

Grand Solutions call:

# Research and Innovation Solutions Enabling the Green Transition, 2. call

**Application deadline: 18 August 2020 at 12:00 CET**

**Grand Solutions project duration: Typically 2-5 years**

**The 2020 budget for the 2 calls with deadlines 27<sup>th</sup> February and 18<sup>th</sup> August is maximum DKK 700 mill.**

**Innovation Fund Denmark (IFD) invests in ambitious and targeted strategic research and innovation projects that create and implement new solutions, technologies, behavioural changes and valuable new knowledge.**

**IFD co-finances green projects**, preferably with transdisciplinary approach across the scientific fields including natural sciences, humanities and social sciences, **that in competition with the global state-of-the-art knowledge and a committed and efficient consortium creates large value for society and high impact on the green transition.**

## Objective

The objective of this call is to enable green transition towards a sustainable society and to enable the Danish governments' ambitious target of 70% reduction of greenhouse gas emissions in Denmark by 2030 and net-zero emissions in EU and Denmark by 2050. This requires research and innovation with interdisciplinary approach in all different sectors and scientific disciplines to develop innovative solutions and implement them.

The research and innovation must strengthen the entire value chain from strategic research to development and implementation, and contribute to build-up capacity in the Danish research sector to provide knowledge and educated staff at all career levels and access to infrastructure, to secure targeted long-term green innovation efforts.

Based on Danish research- and/or professional strongholds within academia and/or industries in collaboration with international input, we must develop green solutions that are globally scalable through establishment of obligating partnerships between the contributing parties. To do that, we seek ambitious ideas with large potential for both transition and growth in the green area that will lead us to fulfil the Danish reduction targets for greenhouse gas emissions.

## Investment strategy

Innovation Fund Denmark invests in projects at all stages of the research and innovation value chain. Thus, IFD invests in the early strategic research project, where targeted efforts and cooperation with the most competent international and/or Danish partners from relevant scientific and professional disciplines are crucial, as well as a promising project that lacks the final steps towards implementation and a successful introduction into the market/society.

IFD's investments often do not necessarily take a project all the way through the value chain. Therefore, it is crucial that the project partners themselves have the ability to ensure that the outcome of their efforts enter the market/society to ensure implementation, or have investors/end-users who can take over the project implementation after IFD's investment period.

IFD emphasises that the green transition projects should, where necessary, work with transdisciplinary approach across the scientific fields including natural sciences, humanistic and societal research and innovation, that may contribute with valuable knowledge on e.g. human behaviour, incentives, regulation and market/societal conditions. Use of artificial intelligence, and robot and drone technological perspectives promoting the green transition may also be included.

The White Paper from IFD Climate Solution Panel 2019, the 2020 Agreement on Allocation of the Research Reserve, Finance Act 2020, the partnerships on climate established by the Danish government 2019, Research 2025 and IFD Investment strategies for Bioresources, Environment and Energy have many recommendations on how to enable the green transition. IFD invites proposals that focus on solutions, technologies, and behavioural changes that mitigate climate change, and consequently will provide maximum effect on the reduction on greenhouse gas emissions in Denmark and globally.

In short, IFD is looking for solutions to secure a sustainable nature and environment, as well as behavioural aspects in relation to the green transition, reflecting the fact that technical solutions cannot stand alone as they are often part of a broader social and behavioural context, and invites project applications that focus on the following sub-themes:

- Energy and storage
- Climate
- Climate friendly agriculture and sustainable food
- Climate and environmentally friendly transport
- Sustainable nature and environment
- Sustainable cities and community
- Manufacturing Industry and materials
- Behavioural aspects in relation to green transition

Please see the appendix for elaboration on the sub-themes.

## Assessment criteria

The overall assessment criteria are:

- Value creation – during and after the project period
- Excellence - Quality of research and innovation
- Efficiency of project execution
- Implementation of results

In connection with applications for the Grand Solutions 2020 "Research and Innovative Solutions Aiding the Green Transition ", particular importance is paid to describing the project's quantified contribution to the green transition; including reduction of greenhouse gas emissions, in Denmark as well as globally. Hence, the partners must account for the specific value creation of the project, and in this connection, value creation should not be understood only as monetary value, but may also encompass improved quality of

life as well as reduced environmental impact, cleaner environment, etc. It is the responsibility of the applicant to describe the different aspects of value creation from the project.

Specifically, the applications will be assessed based on the qualities of the project, in terms of research and innovation in a global perspective, in relation to an articulated or latent need, international state-of-the-art, directly competing or closely related scientific, behavioural or technological solutions; the scalability of the solution, technical, regulatory and market/societal risks, the risk management of the project plan as well as the feasibility.

In addition, efficiency in terms of the rate of project development, the effective use of invested resources, managerial and professional skills and the subsequent effective implementation of the project results, nationally and/or globally, will be carefully evaluated. The value creation of the project will be assessed in relation to the size of the investment.

Likewise, it will be emphasised that the project's beneficiaries/end-users and core stakeholders contribute to the formation of the project, participate in the project or are otherwise directly involved in the project, e.g. through investments and implementation.

In addition to the above assessment criteria, reference is made to “Guidelines for Grand Solutions” and the Allocation of the Research Reserve. Allocation of funds will be made on the basis of the 2020 Finance Act.

## Assessment Process

Interviews take place second half of October 2020. Projects not invited for interviews will be notified in start October 2020. Final decision on the application is expected mid December 2020 with project start in Q1 2021.

## Instructions - links

- [Guidelines for Grand Solutions](#)
- [Guidelines for e-grant](#)
- [The Climate Solution Panel white paper](#)
- [Finance Act 2020](#)
- [FORSK2025, including the listed indicators for the allocation of funds](#)
- [2020 Agreement on Allocation of the Research Reserve as well as other research priorities](#)
- [IFD Investment strategies for Bioresources, environment and energy](#)
- [UN 17 Sustainable Development Goals \(SDGs\)](#)

## Contact:

### Senior Scientific Officer Thomas Mathiasen

M: 6190 5063

E: [thomas.mathiasen@innofond.dk](mailto:thomas.mathiasen@innofond.dk)

### Scientific Officer Anitha K. Sharma

M: 6190 5048

E: [anitha.sharma@innofond.dk](mailto:anitha.sharma@innofond.dk)

**Senior Scientific Officer Lars Winther**

M: 6190 5036

E: [lars.Winther@innofond.dk](mailto:lars.Winther@innofond.dk)

**Scientific Officer Bo Frølund**

M: 6190 5043

E: [bo.froelund@innofond.dk](mailto:bo.froelund@innofond.dk)

**Scientific Officer Connie Benfeldt**

M: 6190 5061

E: [connie.benfeldt@innofond.dk](mailto:connie.benfeldt@innofond.dk)

**Program Officer Jakob Dahl Wedel**

M: 6190 5031

E: [jakob.wedel@innofond.dk](mailto:jakob.wedel@innofond.dk)

**Scientific Officer René Damkjer**

M: 6190 5007

E: [rene.damkjer@innofond.dk](mailto:rene.damkjer@innofond.dk)

**Scientific Officer Helle Junker**

M: 6190 5029

E: [helle.junker@innofond.dk](mailto:helle.junker@innofond.dk)

**Scientific Officer Kathrine Hauge Madsen**

M: 6190 5047

E: [kathrine.hauge.madsen@innofond.dk](mailto:kathrine.hauge.madsen@innofond.dk)

**Scientific Officer Sune Dalgaard Ebbesen**

M: 6190 5030

E: [sune.dalgaard.ebbesen@innofond.dk](mailto:sune.dalgaard.ebbesen@innofond.dk)

**Scientific Officer Lars Denning**

M: 6190 5069

E: [lars.denning@innofond.dk](mailto:lars.denning@innofond.dk)

**Scientific Officer Paola Andrea Barrientos Quiroga**

M: 6190 5086

E: [paola.barrientos.quiroga@innofond.dk](mailto:paola.barrientos.quiroga@innofond.dk)