Ministry of Finance's budget guidelines and guidance on effective grant management.

<u>The guidance on grants for projects on climate measures</u> outlines how to apply for funding and describes the various criteria and obligations that must be met to receive a grant.

1.1 Important information regarding the call

1.1.1 Application deadline, project start, and duration

The application deadline is Friday, 15 September 2025 at 12:00 noon.

The application period runs from **24 June 2025 – 15 September 2025**. We expect to notify applicants of approvals and rejections in December 2025.

Projects that receive funding approval may commence thereafter. The proposed project duration may be a maximum of 4 years.

1.1.2 Before you apply

We encourage you to carefully read this call along with the guidance for the application forms.

1.1.3 Learn more

Two online information meetings will be held on **4 July** and **11 August**, including a review of the application materials.

You can also read more about the program in the Grant Guide from the Agency for Green Transition and Aquatic Environment.

2. Background, purpose, and framework

2.1 Background of the call

The government's green research and innovation initiative Speeding Up Tomorrow's Green Solutions – A Strengthened Effort for Green Research, Innovation and Climate Solutions (Fart på fremtidens grønne løsninger) from October 2024 presents an approach to green research and innovation aimed at reducing development and implementation barriers for concrete climate solutions. The initiative plays a key role in the continued development and implementation of new climate solutions within the agricultural and food sectors, supporting the implementation of the Agreement for a Green Denmark (Aftale om et Grønt Danmark) from June 2024, and helping Denmark meet its national climate goals and international obligations.

The Agreement for a Green Denmark was made between the government and the parties in the Green Tripartite Agreement (Den Grønne Trepart), and its implementation was adopted in the Danish Parliament through a political framework agreement on 18 November 2024. The agreement outlines a strengthened effort to develop and implement climate technologies and measures. It specifies that all relevant stakeholders – particularly the state – must support the development and implementation of climate technologies and measures that reduce emissions, while also ensuring that no undesirable environmental or health-related side effects occur.

According to the agreement, it is a prerequisite that the climate effect of new climate solutions is documented and approved by the central institution responsible for Denmark's national greenhouse gas inventory system (DCE – Danish Centre for Environment and Energy at Aarhus University) in order to be included in the national emissions inventory. The Danish Climate Act (Klimaloven) sets a target of reducing greenhouse gas emissions by 70% by 2030 compared to 1990 levels. By basing CO_2e regulation on the national emissions inventories, it is ensured that regulated activities on farms are reflected in the effort to meet the Climate Act's targets. Therefore, generating sufficient documentation for the climate effects of new climate solutions – specifically in relation to the national emissions inventories, and this strengthened documentation effort, clear guidelines must also be established for which environmental and health-related side effects must be researched in parallel.

2.2 Purpose of the research program

The purpose of the research program is to generate sufficient knowledge about the climate effects and use of the included climate measures, enabling their implementation in the agricultural sector without significant risk to the environment or human health. At the same time, their use must be eligible for inclusion in the national emissions inventories and in a future farm-scale CO₂e regulation system.

The program's activities are therefore categorized as follows:

- **Focused documentation of climate effects.** This research program allocates funding for the focused documentation of climate effects related to the following climate measures:
 - Chain effects and combination effects between animal housing and storage technologies for manure management
 - o Frequent removal of deep bedding with subsequent anaerobic digestion
 - o Synthetic nitrification inhibitors

Projects receiving funding must document and quantify the climate effect of applying the specific measure. The documentation must account for relevant variation using methods that clearly demonstrate that the measure, once implemented, can be included in the national emissions inventory—provided the documentation is deemed sufficient¹. Additionally, documentation projects must focus on quantifying and documenting both the reduction effects and their reference emissions at the farm level to contribute to the knowledge base for farm-level greenhouse gas regulation.

- **Screening.** Funding is allocated for screening the following climate measure:
 - Biological nitrification inhibitors

For biological nitrification inhibitors, the focus will be on screening potential climate effects, conducting tests, and potentially identifying the genetic traits in selected crops and the biochemical compounds that could inhibit nitrification.

- Testing, scaling, and demonstration of climate solutions to indicate the potential of fully developed measures. Funding is available for test, scale, and demonstration projects for the following climate measures:
 - Tent covers with floating layers
 - o Frequent removal of deep bedding with subsequent anaerobic digestion

These projects must assess the potential of the measures once fully developed. To quantify this potential, the climate measures must be tested at their current development stage and demonstrated at full scale. The aim is to trial and increase the maturity of these measures in practical contexts to ensure their applicability and indicate their climate effects under real-world conditions.

- **Identification of significant negative side effects** from the use of selected climate measures. Funding is allocated to investigate significant negative side effects of:
 - The use of synthetic nitrification inhibitors
 - The application of biochar to agricultural soils

Even when a climate measure has substantial potential for emission reduction and widespread application, its use may be associated with undesirable risks. These risks depend on the measure in question and may include impacts on the environment, animal welfare, and human health. Therefore, the implementation and broader adoption of a climate measure also require acquiring knowledge about any potential negative side effects that might be suspected to arise from its use.

¹ You can read more about how the Ministry of Climate, Energy and Utilities and AU DCE approach the documentation of climate effects of climate technologies and actions in the <u>Guidelines for Documentation of Climate Effects</u> and in the program's application guide: <u>guidance on grants for projects on climate measures</u> (section 2.10).

3. Description of the initiative

3.1 Animal housing and storage measures

3.1.1 Chain effects and combination effects between animal housing and storage technologies for manure management

Initiative for focused documentation of climate effects

This initiative specifically addresses the documentation of climate effects. For projects under this initiative, it is a requirement that representatives from Aarhus University's DCE Emissions Group are involved to a relevant extent. This is to ensure that project partners have adequate access to guidance and knowledge on how the project can best contribute to the inclusion of the measure in the national emissions inventory. As a minimum, this involvement requires that AU DCE is represented in an established advisory board or project group (for more information, see Section 5.7).

When projects investigate the reduction effect of a measure in an emissions category in the national inventory where no national emission factors are currently applied, both baseline emissions (reference emissions) and emissions following the implementation of the measure must be quantified. For further details, see the program's application guide.

About the climate measure

Livestock manure is a source of methane, ammonia, and nitrous oxide emissions, all of which contribute to a farm's climate footprint. Within the manure management chain, there are various opportunities to reduce one or more of these emissions—either through treatment technologies or by shortening retention times. However, such changes may influence the potential for the production or loss of individual greenhouse gases in subsequent stages of the chain. There can be positive synergies – for example, combining short retention time in the housing facility with biogas production, which reduces the risk of methane emissions during subsequent storage. Short retention time can also be combined with slurry treatment technologies at the storage stage. Conversely, treatment at one stage may reduce the effectiveness or value of additional treatment at a later stage.

Projects in this research area are expected to identify and quantify chain and/or combination effects on direct and indirect greenhouse gas emissions from the use of animal housing and storage technologies. Applications must demonstrate that the selected technologies have significant reduction potential – either currently or within a short timeframe. Projects should target animal housing systems for both cattle and pigs.

Known strategies in animal housing include, among others, frequent slurry removal, slurry cooling, pit flushing, and the use of additives. Slurry can be treated before storage using well-established methods such as anaerobic digestion (biogas treatment), separation, and acidification. Technologies for use during the storage period include flare combustion, biofilters, low-dose acidification, and tent covers – possibly with controlled ventilation. Other technologies with a high Technology Readiness Level (TRL), not mentioned here but currently in use or expected to be adopted within a few years, are also considered relevant.

For all of the above-mentioned measures, documentation of climate effects remains insufficient – partly because the overall effect depends on the interaction within the entire manure management chain, which is not yet well understood. Moreover, the climate impact of individual technologies may

be limited unless combined with other measures, though such combinations can offer opportunities for synergies.

Projects eligible for funding under this area must document climate effects across the entire manure management chain under conditions representative of real-world practice – including seasonal variation – to ensure that results can be used in both farm-level and national greenhouse gas inventories. Controlled experiments at laboratory or pilot scale may be included, but cannot stand alone.

Regardless of which combinations of animal housing and storage technologies are addressed, it should be described which sources of variation are most relevant across farms. These sources of variation may include, but are not limited to: housing type and design, manure types, season, feeding systems, and other management practices.

Examples of specific knowledge gaps include:

- Studies of how the effectiveness of storage technologies is affected by variation in slurry/digestate properties at the point of transfer to storage, including the role of dry matter content in slurry and digested biomass.
- Development and validation of measurement methods for performance documentation under practical conditions.
- Development of emission factors, reduction factors, and/or models for use in national greenhouse gas inventories and farm-specific CO₂e regulation.

Where relevant, data collection should be coordinated with ongoing and future documentation projects on individual storage technologies, including projects measuring reference emissions from various types of cattle and pig housing, in order to meet the national emissions inventory's requirements for representativeness.

Total budget for the initiative DKK 65-85 million

Maximum grant per project application DKK 20 million

Initiative for testing, scaling, and demonstration

About the climate measure

A fixed cover on slurry storage facilities can lead to reduced methane emissions if the storage has a wellestablished floating layer. This is likely due to biological methane oxidation in the floating layer, but the relationship between storage conditions and methane removal is still poorly understood. The mitigation potential depends partly on the conditions for methane oxidation in the floating layer and partly on the exchange of methane and other gases between the storage and the surrounding environment (ventilation). In addition, it is essential that slurry handling can be carried out without significant operational drawbacks.

This initiative aims to test the combination of tent covers and floating layers – two mitigation measures that are already widely used individually, but not yet combined in practice as a climate measure on livestock farms. The project should quantify the effects of floating layers in tent-covered slurry tanks on emissions of methane, nitrous oxide, and ammonia. In addition, there is a need to identify practical barriers to the adoption of the measure and suggest possible solutions (e.g. for ventilation control).

The initiative is expected to address both pig and cattle slurry, as well as the potential storage of degassed biomass returned from biogas plants. The project must support the implementation of the measure, including documentation of seasonal variation.

Since the aim of the initiative is to develop a measure to reduce emissions from slurry storage, it is essential to have access to a broadly applicable measurement method. The development of a method for measuring emissions from tent-covered storage tanks independently of environmental conditions may therefore also be included in projects under this initiative.

Examples of specific knowledge gaps include:

- The effect of the floating layer's properties on methane emissions from covered slurry storage, including, for example, the relationship between the age of the floating layer and methane emissions.
- Design of tent covers aimed at improving ventilation control.
- Knowledge base and development of practices for establishing and maintaining floating layers during the filling and emptying of slurry storage facilities.
- Development of a cost-effective method for measuring emissions from covered storage in practice, ensuring representativeness across different storage facilities.

Total budget for the initiative DKK 15-25 million

Maximum grant per project application DKK 10 million

3.1.3 Frequent removal of deep bedding with subsequent anaerobic digestion

Initiative for testing, scaling, and demonstration and focused documentation of climate effects

This initiative specifically addresses the documentation of climate effects. For projects under this initiative, it is a requirement that representatives from Aarhus University's DCE Emissions Group are involved to a relevant extent. This is to ensure that project partners have adequate access to guidance and knowledge on how the project can best contribute to the inclusion of the measure in the national emissions inventory. As a minimum, this involvement requires that AU DCE is represented in an established advisory board or project group (for more information, see Section 5.7).

When projects investigate the reduction effect of a measure in an emissions category in the national inventory where no national emission factors are currently applied, both baseline emissions (reference emissions) and emissions following the implementation of the measure must be quantified. For further details, see the program's application guide.

About the climate measure

Frequent removal of deep bedding means that manure and bedding material (typically straw mixed with manure) are removed from the barn more often than is common practice. Current practices vary depending on factors such as housing system and farm management.

Frequent removal of deep bedding has the potential to reduce methane and nitrous oxide emissions from the bedding while it is still in the barn. Deep bedding systems are used in various types of live-stock housing.

To serve as a climate mitigation measure, frequent removal of deep bedding requires subsequent anaerobic digestion immediately after barn clean-out to prevent a shift in emissions to field heaps or other storage facilities.

Standard values from the IPCC Guidelines are currently used in the national greenhouse gas inventories to calculate methane emissions from deep bedding and other solid manure during storage and housing. These values differentiate based on whether the retention time of the deep bedding in the barn is more or less than 30 days.

Funding is available for projects that both document climate effects and establish test-, scale-, and demonstration trials for the frequent removal of cattle deep bedding with subsequent anaerobic digestion.

The test-, scale-, and demonstration projects are expected to address the most pressing practical barriers and challenges associated with the handling of frequent deep bedding removal on farms, as well as the subsequent technical and logistical challenges related to delivering the deep bedding to biogas plants.

The initiative must also contribute to the knowledge base required for developing guidelines on optimal removal frequency, aimed at reducing greenhouse gas emissions.

In order for the climate mitigation measure of frequent deep bedding removal to be included in the national greenhouse gas inventory, the initiative must: 1) document the reference emissions (baseline) for Danish deep bedding barns across the most significant variables, and 2) document the climate mitigation effect of implementing frequent deep bedding removal followed by anaerobic digestion. To assess the effect of the climate measure relative to the reference scenario (cleaning of animal housing and direct field application), the emissions resulting from the field application of the digested biomass – including digested deep bedding – should also be quantified.

Examples of specific knowledge gaps:

- The relationship between removal frequency and climate effect for the most relevant deep bedding systems. There is a need for Danish emission factors that reflect the gradual increase in methane emissions over time, thus providing a basis for determining the optimal removal interval.
- Emissions associated with disturbing the deep bedding layer for removal and during offloading of the material should be included.
- Variability in the climate mitigation effect of the measure for key barn types, to support future inclusion of the measure in the national emissions inventory.
- Current practices in deep bedding barns, including updating standard figures (norms) for bedding use and storage capacity for the returned digested biomass. Identification of practical barriers to implementation should also be included.
- Development of emission factors, reduction factors, and/or models for use in national greenhouse gas inventories and farm-level CO₂e regulation.

Applicants are encouraged to integrate efforts to ensure coherence between the quantification of the measure's climate effect and the development of best practices at the farm level.

Total budget for the initiative DKK 20-30 million

Maximum grant per project application DKK 10 million

3.2 Land-use measures

3.2.1 Biochar in agricultural soils

Initiative for identification of significant negative side effects

About the climate measure

Biochar applied to agricultural soil adds a stable carbon pool to the soil, contributing to long-term carbon storage. Biochar is a new climate mitigation measure, and procedures for its routine large-scale application on agricultural land are still under development.

The impact of biochar on soil biology, ecosystem services, and environmental conditions also includes potentially negative effects on soil health. However, biochar is an umbrella term covering products with varying properties. International studies on ecotoxicological effects are ambiguous, which can be attributed, among other factors, to differences in input biomass for pyrolysis, pyrolysis conditions, and the climatic and agronomic conditions of the soil to which the biochar is applied. The focus of this programme initiative is to identify and quantify these potential effects and side effects of different types of biochar under Danish cultivation conditions.

This initiative aims to investigate significant side effects associated with the application of biochar to agricultural soils over time. The initiative should include studies of side effects on microbial cycles that influence greenhouse gas emissions, nitrogen leaching, and plant-available nutrients. It should also examine biochar's potential side and accumulation effects on the occurrence and fate of other substances in agricultural soils – such as pesticides and nutrients.

As a minimum requirement, side effects should be examined across the following variables:

- Feedstock types for pyrolysis, with a focus on wood, straw, sewage sludge, and digestate fibers, which are expected to be pyrolyzed at larger scales in the near future. For biochar derived from more complex biomasses such as digestate fibers and sewage sludge, the variation in side effects within each biomass type should also be investigated.
- Soil types
- Particle size of the applied biochar

Examples of specific knowledge gaps related to the use of biochar in agricultural soils include:

- Negative effects on phosphorus and nitrogen cycling, especially focusing on the risk of nitrate leaching and key factors affecting the plant availability of phosphorus.
- Risk of introducing environmentally hazardous substances with biochar (e.g., PFAS, PAHs, heavy metals, etc.), including risk assessments related to human health (e.g., airborne dust, groundwater leaching), and ecotoxicological studies.
- Effects on the bioavailability and leaching of pesticides under field conditions.
- Negative effects on soil health, including soil aggregate structure and soil biota (microbiome and fauna), as well as the potential for biochar saturation in soils.
- Pathways for biochar loss environmental transport, including the potential effect of pelletized biochar stability on losses to aquatic environments.

Although the focus is on biochar application in agricultural soils, there is also a knowledge gap concerning how biochar effects are influenced by changes in land use—such as afforestation or rewetting of cultivated land.

Total budget for the initiative DKK 45-65 million

Maximum grant per project application DKK 20 million

3.2.2 Synthetic nitrification inhibitors

Initiative for **identification of significant negative side effects** and **focused documentation of climate effects**

This initiative specifically addresses the documentation of climate effects. For projects under this initiative, it is a requirement that representatives from Aarhus University's DCE Emissions Group are involved to a relevant extent. This is to ensure that project partners have adequate access to guidance and knowledge on how the project can best contribute to the inclusion of the measure in the national emissions inventory. As a minimum, this involvement requires that AU DCE is represented in an established advisory board or project group (for more information, see Section 5.7).

When projects investigate the reduction effect of a measure in an emissions category in the national inventory where no national emission factors are currently applied, both baseline emissions (reference emissions) and emissions following the implementation of the measure must be quantified. For further details, see the program's application guide.

About the climate measure

In this context, synthetic nitrification inhibitors are understood as industrially produced chemical compounds that are added to fertilisers to slow down the conversion of ammonium (NH_4^+) to nitrate (NO_3^-) in the soil. The purpose is to reduce nitrogen losses from the soil, particularly by decreasing nitrate leaching and nitrous oxide (N_2O) emissions. In the present call, a distinction is made between synthetic nitrification inhibitors and biological nitrification inhibitors. The latter are defined below in section 3.2.3 as naturally occurring plant metabolites that inhibit nitrification.

The initiative aims to expand the documentation of the most commonly used synthetically produced nitrification-inhibiting active substances' direct and indirect climate effects to a level where the effects can be included in national greenhouse gas inventories across different conditions.

At the same time, projects are expected to assess whether there are significant negative side effects associated with the use of such inhibitors and to provide a knowledge base that should be considered in future regulation of synthetic nitrification inhibitors used as a climate mitigation measure. Thus, it is relevant to examine side effects that are central to a risk assessment of nitrification inhibitors in the context of their use as a climate measure, as well as the levels of uncertainty associated with these side effects.

Documentation of the climate effect of synthetic nitrification inhibitors requires knowledge of emissions from an untreated reference. Project applications are therefore invited to document nitrous oxide emissions from agricultural soils and the climate effects of relevant uses of synthetic nitrification inhibitors. Relevant variables for the climate effects include soil type and climate, crop type, and types of fertilisers. Since effects on nitrogen use efficiency can have secondary effects on the composition of plant residues, there is a need to document the various nitrogen loss pathways (nitrous oxide emissions, ammonia volatilization during application, nitrate leaching) throughout the year.

Side effects in the form of ecotoxicological effects on soil-dwelling organisms, leaching risk, and broader ecological effects should be assessed for representative uses of synthetic nitrification inhibitors, potentially through a combination of controlled experiments and field studies. Close coordination

with studies of climate effects is expected. Where deemed relevant and cost-effective, studies of climate and side effects are encouraged to be integrated into the same project.

Examples of specific knowledge needs:

- Effectiveness of synthetic nitrification inhibitors as a function of fertiliser type and soil/climate. Here, knowledge is expected regarding effects on nitrogen pools and nitrous oxide emissions, as well as nitrate leaching and ammonia volatilisation. The results are expected to contribute to the determination of nitrous oxide emission factors for relevant fertiliser types and crop categories.
- Combination effects and interactions. There may be uses of synthetic nitrification inhibitors that coincide with other climate mitigation measures such as the application of biochar to agricultural soils, anaerobic digestion of manure, slurry acidification, etc. Potential interactions should be investigated.
- Risk of side effects on:
 - o soil health microbiome, fauna, and soil functions (e.g., methane oxidation)
 - the environment (ecotoxicological studies, leaching risk to groundwater, e.g., through screenings using the Groundwater Monitoring Programme (GRUMO) or the Danish Pesticide Leaching Assessment Programme (VAP) as a platform)
 - human health, by risk assessment of leaching to groundwater and/or uptake of active substances by plants

To best ensure cost-effective synergies with other research and development efforts related to nitrous oxide emissions from agricultural land and the climate effects of synthetic nitrification inhibitors, projects are encouraged to use the <u>SmartField</u> project's data infrastructure and metadata specifications². Alternatively, projects should align with SmartField's minimum metadata requirements and, following publication of research results, make raw data from the project available.

As a smaller part of the initiative concerning synthetic nitrification inhibitors, there is also a need — to support the reference framework for nitrification inhibitors as a climate measure — for the collection of data on the current usage of synthetic nitrification inhibitors in Denmark, including which products/active substances are used, when, and for which crop types.

Total budget for the initiative DKK 40-60 million

Maximum grant per project application DKK 20 million

² For more information, contact <u>SmartField</u>.

Initiative for screening

About the climate measure

Biological nitrification inhibitors (BNI) are understood here as plant-specific metabolites that inhibit nitrification. BNI can act as enzyme inhibitors similar to their synthetic counterparts, or they may have more indirect modes of action, for example by influencing the soil microbiome. There are various ways in which BNIs can be utilized. The specific BNI metabolites can be extracted from plants and applied as additives to fertilisers or directly to fields. Alternatively, plants and/or specific varieties with BNI potential can be cultivated alone or in mixtures to take advantage of their nitrification-inhibiting properties.

The initiative for the development of biological nitrification inhibitors concerns clarifying and raising the relatively low Technology Readiness Level (TRL) through screening and mapping of nitrification-inhibiting metabolites. The initiative must build the knowledge base for the breeding of crops relevant for cultivation in Denmark. There is a fundamental need to map the nitrification-inhibiting metabolites that may be present to varying degrees in different crop varieties (and their wild relatives). This mapping may ultimately form the basis for the production of nitrification-inhibiting metabolites to be bred through traditional breeding or through the use of relevant new genomic techniques (NGT), implemented in agriculture, and thus contribute to national and international climate targets and commitments.

In the present initiative, the central focus is a screening of plants in which the production of nitrification-inhibiting metabolites is catalogued. Emphasis is placed on focusing on crops with widespread cultivation in Denmark, where growing them requires relatively high fertiliser use. It is also advantageous if the initiative actively supports and leverages synergies with other ongoing and future projects on BNI.

Initiatives may, for example, focus on the following:

- Documentation of genetic variation for the BNI trait in relevant main crops in Denmark.
- Screening and testing of BNI activity of both known and newly discovered metabolites.
- Development of a reference catalogue for nitrification-inhibiting properties through screening of various relevant crop varieties, including relevant wild species and introgression lines.
- Identification of biochemical compounds in crop varieties with considerable BNI properties with the aim of comparing across relevant varieties in a reference catalogue.

The initiative also includes an assessment of the maturity level of the BNI crop varieties selected for the project.

Total budget for the initiative Approx. DKK 10 million

Maximum grant per project application DKK 5 million

4. Expected results of the research programme – "expected impacts"

Applications must clearly describe how the research efforts contribute to the programme's overall aim of strengthening the knowledge base for the implementation of selected climate mitigation measures in agriculture. Below are the expected impacts of the initiatives described in Section 2.2:

- 1. For projects addressing focused documentation of climate effects, the programme is expected to lead to:
 - Quantification of the climate effect of the given mitigation measures with sufficient precision and robustness to allow inclusion in Denmark's national greenhouse gas inventory and support practical implementation.
 - A well-documented knowledge base on reference emissions and mitigation effects at farm level, which can contribute to the development of future farm-level CO₂e regulation.
 - Documentation that covers relevant variations and operational conditions reflecting practical application scenarios, ensuring scalability to the national level and identifying relevant activity data.
- 2. For projects focusing on the screening of biological nitrification inhibitors, the programme is expected to lead to:
 - Contributions to the knowledge base for further research and development of biological nitrification inhibitors in relevant crops
- 3. For projects focusing on testing, scale-up, and demonstration, the programme is expected to lead to:
 - Testing and demonstration of the given climate mitigation measures in practice, allowing for assessment of their technological maturity and climate effect in realistic operational environments.
 - Reliable estimates of the mitigation potential at full-scale application and identification of potential technical or practical barriers to implementation.
 - Contributions to the maturation of the mitigation measures and provision of experience-based knowledge to support strategic decisions by industry stakeholders and authorities regarding their deployment.
- 4. For projects focusing on the identification of significant negative side effects, the programme is expected to lead to:
 - Identification and documentation of potential environmental and health risks associated with the application of the given mitigation measures, enabling informed decisions on implementation.
 - Preparation of assessments of consequences for the local and broader environment, animal welfare, and human health in relation to the use of specific mitigation measures.
 - Contributions to the development of clear guidelines on which types of side effects should be examined in the future.

5. Application and application procedure

5.1 Application materials

5.1.1 Application forms and guidelines

Application forms as well as 'Vejledning om tilskud til klimatiltagsprojekter' can be found in the Agency for Green Transition and Aquatic Environment's tilskudsguide for <u>Klimatiltagsprogrammet 2026-2029</u>.

The guideline describes in detail what a complete application must contain. Applications must be submitted exclusively using the specific application forms.

The application consists of:

- Form A: Main application form including the scientific content.
- Form B: Budget form and Gantt chart.
- Form C: Participant form.
- CVs of the project leader and relevant key personnel.

Up to four pages of appendices – e.g., reference list, illustrations, and technical drawings.

5.1.2 Language

The application may be written in Danish or English; however, a comprehensive summary must be written in Danish.

5.1.3 Submission of applications

Applications for funding must be submitted via Digital Post (e.g., the "digital post" function in Outlook or e-Boks). In the subject line, write the e-mail address <u>klimatiltag@sgav.dk</u>.

Applications, including attachments, must be received no later than 12:00 noon on the application deadline day. Applications received after this time will not be considered, regardless of when they were sent. Be aware that there may be a delay between the time of sending and the receipt of the application in the inbox of the Agency for Green Transition and Aquatic Environment. Please also note that emails sent via Digital Post or e-Boks must not exceed 10 MB, including attachments, and each attachment must not exceed 4 MB. To be considered for funding under the program, applications must comply with the submission deadline and the formal requirements described in this call and the accompanying guide.

Application Forms A and C, along with CVs and any appendices, must be submitted as a single PDF file. The material must be submitted in two versions: 1) A non-scanned version without signatures 2) A scanned version with all required signatures. Form B must be attached as a separate Excel file.

The Agency for Green Transition and Aquatic Environment will send an automatic receipt confirming that the application has been received.

5.1.4 Applications can be declined

Applications may be rejected without review if they are not prepared in accordance with the requirements set out in this call and the accompanying guidelines, including if the submission deadline is not met.

5.1.5 Other funding schemes

There are several other funding schemes related to research and development in the agricultural and food sectors. Applicants should carefully consider which scheme is most relevant. Overviews of other funding schemes can be found, for example, at <u>statens-tilskudspuljer.dk</u>, <u>gudp.dk</u>, <u>Innova-tionsfonden.dk</u>, and <u>dff.dk</u>.

5.2 Who can apply?

Universities and other recognised knowledge and research institutions that conduct research as a non-financial activity are eligible to apply.

Companies and other institutions engaged in research as an economic activity may be included in the applications to a relevant extent without receiving funding. However, they cannot obtain exclusive rights to the project's results, as there is a requirement for equal access, including exploitation rights.

The definition of a research and knowledge dissemination institution can be found [here].

We encourage that the same individual appears as project leader in no more than two applications, and that participation in projects is generally limited to a realistic and feasible extent.

The project leader's type of employment at the given knowledge and research institution does not restrict eligibility, and permanent employment is not a requirement, for example.

5.3 What can you apply for funding for?

Funding may be granted for all necessary and directly related expenses connected to the implementation of the project. This includes salaries for both academic and technical-administrative staff, operational costs, external consultancy (such as subcontracted services), PhD-related expenses, and indirect costs (overhead). As a general rule, applicants are expected to finance and provide any equipment required for the project themselves. However, support may be granted for apparatus or other equipment if it is essential to carrying out the project.

A separate overhead contribution of 44% is provided. Full funding is available for PhD programmes, including international stays and enrolment fees, though <u>not</u> for fulfilling teaching duties or other institutional obligations on the part of the PhD student.

The maximum duration of the project is four years.

5.4 What is not eligible for funding?

Funding is not provided for the following:

- VAT, unless it is ultimately borne by the grant recipient.
- Capital investments, apparatus, and equipment except for items used exclusively in the project and essential for its execution.
- Depreciation, general operational and service costs beyond what is covered by the overhead contribution.
- Compensation for loss of production for the applicant or trial host on land or in facilities where the research is conducted.
- Financing costs of any kind.

5.5 Financing and commercial conditions

This call concerns research projects with a maximum duration of 4 years, which can apply for funding within the financial limits specified for the individual initiatives outlined in sections 3.1 and 3.2.

The grant is conditional on compliance with relevant national regulations and must adhere to the Ministry of Finance's budget guidelines and the guidelines for effective grant management. The maximum funding rate is set at 100% of the total project cost. Eligible costs are described in section 5.3 above. It is the applicant's responsibility to ensure that the funding is not directly or indirectly transferred to a third party as the final beneficiary in contravention of <u>EU state aid regulations</u>.

5.6 Procedure for the assessment of applications

The scientific quality of applications is assessed by a review committee at a research level equivalent to that of the Innovation Fund Denmark (Innovationsfonden), in accordance with § 5, subsection 1 of the Act on the Innovation Fund Denmark (cf. Consolidated Act No. 156 of 13 February 2025).

The review committee consists of researchers or research experts appointed based on recommendations from key stakeholders. The committee is appointed by the Agency for Green Transition and Aquatic Environment. A cross-ministerial working group³ supports the review committee during the evaluation process. The Innovation Fund approves that the responsible ministry's scientific review committee possesses relevant research expertise for the call in question.

All communication with the review committee is handled by the Agency for Green Transition and Aquatic Environment. Applicants will be given a right to be heard ("partshøring") as part of the decision-making process.

The evaluation of the scientific quality of applications is carried out by the review committee based on the following criteria:

- The project's problem formulation and hypothesis, theoretical foundation, methodology, and overall project plan, including objectives, milestones, deliverables, success criteria, and key risks.
- The scientific content of the project in relation to the current state-of-the-art.
- The research and project management competencies of the project team in particular the project leader and work package leaders as well as relevant information on the division of responsibilities.

Each application is assessed on this basis as either eligible for funding or not eligible for funding.

The review committee also provides advice on the prioritization among those applications deemed eligible for funding based on their scientific quality. This prioritization is carried out according to the criteria described in section 5.7. As part of the overall assessment of the application, a right to be heard (partshøring) is conducted.

The Ministry for Green Tripartite makes the final decision on the composition of the overall program, based on the review committee's recommendations and within the available budgetary framework. During the assessment process, the Agency for Green Transition and Aquatic Environment may contact the applicant with clarifying questions.

5.6.1 Confidentiality

Applications are treated confidentially within the framework of the applicable legislation on public access to administrative documents.

5.6.2 Publication of applications

In connection with the application round, the Agency for Green Transition and Aquatic Environment may publish a list of the project titles of the applications received. Once a decision has been made on which projects will be granted funding, project titles, short project descriptions, expected grant amounts, and the name of the main applicant will be published on the research program's website.

³ The cross-ministerial working group consists of employees from Styrelsen for Grøn arealomlægning og Vandmiljø, Miljøstyrelsen, Ministeriet for Fødevarer, Landbrug og Fiskeri, and Klima- Energi og Forsyningsministeriet.

The size of the grants and co-financing may be shown in total and/or broken down by individual participants.

5.6.3 During and after the project

The implementation and results of the project must be reported annually as well as at the project's conclusion. This reporting will be reviewed by a monitoring group established for this purpose and used in connection with research-based public administration by the the Ministry for Green Tripartite supporting the implementation of the *Agreement for a Green Denmark (Aftale om et Grønt Danmark)*.

5.7 Prioritization of applications

Applications that are scientifically assessed as eligible for funding (cf. section 5.6) are prioritized based on their quality and relevance to covering the topics of the call.

The prioritization is supported by an evaluation according to the criteria below with associated weightings. The applications are assessed by the evaluation committee on each criterion on a scale from 1 to 5, where 5 is best.

Prioritization criteria	Weighting
The knowledge needs for the climate measures in this call (cf. section 2.2) are cate- gorized into four different types: 1) focused documentation of climate effect, 2) screening, 3) testing, scaling, and demonstration, 4) identification of significant nega- tive side effects. Each climate measure must deliver results within one or two of the four categories, as described in sections 3.1 and 3.2. The project's relevant contribution to the documentation of a given climate measure's climate effect, side effects and/or addressing of implementation barriers is thus a key prioritization criterion.	40%
 This includes: The project's addressing of the most important knowledge needs related to the given climate measure A clear account of how the project will meet these knowledge needs and examine effects across the most significant variables An explanation of how the expected results are intended to be applied in relation to the relevant focus/foci: 1) focused documentation of climate effect, 2) screening, 3) testing/scaling/demonstration, 4) identification of significant negative side effects. 	
 The project's quality and efficiency are prioritization criteria. This includes: Coherence and efficiency of the work plan, including the extent to which the resources allocated to the work packages are aligned with the objectives and deliverables of the work packages Appropriateness of the management structures, including risk management Allocation and optimization of the budget, including the necessity, scope, and suitability of all costs Complementarity of the participants and the extent to which the consortium as a whole brings together the necessary expertise. This also includes the recruitment plan 	25%

The project's synergy with related efforts and its contribution to supporting the imple-	15%
 mentation of the measure is a prioritization criterion. This includes: The project's complementarity to – and expansion of – existing knowledge Support for ongoing and future efforts related to the given climate measure, 	
 for example through the development of measurement protocols or through the compatibility of the data produced with existing data and its applicability in related projects The added value of the expected results in relation to existing knowledge and ongoing efforts 	
The project's contribution to the establishment of relevant national or international in- terdisciplinary and/or cross-institutional collaborations is a prioritization criterion. This means that the value of such collaborations for the project should be explained, for example in relation to the development of a measure's implementability, synergy with ongoing efforts, new methods for data collection, or similar aspects.	10%
The project's contribution to strengthened research and development capacity in the field is a prioritization criterion, for example through research training or the recruitment and career development of early-career researchers.	10%

For each project, the applicant must establish an advisory board or a project group with the purpose of discussing project progress and continuously reviewing methods and results. Participants in the group may include, in addition to project participants, representatives from knowledge institutions and relevant authorities. For projects where one of the objectives is to document climate effects, the group must include representatives from AU DCE with expertise in the national greenhouse gas inventories.

For projects aimed at documenting climate effects, there are also a number of factors to consider in connection with the development of national emission factors. Read more in the program's application guide: <u>Vejledning om tilskud til klimatiltagsprojekter</u>, section 2.10.

5.8 Processing of personal data

Applications are treated confidentially and are not, as a rule, disclosed to third parties. However, requests for access to documents can be submitted in accordance with applicable rules on public administration transparency. Confidential information cannot be disclosed beyond what is permitted under these rules.

Based on the General Data Protection Regulation (GDPR), which came into effect in May 2018, we must provide the following information regarding the Agency for Green Transition and Aquatic Environment's handling of personal data:

Applicants for funding submit personal data as part of their application and any subsequent case processing. If the applicant does not do so, the Agency for Green Transition and Aquatic Environment cannot process the application.

The Agency for Green Transition and Aquatic Environment processes the information in connection with case management and project selection. Submitted materials may be shared with external experts outside the Agency for Green Transition and Aquatic Environment for the purpose of obtaining scientific advice and evaluation. In addition, personal data may be shared with experts both within and outside the Agency for Green Transition and Aquatic Environment during follow-up processing related to the projects.

In connection with project audits, personal data may be shared with other authorities in accordance with applicable law.

In addition to submitted materials, the Agency for Green Transition and Aquatic Environment collects and stores personal data from publicly available sources for information activities. The data is stored in the secretariat's archiving systems until transferred to the Danish National Archives (Rigsarkivet) in accordance with Consolidation Act No. 1201 of September 28, 2016 (the Danish Archives Act, da.: Arkivloven). As mentioned above, parts of the project applications will be made public.

The Agency for Green Transition and Aquatic Environment stores the information in secure file systems for one year after submission, after which it is deleted. In addition, the information is stored in the Agency for Green Transition and Aquatic Environment's case management system until it is transferred to the Danish National Archives in accordance with the Archives Act. Information in the archive cannot be deleted.

For details on the Agency for Green Transition and Aquatic Environment's processing of personal data and your rights to access and correct personal information, see <u>Veiledning om tilskud til klimatiltag</u>-<u>sprojekter</u>, section 7.5.

Research Programme for Climate Measures (Klimatiltagsprogrammet) 2026-2029 Call for Applications



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