



Energiteknologisk Udviklings-  
og Demonstrationsprogram  
January 2019

# **Energy Technology Development and Demonstration Programme (EUDP)**

Call for proposals  
EUDP 2019-I  
Deadline March the 1<sup>st</sup> 2019 15.00 CET  
(unofficial translation)

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## 1. Call for proposals

The Board of the Energy Technology Development and Demonstration Programme (EUDP) calls applicants to apply for funding for projects that develop and/or demonstrate new energy technology.

It is also possible to apply for funding for international collaboration projects, technology partnership projects, pre-studies, and dissemination projects.

All applications must follow the general guidelines for applications to the EUDP.

## 2. General information

### Funding

In this call, the following funds are available:

- a total of max. 250 mill. DKK are available in the “ordinary” EUDP call
- 4.9 mill. DKK are targeted research/experimental projects aiming at improving the environmental impacts, and energy efficiency of oil and gas production

### Deadline

The submission deadline is March the 1st, 2019 1500 CET.

Applications submitted after this date will not be considered.

### Grants and rejections

The Board of EUDP decides what projects that qualify for granting. The decisions are made in June 2019, and applicants will be informed immediately after whether or not they have been granted.

### Language

The application must be submitted in English.

The application may be submitted in Danish if the applicant applies for less than 3 million DKK (per project).

The application must be in English if the project contains research activities or education of ph. d's regardless of the grant applied for.

### Application guidelines

The application guidelines can be found at [www.ens.dk/eudp](http://www.ens.dk/eudp).

If further questions, contact the EUDP Secretariat.

## Submission

Applications must be submitted electronically at the DEA's funding [portal](#) (only available in Danish). The application templates can be downloaded from [www.ens.dk/eudp](http://www.ens.dk/eudp)

The applicants have to register on the funding portal, using **CVR Nem-ID (employee certificate)** which can be required from NETS. A key card or key file must be used.

The application templates can be downloaded from [www.ens.dk/eudp](http://www.ens.dk/eudp). The templates include the application form (word), budget and time schedule (Gantt) (both Excel), Business Model Canvas (word), research description, and participation declarations.

An overview of submitted data and files will be visible before the final submission of the application.

It is the applicant's responsibility to check if all the necessary files are attached.

You will NOT receive a mail confirming the submission.

## Previous projects

Information on past and ongoing funded projects can be found on [www.energiforskning.dk](http://www.energiforskning.dk)

## Immediate rejection

Applications can be rejected immediately if:

- The application (incl. appendixes) is not submitted before the deadline
- The project does not match EUDP objectives
- The application forms are not completed in accordance with the requirements
- The research description is not enclosed (applies only to projects with research content - see section. 8).

## News in this Call

### Updated application template

The application template (appendix 1) has been updated. Furthermore, it is now a requirement that a Business Model Canvas (appendix 4) is included in the application. For more information see the guidelines and the application template.

### Mission Innovation

Denmark participates in Mission Innovation (MI). Countries that participate in Mission Innovation aim at doubling their public funding means for clean energy tech-

nologies by 2020. The Danish funding for MI will mainly be granted in accordance with regulative framework of the law of EUDP.

It is possible to apply for two types of activities:

1) Danish workgroup participation in Innovation Challenges i.e. Smart Grid Innovation Challenges, Heating and Cooling of Buildings Innovation Challenge, Converting Sunlight Innovation Challenge. The application criteria for such activities correspond to the application criteria for participation in tasks/annexes under International Energy Agency (IEA), which can be found in section 9 (p. 6-8)

2) Projects that develop new energy technology collaboration with partners from other countries that participate in MI. The main applicant must be Danish and the technology development has activities have to take place in Denmark. The application criteria can be found in section 9 (p. 11-12).

#### Dissemination projects and pre-studies prior to development and demonstration projects

- It is possible to apply for funding for projects that disseminate information and knowledge about energy technology (besides the dissemination activities included in development and demonstration projects).
- A pre-study happens prior to an actual development or demonstration project. Applications for such projects will be evaluated based on the following criteria: - *Is the potential and feasibility of the subsequent project assessed? Is the project and its boundaries, including the project organization, financing etc. defined? Is the end user represented in the project?* Feasibility studies/pre studies can be supported with up to 60%.

#### **Other funding programs**

Other funding programs supporting research, development, demonstration and / or market maturation of energy technologies exists, i.e.:

- ELFORSK which supports research, development and demonstration projects in effective use of electricity in final consumption
- National Innovation Fund (Danmark's Innovationsfond) supporting research and innovation.

### 3. The purpose and framework of EUDP

#### **Legal framework**

The legal basis for the Energy Technology Development and Demonstration Program is:

- Act no. 555 of 6 June 2007 as revised in 2010.
- Order no. 133 of 27 February 2008

Both can be at [www.retsinfomation.dk](http://www.retsinfomation.dk)

From 2015 EUDP support is given on the basis of the EU block exemption regulations (Commission Regulation (EU) N°651/2014 of 17 June 2014 )

## **Purpose**

By supporting the development and demonstration of new energy technologies EUDP aims at ensuring that the objectives of Danish energy policy is obtained. The energy policy objectives are within security of energy supplies, climate, environment, cost-effectiveness and independence from fossil fuels by 2050.

With the energy agreement of March 2012 regarding Danish energy policy 2012-20 the government and a majority of the political parties in Parliament have agreed upon a number of energy policy initiatives and objectives in order to develop an energy efficient society, a green and sustainable energy supply and to develop the electricity system.

In the Government's "For a freer, richer and more secure Denmark", 2016 the long-term goal is that Denmark in 2050 can produce renewable energy to be independent of fossil fuels

The EU Commission presented in November 2016 the so-called "Winter package" that includes a series of initiatives which will have impact on the Danish energy sector. The winter package is part of realizing the Energy Union. The purpose of the winter package is to ensure the achievement of EU's 2030 target for renewable energy and energy efficiency and to tie energy systems in Europe closer together. The initiative will support the development of new energy technologies and companies developing these technologies.

## **Board**

EUDP is managed by an independent board of 7 members. The Secretariat is located in the Danish Energy Agency (DEA).

## **EUDP strategy and efficiency targets**

In the Strategy 2017-19 the EUDP Board puts emphasis on supporting development and demonstration projects and activities that utilize Danish business potentials. The strategy is based on the Danish strongholds in energy technologies. The Board wishes to support the development of technologies that have a global market for. Emphasis is also placed on participation in international cooperation within the EU, IEA and Mission Innovation. The strategy can be seen [here](#)

The strategy also sets a number of efficiency targets that forms the basis for an assessment of the applied projects potential impact compared to EUDP's objectives. Applicants must in their applications account for the contribution to the efficiency measures.

Completed projects are assessed similarly.

The efficiency targets concern the following areas:

- Security of supply
- Independence from fossil fuels
- Climate and a cleaner environment
- Cost efficiency
- Utilization and development of Danish business potentials for growth and employment
- Research that prepares the development and demonstration of new energy technology.

## 4. Project types

EUDP supports the following project types:

### **Development and demonstration**

The EUDP programme primarily supports the development and demonstration of new energy technologies:

- *Development* means utilisation of knowledge in order to produce new or improve existing materials, products, processes, methods, systems or services (corresponding to EU Technology Readiness Level TRL 4-6)<sup>1</sup>.
- *Demonstration* projects mean projects that involve experimental testing of a technology, a system or a method under conditions as close to reality as possible, with the aim of subsequent introduction to the market or, if the demonstration so requires, further development before introduction to the market (corresponding to EU Technology Readiness Level TRL 6-8).

### **Research**

EUDP does not support research. Research applications can be submitted to the Danish Innovation Fund (Danmarks Innovationsfond)

However, the EUDP programme can support research which prepares or directly supports demonstration activities. In this case, the specific plans for the demonstration activity must be available. If research, including research education, is part of the application this must be clearly indicated when starting the application procedure. It is required that section 9 in the application template is filled in, as well as

<sup>1</sup> Further information [here](#)

an independent research description is included (appendix 7). Furthermore, the application incl. CV's must be English regardless of the amount requested.

- *Research* means original projects aiming at getting new knowledge and understanding in relation to specific goals and applications (corresponding to EU Technology Readiness Levels (TRL) 2-4).

#### *Research assessment*

Projects that contain research activities must be evaluated qualified for support based on a research assessment conducted by Denmark's Innovation Fund.

The evaluation is based on section 9 in the application form (appendix 1), appendix 7 and the CVs (appendix 5) which have to be in English. If the Innovation Fund concludes that the research content is not qualified for support, EUDP cannot support the project.

The specific requirements can be found in appendix 7, and in section 9 in appendix 1.

#### *Hearing process*

If external reviewers from The Danish Innovation Fund assess that the research content in the project does not qualify for funding, a response letter can be submitted. This allows for the applicant to respond if the applicant evaluates that assessment is based on misunderstandings. The response letter may be presented to the reviewer in order to clarify whether this is the case.

The privacy policy of Denmark's Innovation Fund can be found at <https://innovationsfonden.dk/da/privatlivspolitik>

#### **International collaboration**

Applicants can apply for funding for international collaboration on development and demonstration of new energy technologies and research in this connection, including in particular:

- ***The EU's Strategic Energy Technology Plan (the SET plan)***

The EUDP programme can fund applicants' participation in larger joint European projects which contribute to implementing European initiatives under EU's Strategic Energy Technology Plan (SET). The projects must be within the objectives of EUDP.

EUDP supports participation in relevant ERA-NET Cofund activities, see section regarding technologies.

- ***The International Energy Agency – Energy Technology Network***

Denmark participates in the International Energy Agency technology network (IEA Energy Technology Network), which includes a wide range of technology or theme-specific agreements - so-called Implementing Agreements - between IEA member countries on cooperation in research, development and demonstration of energy.

Within these agreements experts from research institutions and industry in various countries cooperate to exchange information, share results and to perform specific analyses and investigations to be presented in reports and publications. The co-operation usually takes place through the participation in the so-called annexes or task's defined by the individual Implementing Agreements.

EUDP may upon application support Danish participation in such annexes or task's if:

- it is a field of particular Danish interest
- The application contains a comprehensive overview of all relevant Danish actors and stakeholders in the relevant technology area. This applies to research institutions, knowledge centres, private production and consulting companies, utilities and public authorities as well as trade associations, etc.
- the applicant has a professional self-interest in participating
- A plan has been specified in the application for the specific dissemination activities that are planned in relation to the relevant Danish actors and stakeholders in the field. For participation in tasks / annexes, as a minimum an electronic newsletter or equivalent (e.g. website) must be created, which is offered to all actors and stakeholders, and is communicated at least twice a year, e.g. in connection with the applicant's participation in meetings, workshops and the like or upon the emergence of new reports, analyses or other initiatives by the IEA.
- At least one workshop / seminar will be held during the project period aimed at the Danish actors and stakeholders in the area concerned. This can be done in cooperation with other related IEA partners or similar.

Applications for support to participate must be submitted in EUDP application rounds, by filling in EUDP's standard application form (with exception of sections 6.2, 6.3 and 8), budget file and Gantt diagram.

The application must describe:

- The Danish interest in the field and the relevance of participation in the co-operation work and relevance to EUDP's strategy 2017-19 and the energy policy objectives.
- Working content of the annex / the task.
- Applicant's own tasks in co-operation.
- Dissemination activities to stakeholders in Denmark.
- Applicant's professional background - CV for Danish participants enclosed.
- Activities and time schedule - the Gantt chart must be completed.
- Costs related to the Danish participation must be specified on a budget including hours spent, travel costs, other expenses and overhead expenses –

by filling in the budget file attached to the application. In addition, the hours budgeted must be specified in a note to the budget on

- hours for attendance / travel,
- Hours for performing specific tasks.

Support is given for relevant costs for time consumption, travel, expense and overhead. No support is granted for installations, instruments, equipment and materials ("hardware").

Research institutions / universities may apply for support to *up to 70%* of the eligible costs for participation in the IEA co-operation. Overhead for research institutions / universities must not exceed 44%.

Support for enterprises must be in accordance with EU Commission guidelines on maximum support for development and innovation - for more details see section 3.4 of the 'Rules for support from EUDP for projects in research, development and demonstration'.

Applications of the above character are created on the portal under the *relevant budget area* and checked in the application form under "*Other*".

If an application includes *actual technology development activities*, application for funding follow the general EUDP guidelines for technology development projects.

### **Technology partnerships**

It is possible to apply for:

- Specific initiatives carried out as part of the development of cooperation between public and private actors, such as strategies, action plans, market studies.

The following conditions apply for these kinds of activities:

- Specifically, priorities must be identified to form the basis for establishing project consortia in order to promote project applications to for example EUDP.
- The effect of EUDP support for the establishment / development of a strategic partnership as well as the industry's demand for concrete strategies, action plans must be explained.
- Applications must refer to one of the six specific technology areas in EUDP strategy. It must be clear, to which activities funding is applied for, and who will carry out the activities.
- Projects must be driven by companies.

### **Activities not eligible for funding**

Funding is not awarded to projects which aim to

- Development of new markets including promotion of existing technologies and operation of plants.
- development of infra structure

- The implementation of preproduction planning, or to streamlining production or control processes and similar.<sup>2</sup>

## 5. Technologies and targeted actions

### Technologies

EUDP supports all new energy technologies. Major areas are energy technologies aiming at more efficient use of energy, all kinds of renewable energy and technologies for conversion and storage of energy. Special priorities are technologies that represent Danish strongholds, please refer to the EUDP strategy 2017-18:

- wind energy
- district heating
- energy efficient solutions
- bioenergy
- smart energy and integration of energy systems
- oil and gas.

### Targeted actions

Applications for these initiatives follow the guidelines for applications for EUDP.

- *Research into and experiments with more environmentally friendly and energy efficient production of oil and gas*

A special fund is being offered under the EUDP for the purpose of supporting development and demonstration projects with associated research that can contribute to a more environmentally friendly and energy efficient production of oil and gas. The aim is, in particular, to reduce the environmental footprint for industry. This can be done, for example, by developing methods that can help break down barriers for further energy efficiency, including, for example, the reduction of gas and fuel consumption and for flaring, as well as the introduction of energy management.

The fund can also support the promotion of commercial application of new technology developed by research organizations. Furthermore, it is an aim to support “real condition tests” of new technologies i.e. an oil-gas plant.

In this call the available budget is **4.9 mill. DKK**. The grant is expected to be continued in the following years at a varying level. The total grant in the years 2017-25 amounts to 100 mill. DKK.

<sup>2</sup>See the OECD Frascati Manual

## 6. Who can apply?

Public and private enterprises or knowledge institutions can apply for funding under the EUDP programme. This includes universities and approved technological service (in Danish 'GTS') institutes.

The EUDP programme can co-fund foreign participants in projects which contribute to advancing technological development in Denmark as long as the commitment holding company is registered in Denmark. The main applicant must be registered in Denmark.

Aid is not available to companies that have not complied with a demand for repayment of support that following a previous EU Commission decision has been declared incompatible with the internal market.

## 7. How much can you apply for?

EUDP support is provided within the framework of the EU State Aid Code, which sets the upper limits for support rates, or according to the de minimis support rules.

Each participant in the project must fill in a budget showing budgeted expenses and financing, including aid applied for.

- *Aid (DKK)*  
No provisions are provided for minimum or maximum aid in DKK.
- *Aid intensity (pct.)*  
Aid intensity varies between applicants and must comply with EU rules regarding state aid. The applicant indicates the requested support rate in the budget. In the case of a decision on support, the EUDP Board of Directors establish the percentage of aid for each project participant as a result of company size, project type, commercial aspects and technical and economic risk involved. Aid is further decided based on an evaluation on the incentive effects of the aid granted.

Support is granted mainly on the basis of actual expenses incurred under the EU Block Exemption Regulation. The allowable support rates are set out in the EUDP Rules for Payment of Support. In cases where it not possible to document the actual costs for salaries a fixed rate of 350 DKK per hour can be applied.

Public funding of research and development activities carried out by universities and public research institutions, not working in order to profit, is generally not covered by EU state aid rules for R&D & Innovation. Such activities may be supported with up to 90 %.

Research institutions and universities can apply for up to 70 % aid when applying for participation in tasks/annexes under the International Energy Agency or Mission Innovation challenges.

When applying for feasibility studies/pre studies it is possible to apply for up to 60 % aid.

## 8. Application material

A full application contains the following appendices which can be downloaded from [www.ens.dk/eudp](http://www.ens.dk/eudp)

Appendix 1: the application form (Word-file)

Appendix 2: the budget form (Excel-file)

Appendix 3: Gantt Chart (Excel file)

Appendix 4: Business Model Canvas (Word-file)

Appendix 5: As a minimum, the CV of the project manager must be enclosed. Please include CV's in one file. For research projects, CVs must be enclosed **in English** for all participants of importance to the research part of the project. Please include CV's in one file.

Appendix 6: declarations from all project participants stating their intention to participate in project financing.

Appendix 7: Research-technical description (**MANDARORY** if research or research education is part of the project)

Appendix X: Other relevant documents (optional)

Appendix 1-6 must always be submitted. Appendix 7 has to be submitted if the project contains research activities.

Files must not contain links to other files or be read-only files and they must not include e-mails.

All application templates are available on [ens.dk/eudp](http://ens.dk/eudp) and must be submitted using the portal.

Other appendices cannot replace the required application documents. All fields in the application templates must be filled.

## 9. Criteria for assessment of applications

The board of EUDP emphasises:

- to support the development of technologies that are of global demand
- that the developed technologies can be deployed in the markets, and that the applicant has a plan for deployment activities at the time of application
- that the collaboration projects are managed by an industrial/private company

The Board evaluates the impact of finalized EUDP projects. Thus, a number efficiency targets for measuring the impacts of the projects have been set in the Strategy of EUDP. The targets are used for an ex post evaluation of the project impacts.

The projects potential impacts must therefore be specified *ex ante* in the project application.

The assessment criteria are summarized below. A detailed description of the individual criteria and related efficiency targets can be found in the guide to the application form.

Criteria:	Emphasis is on that [ref. to guidelines]:
1. Project objective	the project's objective and the state of art of the technology is clearly described, that the proposed project's maturity and risk is clear, that the project includes an innovative technological development, that it is feasible and can be completed as described and that the solution can be replicated and scaled [1].
2. Project time schedule and structure and feasibility	the content of the project is clearly described and organized in work packages and that an appropriate number of milestones (technological and commercial) are indicated in the Gantt chart [2].
3. Effects of the project a) Security of supply b) Independence of fossil fuels c) Climate and environmental concerns d) Cost-effectiveness e) Growth and Jobs f) Research prepares development and demonstration of energy technology	the project's relevance and potential in relation to the objectives of the EUDP act is described incl. reference to technology strategies, if any [3]. The applicant must for the specified efficiency targets qualitatively and with respect to d) and e) as far as possible quantitatively explain in what way and to what extent the project is expected to contribute. Projects do not necessarily need to contribute to all endpoints f) eg number of publications in peer-reviewed journals. NB: Only relevant if project includes research, see criterion no. 9 [9].
4. Dissemination	it is clear how the project results will become disseminated [4]
5. Organisation	the competences of the participating persons and enterprises are described. Furthermore, it should be reasoned and justified if non-Danish partners participate in the project Participation of private enterprises is regarded positive, based on their ability to commercialize the final product [5].
6. Budget and financing	the project budget is reasonable seen together with project content and expected results, that assumptions for key budget items are explained and that the parties have confirmed their participation [6].
7. Incentive effect	that it in the application is made probable that the project will not be completed in the requested version, if no support is granted [7].
8. Market potential and value proposition	the expected market for the technology developed is described (where, when, how much) as well as the competitive situation] and marketing plans should be described. Furthermore, the target group and the value proposition of the project (i.e. economical, user comfort, functionality etc.) should be presented [8].
9. Research-technical assessment	Projects that contain research activities and/or education of PhDs must include a clear description of the research content corresponding to the requirements specified in section 9.1 in the application template, as well as appendix 7 - the Research-technical description.

	<p>Based on these descriptions an evaluation is made by Denmark's Innovation Fund.</p> <p>Please notice that the descriptions regarding the research activities must be formed as independent descriptions. Thus, it has to be possible to read and evaluate appendix 7 independently from the rest of the application.</p> <p>It is a requirement that the research description and appendix 7 is in English.</p>
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## 10. The process

Project proposals are processed following the procedure below:

- Deadline March 1st, 2019 1500 CET
- Evaluation of project proposals, March-May 2019

The applications will be evaluated by external experts. The external experts must not have any conflicting interests and are imposed confidentiality of application material.

Applications related to special projects as building partnerships, international cooperation, dissemination are in general assessed by the Secretariat without the involvement of external experts.

- Research-technical assessment

The assessment of applications that contains research activities are done by Denmark's Innovation Fund (Danmark's Innovationsfond).

- Hearing of parties in March and April 2019

In the hearing process the applicants get an opportunity to comment on the assessments of the external experts

- Final decision

The board of EUDP makes the final decision on which project that qualifies for support in June 2019.

## 11. If funding is granted

Information about the projects that have been granted aid is available on:

- the Danish Energy Agency's home page [www.ens.dk](http://www.ens.dk)
- [www.energiforskning.dk](http://www.energiforskning.dk) and [www.energiteknologi.dk](http://www.energiteknologi.dk)

If funding is awarded a number of requirements have to be met when carrying out the project. The requirements are described in a set of rules (regelsæt) that can be found at [www.ens.dk/eudp](http://www.ens.dk/eudp)

The requirements include:

- **Project agreement**  
The responsible company and other project participants must accept the agreement and return a signed copy (signed by all parties) no later than one month after having received the project agreement. The project may not commence until agreement is reached between the project participants and EUDP.

- **Coordination, reporting and accounting obligations**  
The commitment holder (enterprise/institution responsible for the project) is financially and professionally responsible for completion of the project. This means that the enterprise/institution responsible for the project coordinates all financial and technical/professional relationships with any collaboration partners.

- **Dissemination, utilisation and rights of results**

Project results has to be published, however considerations may take place when patent rights are being acquired. EUDP can, in specific cases, allow that results are not published. When terminating the project the responsible company submits a project report that is suitable for publication. The responsible company may during the project be asked to forward pictures of project results to be used on the web portals.

- **Reimbursement of project expenses**

The aid is paid to the projects in accordance with the regulative framework of the General Block Exemption Regulation. The aid is paid to the projects as reimbursement. The reimbursement is paid out based on a financial statement of the actual, eligible expenses and the aid intensities stated in the project agreement for each participant.

NOTE: aid being paid on the basis of actual costs incurred, including actual salaries. Support is not paid on the basis of budget figures.

When asking for reimbursement of project expenses, a short statement describing project progress according to Gantt charts and/or milestones has to be included. Expenses can be reimbursed twice a year, or after agreement with the EUDP secretariat.

It is a condition for receiving aid that the project activities have not started prior to submitting the commitment for aid. Furthermore, the project cannot get any expenses reimbursed until a collaboration agreement has been signed by all parties within the project. A copy must be forwarded to EUDP for information.

- **Contribution to efficiency targets**

In the EUDP Strategy 2017-19 a number of efficiency targets are set for the supported projects. Funded projects will when completed be asked to quantify the effects achieved in respects to the efficiency targets (see. section. 3 under Evaluation criteria).

A full description of the rules is found in the document "Regelsæt" (Rules), se section on other documents.

## 12. Other documents

- Rules for payment of EUDP aid (Regelsæt)
- Guidelines for filling in Application, Budget and Gantt including annexes regarding
- The EUDP Strategy 2017-2019.