



JANUARY 2016

Call for proposals for the

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

2016

January 2016

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www.ens.dk/eudp

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1. Objectives

The primary objective of the EUDP programme is

- to support primarily development and demonstration of energy technologies
- to collaboration between public and private actors and
- to promote involvement in international activities within the area.

EUDP is also to contribute to exploiting and developing the commercial potential of Danish energy technologies in order to benefit growth and employment. EUDP funding is therefore awarded with an expectation that the projects funded will lead to market deployment of the new technologies developed by the project, and the EUDP programme expects to receive a concrete plan for this at the time of the application.

Furthermore, EUDP projects must support the Danish energy-policy objectives and have clear commercial potentials.

This call for proposals includes

- the ordinary EUDP call – EUDP funding for projects is expected to be approx. 165 mill. DKK.
- a targeted action regarding energy efficiency and reduced CO2 emissions in transport – EUDP funding for projects is 7,9 mill. DKK.

The ordinary EUDP call includes support to project proposals to EU's ERA-NET COFUND initiatives within biomass and wind energy. See further information in this call.

The closing date for applications is **Thursday April 7, 2015 at 15:00 pm CET**. Applications for this round may not be submitted after this deadline. Applications must be submitted via the application [portal](#)

Decisions of support are expected end September 2016.

Please note that EUDP has only one call for proposals in 2016.

2. Energy Policy objectives

The primary objective of the EUDP programme is to underpin Danish energy-policy objectives for security of supply, climate, the environment and cost effectiveness and to facilitate the realisation of the objective of rendering Denmark independent of 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 a energy efficient society, a green and sustainable energy supply and a number of initiatives to develop the electricity system to a smart electricity system.

In the Government's "Together for the future, June 2015" it is the long-term goal that Denmark must be independent of fossil fuels by 2050, as Denmark in 2050 can produce renewable energy enough to cover the total Danish energy consumption

3. Activities eligible for funding

Development and demonstration

The EUDP programme is to provide funding chiefly to 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)¹.

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 6-9).

Research

As a general rule, research projects as such are referred to other funding schemes within the area, firstly the Danish Innovation Fund (Danmarks Innovationsfond).

However, the EUDP programme can supply funding to research which prepares or directly supports demonstration activities. In this case, concrete plans for the demonstration activity must be available. If research, including ph.d. education, is part of the application this must be indicated when starting the application procedure and item 9 of the application formula must be filled in.

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

International collaboration

Applicants can apply for funding for international collaboration on research, development and demonstration of new energy technologies, 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 industry initiatives (EII) under the [EU's Strategic Energy Technology Plan \(the SET plan\)](#). The projects must be in line with the plans of implementation for wind power, bioenergy, Smart Grid, solar energy and CCS and for fuel cells (FCH JU (Fuel Cells and Hydrogen 2 Joint Undertaking)) within the Multi-Annual Work Program and the Annual Work Plan for the relevant year. At the same time the projects must be in accordance with the objectives of EUDP. Furthermore EUDP supports participation in relevant ERA-NET COFUND initiatives under Horizon 2020.

¹ see further [here](#)

- **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 analyzes 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 they are of particular Danish interest and if the applicant has a professional self-interest in participating.

When participating it is crucial that the Danish representatives in such co-operation effectively disseminate information and results obtained to all relevant stakeholders in Denmark.

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 relevance of Danish participation in the co-operation work.
- Working content of annex'et / 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.
- 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 budgetted must be specified in a note to the budget on
 - hours for attendance / travel,
 - hours for performing specific tasks and
 - hours for dissemination.

Support may not be granted for systems, instruments, equipment and materials ("hardware"). If an application includes actual technology development activities, application for funding follow the general EUDP guidelines for technology development projects.

Research institutions / universities may apply for support to up to 90% 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'.

Partnerships, analyses and dissemination

The EUDP programme can provide funding to

- specific initiatives arranged in order to develop public-private collaboration, for example strategies, action plans, market surveys, etc.
- dissemination of research results and other relevant technological knowledge
- feasibility studies.

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.²

4. Technologies and targeted actions

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. Included are:

- biomass technologies including for transport
- wind energy and other renewable energy technologies
- hydrogen and fuel cell technologies
- low energy buildings
- energy efficient solutions, including final consumption and flexible energy consumption
- combined energy systems (integration of technologies) including transport of energy
- more efficient methods for production of oil and gas
- other more efficient and environment friendly production (electricity and heat), including CO₂ storage.

Following the Energy Agreement of March 2012 and in co-operation with other programs, the EUDP Board has identified the following technological focus areas:

- Energy Efficiency in Buildings
- Smart Grid, see further in reports [here](#) (partly in Danish)
- Energy Storage, please see the [report](#) "Status and recommendations for RD&D on energy storage technologies in a Danish context"

as being of particular importance for the realisation of the long term objective to convert the Danish energy system to being 100 % based on renewable energy.

²See the OECD Frascati Manual

Targeted actions

- **ERA-NET COFUND regarding biomass – BESTF3**

EUDP can support applications for Bioenergy Sustaining the Future - BESTF 3 – an EU initiative to promote the development of commercial bioenergy technologies. Applications for project funding must be prepared with regard to a phased application process during spring 2016.

A number of EU countries are participating in this ERA-NET COFUND initiative BESTF 3. EUDP is the Danish participant. The call covers a wide a range of value chains regarding the use of biomass for energy production. As well companies as research institutions can apply for aid, but the projects must be led by a company.

Applications must include participants from at least two of the countries participating in the call. The aid available for Danish projects found worthy of aid is a total of 4.5 mill. € (EU and EUDP funding in total). Aid from EUDP supplemented by EU funding to Danish project participants follows the program's usual terms.

The application procedure is three-phased:

1. Deadline for project proposals: **February 29, 2016**.
2. Consultation Period with EUDP (for all Danish project participants).
3. Deadline for final and full application: **May 12, 2016**

For further information, please see www.eranetbestf.net

ATTENTION! Project proposals and applications must be submitted through BESTF3's electronic portal. For further information regarding EUDP, please see www.ens.dk/ny-teknologi

If considering applying for project funding it is recommended to contact:
EUDP Secretariat • Jan Engelbrecht Bünger, project consultant
email jbu@ens.dk • tel. 33 92 75 89

- **ERA-NET COFUND regarding wind energy – DemoWind2**

EUDP can support applications for DemoWind2 - Delivering Cost Reduction in Offshore Wind – an EU initiative to promote the development and demonstration of innovative technologies that can contribute to cost reductions of offshore wind energy.

A number of EU countries are participating in this ERA-NET COFUND initiative DemoWind2. The call covers a wide a range of value chains regarding offshore wind. EUDP is the Danish participant.

As well companies as research institutions can apply for aid, but the projects must be led by a company. Applications must include participants from at least two of the countries participating in the call. The aid available for Danish projects found worthy of aid is a total of 7 mill. € (EU and EUDP funding in total). Aid from EUDP supplemented by EU funding to Danish project participants follows the program's usual terms.

The application procedure is three-phased:

1. Deadline for project proposals (out line proposals – stage 1): **May 5, 2016** (expected).
2. EUDP's decision regarding Stage 1 (applies to all Danish participants).

3. Deadline for final and full application: **August 11, 2016** (expected).

For further information, please see <http://www.demowind.eu/pages/home-5.html>

ATTENTION! Project proposals and applications must be submitted through DemoWind's electronic portal. For further information regarding EUDP, please see www.ens.dk/ny-teknologi

If considering applying for project funding it is recommended to contact:
EUDP Secretariat • Hanne Thomassen, project consultant
email hth@ens.dk • tel. 33 92 67 78

- ***Development and demonstration regarding energy efficient transport***

This call for project proposals includes a targeted action to aid development and demonstration projects regarding energy efficient transport. The focus must be on developing clean-tech solutions for transport that promotes energy efficiency, and integrated solutions that help to reduce CO2 emissions.

In 2016 available funding for this initiative is DKK 7.9 mill. This level of funding is expected to continue in 2017 and 2018.

Transport accounts for a large part of Denmark's total energy consumption. Promoting a more energy efficient transport and solutions that reduce CO2 emissions is therefore an important part of the effort to promote energy efficiency throughout the Danish energy sector.

Applications for initiative follow the guidelines for applications for EUDP.

5. 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.

6. How much aid

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. For your information former projects have received aid from a few hundred thousand DKK to almost 80 mill. DKK pr. project.

- *Aid intensity (pct)*
No provisions are provided regarding aid intensity except that aid must be in accordance with EU rules regarding state aid. Aid are decided on by the EUDP Board for each project participant as a result of company size, project type, commercial aspects and technical and economic risk involved. Aid is decided based on an evaluation on the incentive effects of the aid granted.

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 %.

For development and demonstration projects at least 50 % financing by the applicants should be aimed at.

7. Submission of applications

Applications must be submitted via portal <https://tilskud.ens.dk> (only available in Danish. However, the application form (word), budget and time schedule (Gantt) (both excel) can be downloaded from ens.dk [here](#) . Please note that ERA-NET applications follow different procedures.

See also link to *guidelines for the application* form below under 'other documents'.

The applicant must register as a user on the funding portal, using Nem-id. It can be required from NETS.

The applicant must fill in

1. an application form (a text form), to be filled in on the portal

All fields in the application form must be filled in substantially. Annexes cannot replace filling in all of the fields in the application form. If research is included, a specific annex must be attached under section 9, see below.
2. a budget form (an Excel sheet); to be edited on your own PC and uploaded when finished (on the application page, not in the application section 9)
3. a timetable (an Excel GANTT chart); to be edited on your own PC and uploaded when finished (on the application page, not in the application section 9)
4. declarations fra other project participants stating their intention to participate in project financing
5. as a minimum, the CV of the project manager must be enclosed. For research projects, CVs must be enclosed for participants of importance to the research part of the project.

Further annexes can be submitted with the application form on the portal, for example a more detailed project description, a project management description, financing agreement, rights agreement, a more detailed business plan, the CVs of other personnel.

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

All files are submitted via the portal (on the page "budget").

Research-technical assessment

Projects including research must be worthy of support based on a research-technical assessment, and such projects will be evaluated by Denmark's Innovation Fund. If the project proposal includes research, the proposal will be sent to Denmark's Innovation Fund for research evaluation. The evaluation is made on the basis of the applicant's reply to the application form section 9 with the obligatory appendix and CVs. Research projects of the Fund is deemed not worthy of support, cannot be supported.

It will be considered positive if researchers training (PhD) is included in a project with a significant research content.

Please see the specific requirements of the application instructions.

Language

The application form must be prepared in English so that foreign experts can be used in the assessment of applications. Applications for funding of less than DKK 3 million per project may be submitted in Danish.

Information on previous projects

Information on terminated and ongoing publicly funded energy RD&D projects is available at www.energiforskning.dk

8. Criteria for assessment of applications

Evaluation of the project proposals received is based on the following evaluation criteria. In the guidelines for the application form it is described in detail what is expected under the individual criteria. Reference to application guidelines are given in brackets:

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, <u>that</u> the proposed project's maturity and risk is clear, <u>that</u> the project includes an innovative technological development, <u>that</u> it is feasible and can be completed as described and <u>that</u> the solution can be replicated and scaled (2.1).
2. Project time schedule and structure and feasibility	the content of the project is clearly described and organized in work packages and that a appropriate number of milestones (technological and commercial) are indicated in the Gantt chart (2.2).

3. Relevance	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).
4. Dissemination	it is clear how the project results will become disseminated (4)
5. Organisation	to a reasonable degree the skills of the participating individuals are outlined, including project management skills and that experiences of the participating companies are described in short, <u>that</u> an appropriate justification for any requested funding for foreign participants is given (5.1). Also emphasis on that the project proposal includes co-operation between companies and public research institutions in accordance with the program's aim to promote this, see also criterion no. 11 (5.2).
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	the competitive situation and the expected market for the technology developed is clearly described (where, when, how much) and also, that plans of marketing are clearly described (8.2, 8.3, 8.4). (see also 2.1 bullet 4).
9. Value proposition	the final target group and the project's added value (economy, comfort, functionality, etc..) is clearly described and further, that the anticipated effects of the project also are clear from the description (8.1)
10. Research-technical assessment	projects with research content include a clear description of the research content corresponding to the requirements specified in the special section on research (section 9.1). It is considered important (but not required) that education of reserchers is included in projects with a significant part of research (see also sections 5.2 and Public / Private partnership).
11. Public-private co-operation	the project proposal includes co-operation between companies and public research institutions in accordance with the program's aim to promote this, but it is not a requirement that co-operation is included in the projects (5.2).

9. Procedure for processing applications

Project proposals are processed following the procedure below:

Call for proposals	Mid January 2016
Project proposals	April 7, 2016 at 15.00 CET
<p>Evaluation of project proposals, see section on evaluation criteria.</p> <p>During processing of applications, the EUDP Secretariat will consult with external experts. The external experts must not have a conflict of interest and will be under obligation to process all application material with confidentiality.</p> <p>The assessment of applications for funding of projects involving research takes place in collaboration with the Innovation Fund (Danmarks Innovationsfond). Decisions by the EUDP Secretariat as to whether an application is to be sent for research-technical assessment are mainly based on categorisation by the applicant on the application form.</p> <p>Some project proposals such as projects regarding partnerships, international co-operation, dissemination etc. are normally evaluated by the secretariat without external assistance.</p>	April – May 2016
The subsequent hearing of parties will provide the applicant opportunity to comment on any external assessments.	End May 2016
Based on external evaluations and own evaluation a recommendation of aid or rejection is produced to the EUDP Board	June-August 2016
The EUDP Board makes decisions about funding for projects on the basis of recommendations prepared by the EUDP Secretariat.	End September 2016

Project proposals will be rejected if

- the application is not submitted by the deadline with the required attachments
- the project is clearly outside the program's purpose
- the application form, including the budget form is not filled in according to requirements in the guidelines
- appendix 8 re. research-technical assessment is not included in the application.

Publication of information about the project proposals received will take place as follows:

- a list showing all project titles, applicants and aid applied for in this round,

10. If funding is awarded

Information about the project receiving aid will be available on the Danish Energy Agency's home page www.ens.dk including a short description of the goal of the project, project participants and budget.

Information will later be available on www.energiforskning.dk together with all EUDP projects.

Having received a commitment for aid, a number of requirements have to be met when carrying out the project. The requirements are described in a set of rules (regelsæt) regarding payment of aid, see section on other documents.

The requirements include:

- Project agreement
 - The responsible company and other project participants must not later one month after having received the project agreement accept the agreement and return a signed copy (signed by all parties). The project may not commence until agreement is reached between the project participants and EUDP.
- Obligation to 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 and utilisation of results achieved as well rights
 - Project results must be *made public*, however considerations may take place when patent rights are being acquired. In specific cases EUDP may allow that results are not published. When terminating the project the responsible company forwards 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.
- Payment of aid
 - Aid is paid based on a statement of actual, eligible expenses and the aid intensities stated in the project agreement for each participant.
 - When asking for payment of aid, a short statement describing project advancement according to Gantt diagram and/or milestones must follow the statement of expenses. As a starting point payments are made twice a year, but payments each quarter may be agreed upon.
 - It is a condition for receiving aid that the activity in question has not been begun before the commitment for aid has been given and that an agreement describing co-operation and distribution of rights between participants has been made. A copy must be forwarded to EUDP for information.

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

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

11. Legal framework

The Energy Technology Development and Demonstration Programme (the EUDP) was adopted by the Danish Parliament with Act no. 555 of 6 June 2007. It was subsequently approved by the European Commission. The Act was revised in 2010. From 2015 EUDP support is given on the basis of the EU block exemption regulations.

The 2016 Finance Act appropriates DKK 179,6 million for development and demonstration projects under the heading "29.22.01 Tilskud til energiforskning" (Funding for energy research)" and DKK 7,9 mill. for development and demonstration of energy efficient transport.

In compliance with the *EUDP Act* the programme is administered by an independent board with its own secretariat made available by the Danish Energy Agency. The Board has been set up on 27 September 2011 for a four-year period, see the composition of the Board at <http://www.ens.dk/da-DK/NyTeknologi> (only available in Danish).

Pursuant to *Act re Danmarks Innovationsfond* the fond must approve the award procedure and conduct a research-technical assessment of the applications received. Research projects deemed not to qualify for funding by the Danish Council for Strategic Research cannot receive funding from the EUDP.

12. Other documents

Payment of aid is subject to a number of conditions as described in

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

13. Other funding schemes

There are a number of funding schemes within energy technology, which provide funding for research, development, demonstration and/or market maturation. Applicants should consider which is the most relevant scheme for them. A list of existing energy technology funding schemes is available in Danish at www.vækstguiden.dk and at www.ens.dk/da-DK/NyTeknologi. For more detailed guidance please contact the EUDP Secretariat or see figure in annex to Guidelines for application form.

General guidelines.

- **ForskEL** is focussing on integration of renewable energy production technologies in the power system, intelligent power systems, safe operation of the power system and the use of electricity for various purposes.

- Applications for research and development projects within efficient use of energy should be submitted under the **ELFORSK** programme, which focuses on electricity use, whereas applications for demonstration projects should be submitted under the **EUDP** programme
- Applications for research projects should be submitted til **Danmarks Innovationsfond**.

14. After the project

- *Danish Standards (Dansk Standard)*

Focus on standards is relevant for companies in the technology development as well as the market maturity phase and can help bringing products faster to market. Danish Standards can help your company to ensure that your company actually works in accordance with the guidelines and / or standards that apply to your product. Entrepreneurs and SMEs can get a free standard starter kit from Danish Standards. See also <http://www.ens.dk/ny-teknologi/energiteknologisk-udvikling-demonstration/sog-tilskud-eudp/fokus-paa-standarder>

- *Denmark's Export Credit Agency (DanmarksEksportkredit)*

Danish Export Credit helps Danish companies to make it possible and attractive for others to buy goods from Denmark. It does this by helping to obtain financing, and by insuring enterprises and banks against economic and political risks, which may be by trading with other countries, see http://www.ekf.dk/da/Sider/default.aspx?qclid=CK7p6_2f9roCFYmN3godcFEAMg