



**To** Applicants for PSO R&D call 2010 Energinet.dk's ForskVE programme

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# ForskVE call 2010 from Energinet.dk

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Energinet.dk allocates funding at an amount of DKK 25m for 2010 with a view to promoting small RE technologies.

Energinet.dk's call is implemented in accordance with Section 57e of the Danish Electricity Supply Act, 17 June 2008 (El-forsyningsloven), Law on the Promotion of Renewable Energy, 27 December 2008 §§ 49 and 50 (VE-loven), and Executive Order no. 1220 of 12 December 2008 on subsidies for promoting the increased use of electricity-generating installations using renewables. (BEK nr. 1220 af 12/12/2008 Bekendtgørelse om tilskud til at fremme udbredelsen af elproduktionsanlæg med vedvarende energikilder).

# ForskVE call 2010 from Energinet.dk

## **Background**

Energinet.dk must in pursuance of paragraph 49 of the Law on the Promotion of Renewable Energy provide funding with a view to increasing the use of electricity-generating units with a lower electricity-generating capacity, including photovoltaics, wave-power units and other RE units using energy sources or technologies of significance to the future increased use of RE electricity. Other RE units include biogasification and stirling engines.

Further provisions relating to the programme are described in Executive Order no. 1220 of 12 December 2008 on subsidies for promoting the increased use of electricity-generating installations using renewables.

The programme is called ForskVE and the pool of funding available totals DKK 25m annually for a period of four years. Being financed by the electricity consumers, the programme is thus a PSO scheme.

## Information meeting and application deadline

On 19 August 2009, the annual information meeting will be held in cooperation with the other energy research programmes.

The common application deadline for ForskVE 2010 and the other energy research programmes is 18 September 2009 at 15.00.

### Focus areas of call 2010

The background for the focus areas and the conditions is the Executive Order no. 1220 of 12 December 2008 on subsidies for promoting the increased use of electricity-generating installations using renewables.

The focus areas comprise the small RE technologies such as photovoltaics, wave power and biogasification, including Stirling engines.

### **General conditions**

- Funding is provided for increasing the use of small RE technologies
- Small RE technologies are photovoltaics, wave power, biomass gasification and Stirling engines
- Small RE technologies are technologies not widely used
- The installations <u>must</u> be connected to the grid in order for funding to be provided
- Funding can be provided for the establishment and operation of units
- No funding can be provided for the sale of components
- Funding can be provided for dissemination activities
- Funding must be provided within the framework of EU's rules on state aid

- It is not possible to apply for funding to projects whose implementation is conditional on funding being obtained from several of the four pools 2008-2011 as funding is only provided for the respective years
- If a project receives operating aid for several years, the entire amount will be allocated at a time and taken out of the pool in the year in which funding is allocated.

### **Explanatory remarks**

The scheme involves funding for increasing the use of small RE technologies. As such, the scheme is aimed at a later stage than the funding provided by Energinet.dk with the ForskEL programme.

A ForskVE project can therefore be set up in continuation of a ForskEL project so that applications for funding can be submitted under both programmes. It is a condition, however, that two separate applications be submitted, with one of the applications simply being a continuation of the other. Construction aid may be applied for under the ForskEL programme while operating aid may be applied for under the ForskVE programme.

The assessment of applications under the ForskEL and ForskVE programmes will be coordinated, and Energinet.dk will coordinate applications submitted for the same unit under both programmes. Such an interconnected project is, however, conditional on the ForskVE part being initiated in 2011 at the latest.

Funding is provided for the market introduction of units, and in this connection it is assumed that the unit has been developed to such an extent as to allow regular electricity generation, but that there are various impediments preventing increased use on market terms. This could, for example, be lack of funding or lack of knowledge of the project on the part of potential buyers.

The units eligible for funding under the ForskVE programme are assumed to be near-commercial. It is a requirement that the application be accompanied by a well-reasoned business plan or strategy for the market exploitation of the technology.

The projects are eligible for construction aid and operating aid in the project period. The project application must distinguish clearly between construction and operating costs in order to make it possible to assess the long-term finances of the project.

Construction and operating aid can be granted through an additional tariff. In pursuance of Section 57c of the Danish Electricity Supply Act, the additional tariff is granted in excess to the normal and current tariff, which is presently DKK 0.6/kWh and granted for a period of 10 years. The tariff will then fall to DKK 0.4/kWh in the following 10 years. The size of the necessary additional tariff is determined by the applicant, but there should within a reasonable number of years be a prospect of the unit being operated at the normal tariff of currently DKK 0.6/kWh. Importance is therefore attached to the additional tariff being phased out in the project.

When determining the necessary operating aid, consideration must be given to the unit's overall finances, including any other income from, for example, biogasification, the sale of heat or receipt of waste to be used as fuel.

The projects must strike a sensible balance between construction aid and operating aid so as to encourage maximum electricity generation at the units.

In addition to construction aid and operating aid, funding is also provided for dissemination activities as well as sales and information campaigns with the aim of promoting the use of the unit involved. This also includes the dissemination of information about the unit's environmental properties. In the project assessment, the long-term expected electricity generation is an important parameter. In connection with, for example, sales-promoting information campaigns, success criteria must be defined for the effect achieved by the campaign, both in the short and long term.

When prioritising units for funding and determining the size of funding, account will be taken of the fact the financial means available are relatively limited. Therefore, only a limited number of units are expected to be prioritised for funding, just as importance is attached to the applicant being able to provide substantial co-funding.

The projects must be rounded off with a report and overall project financial statements. In consideration of the distribution of construction aid and operating aid, the financial statements must be well documented. The written project report, on the other hand, need not necessarily be quite as comprehensive as is the case under the ForskEL programme. The report may thus consist of documentation in the form of sales materials, descriptions in trade papers, webpages and similar documentation of the work performed to disseminate the technology.

Importance will be attached to the unit's environmental properties and the project's business potential being documented in the final report. The report must also include any aspects that may have changed during the project period in relation to the business plan submitted with the application.

## Special aspects of the individual technologies

In addition to the general conditions there are some special aspects for the individual technologies that must be taken into consideration:

## **Wave power**

- Supply of electricity to the grid is the most important goal
- Grid-connected small-scale projects can also be approved
- Combining a ForskEL project with a ForskVE project may be an obvious step
- The formation of consortia with strong industrial partners is encouraged
- It is important to thoroughly account for the financial aspects until the commercialisation of the unit. This includes long-term production costs, capital investments, etc.

- As wave power is a relatively expensive technology, funding will only be provided to few facilities in the four-year period

#### **Photovoltaics**

- Preferably large projects involving building integration or projects in other ways providing essential additional benefits, eg energy savings
- No product grants are allocated for the sale of photovoltaic elements
- The formation of consortia cooperating on increasing market penetration is encouraged
- Funding is provided for informative sales campaigns aimed at making more house owners invest in photovoltaics
- Large industrial units can apply for an additional tariff
- Small units in private homes <u>cannot</u> be granted an additional tariff, but the 'net metering scheme' may be available to them
- Distinctive projects with a 'lighthouse' effect will be prioritised.

### **Biogasification**

- Grid-connected small-scale projects can also be approved
- Units must supply electricity and heat (eg district heating), and the operating economy must include the heat supplies
- Units using residual biomass products (eg wood chips and straw) and waste will be prioritised. Possible income from the receipt of waste must be included in the operating economy
- VE gasification plants not engaged directly in electricity generation but producing gases to be used for electricity generation in combination with other fuels can also be prioritised for operating aid. In these instances, however, reliable documentation for the share of electricity to the generation of which the facility contributes must be provided, and the value of the unit's heat production must be included. An example could be a gasification unit connected before a power station boiler.
- The formation of consortia with strong industrial partners is encouraged
- Combining a ForskEL project with a ForskVE project may be an obvious step
- As biogasification is a relatively expensive technology, funding will only be provided to few facilities in the four-year period

## **Application submission and administration**

Applications for funding under the ForskVE programme must be submitted electronically at <a href="https://www.forskel.dk">www.forskel.dk</a>. Before the application can be submitted electronically, a password must be ordered. This may take two working days.

## Application deadline is 18 September 2009 at 15.00

After the applications have been received, they will be assessed individually by external experts from Energinet.dk's network of evaluators. Project economy will be assessed separately.

On the basis of these assessments Energinet.dk will prepare a plan for the allocation of the DKK 25m for 2010. The plan will then be submitted to Energinet.dk's Supervisory Board and the Danish Energy Authority for approval.

The intention is that agreements from the 2010 plan will be concluded before Christmas 2009.

ForskVE projects follow the same set of rules as ForskEL projects, ie 'Rules applying to the RD&D programmes ForskEL, ForskNG and ForskVE', which can be found at <a href="https://www.energinet.dk">www.energinet.dk</a>.

### This entails:

- A contract concluded between Energinet.dk and the project
- Period reporting at 9 January and 9 August with descriptions of project progress and coverage of the costs incurred in the period
- The projects are exempt from VAT
- Final report, project completion form with specification and audited financial statements
- The final report will be published at <a href="www.energinet.dk">www.energinet.dk</a> and in Risø's DENP database of Danish energy projects

In addition, ForskVE projects must comply with the following special requirements:

- Projects must be rounded off by a final report (brief and supplemented with an account of the measures used to disseminate results), documenting electricity generation (in kWh) and other energy supplies (heat for biogasification).
- Projects can obtain funding for units, operation and/or dissemination activities, including sales and information campaigns
- If an interconnected project is started on the basis of ForskEL funding or EUDP funding from the Danish Energy Authority and is subsequently converted into a ForskVE project, a separate report and financial statements must be drawn up for each of the funding schemes involved.