DANISH ENERGY AGENCY ENERGISTYRELSEN 26 June 2014 Ref. No. 3002/3002-0010

REPORTING OBLIGATION ACCORDING TO ARTICLE 10 (2) OF DIRECTIVE NO 2013/31/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 19 MAY 2010 ON THE ENERGY PERFORMANCE OF BUILDINGS (RECAST).

DEADLINE 30 JUNE 2014

List of existing and proposed measures and instruments, in addition to those stipulated in this Directive, including measures and instruments of a financial nature which promote the objectives of this Directive.

Denmark is required, pursuant to Article 10 (2) of Directive No 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings (recast), to give notice of the following list:

Strategy for Energy Renovation of Buildings

http://www.ens.dk/sites/ens.dk/files/byggeri/Strategi-for-energirenovering-af-bygninger/strategi-for-energirenovering-af-bygninger-web-050514.pdf

The Danish Government adopted a strategy for energy renovation of buildings in May 2014. The Strategy contains 21 initiatives which will promote the renovation of the Danish building stock and insure that energy efficiency measures are implemented on the buildings. It is expected that the effect of the Strategy on energy consumption in existing buildings will be a reduction of net energy consumption for heating and hot water with 35 pct. in 2050 compared to today's consumption. The Strategy includes the following initiatives:

- Revision and upgrade of building regulations and energy requirements that applies to renovation and retrofitting of existing buildings
- New requirements to the energy efficiency of windows. These requirements will be tightened in 2015 and 2020. Furthermore new requirements will be defined for windows, which are installed in buildings after 2020.
- Information to building owners, construction companies, financial institutions etc. on energy how to improve energy efficiency
- Revision of the energy certificates scheme to improve the efficiency of the scheme
- Promotion of the ESCO-concept
- Promotion of energy efficiency in public buildings
- Development and demonstration of new technologies.

The strategy is part of the National Energy Efficiency Action Plan, which was submitted to the Commission in 2014 in accordance with the directive on energy efficiency (Directive/2012/27/EU).

Bedre Bolig - "Better Home" - Initiative

http://www.ens.dk/forbrug-besparelser/bedrebolig

BedreBolig ["BetterHome"] is a new scheme aiming to accelerate energy renovation in private homes. The Danish Energy Agency is the competent authority and will implement the scheme nationwide by the end of 2014. The scheme is part of the [Growth Plan DK] agreement from April 2013 and entails two phases:

- In Phase 1 a one-stop-shop concept will be developed from which specially trained and authorized [BedreBolig] advisors will offer the target group (owners of one-family houses that want an energy renovation of their homes) a flexible all-in-one solution: From a plan that presents potential savings and budgets for the use of funding of the project, to a completed renovation. The aim is to develop a market-driven concept where house owners on a voluntary basis can engage an authorized advisor providing advice throughout the entire process of an energy renovation. The concept will be launched to the Danish market by the end of 2014.
- In phase 2 a number of analyzes will be initiated to examine the potentials to promote the financing of energy saving measures through mortgage banking, and the potentials to establish a model, allowing house owners to pay the energy improvements via their energy bill, inspired by the UK "Green Deal". These analyzes will be conducted throughout the fall of 2014 till the end of 2015.

The scheme has been developed with the close involvement and cooperation of numerous trade associations and interest groups, including construction industry, energy supply companies, municipalities and financial institutions. [BedreBolig] has been gradually introduced and tested in nine municipalities in spring of 2014 to help gather knowledge to ensure suitable nationwide launch in the fall of 2014. The schemed is funded by 50 million Danish kroner, including 15 million Danish kroner for the nationwide marketing campaign to build awareness and demand.

Information Projects on Energy Efficiency

www.SparEnergi.dk

The activities of The Centre for Energy Savings (*Center for Energibesparelser*) were closed down in 2012. The activities were partly transferred to the Danish Energy Agency with the purpose of promoting cost-effective energy savings in enterprises, households and the public sector. The Centre was funded by an energy conservation tax, which generates approximately DKK 90 million in revenue each year. Part of the budget (DKK 33, 4 million (2013) and DKK 17, 9 million (2014)) has been allocated to information projects about energy efficiency e.g. energy savings in buildings. It remains to be decided which funds will be allocated to the information projects in 2015. A corner stone in the information projects is the website www.SparEnergi.dk that promotes cost-effective energy savings in households, the public sector and enterprises in the form of cases, guidelines, energy labelling, electricity consumption, renewable energy and energy cost calculators regarding energy renovation projects.

Danish Knowledge Centre for Energy Savings in Buildings

www.byggeriogenergi.dk

The Danish Knowledge Centre for Energy Savings in Buildings (*Videncenter for Energibesparelser i Bygninger, VEB*) was established in 2008. The Centre was allocated a sum of DKK 32 million between 2008 and 2011. As an element of the Energy Policy Agreement of February 2012 the Centre has been continued with a budget of DKK 5 million per year in the period 2013-2015. The purpose of the VEB is to ensure a wider dissemination of knowledge among the parties to the construction sector, in respect of both possible energy savings in buildings and building regulation requirements, so as to increase the

potential savings made. The VEB's primary target group is tradesmen, contractors, advisers and consultants, as well as small enterprises in the construction sector.

Guarantee for Energy Savings Initiative

The Danish Building & Property Agency is working on an initiative called the "Guarantee for energy savings initiative" under the Danish Strategy for Renovation of Buildings. The purpose of the new initiative is to ensure that energy efficiency goals that have been set for a project will be realized to the benefit of the construction client. The project is a sort of commissioning as it includes a way of testing the individual building components and their energy efficiency standards. By working with this project, the Danish Building & Property Agency is focused on separating the energy consumption of the final buildings into errors during construction, lack of energy management and behavior of the occupants. The Danish Energy Agency is also part of the project. The project runs until the end of 2015 and is part of the Danish Strategy for Energy Renovation of Buildings.

Initiatives to Fund the Conversion from Oil- and Natural Gas Fired Boilers in Existing Buildings to Renewable Energy

http://sparenergi.dk/forbruger/varme/raadgivningstjeneste

As a part of the Danish Energy Policy Agreement dating from 2012, DKK 42 million was made available in the period 2012-15 to fund the conversion from oil-fired boilers and natural gas boilers in existing buildings to renewable energy. Activities undertaken include establishment of advisory service aimed at building owners with oil and natural gas boilers and initiating a series of demonstration projects to demonstrate new products, technologies and business models to reduce building owners' barriers to the installation of renewable energy.

Green Labs DK

www.ens.dk/DA-DK/NYTEKNOLOGI/GREENLABS/Sider/greenlabs.aspx

Green Labs DK is a public subsidy scheme supporting the vision that Denmark will become a "green technology laboratory", in which enterprises enjoy the right conditions throughout the whole innovation chain from research, development and demonstration and onwards to the market. The overall objective of Green Labs DK is to ensure the development and demonstration of new climate technologies, which on the one hand supports the energy policy objectives of independence from fossil fuels, better climate / cleaner environment, cost-effectiveness and security of supply, and on the other hand encourages the use and development of the business potential in the area in the interests of growth and employment in Denmark. The scheme provides grants for a smaller number of green labs, where enterprises can test and demonstrate new green technologies under realistic conditions. The test facilities must be of an international standard and must be capable of attracting both Danish and international development and demonstration activities. The programme supports green labs within all types of technology which can contribute to making Denmark independent of fossil fuels, meaning primarily efficient energy use and Renewable Energy (RE) technologies. Green Labs DK has DKK 210 million at its disposal. DDK 170 million was distributed in 2011 and 2012 to 8 different Green Labs. The remaining DDK 40 million will be distributed in 2014.

EUDP

www.ens.dk/da-DK/NyTeknologi/om-eudp/Sider/Forside.aspx

The EUDP supports the development and demonstration of new, innovative energy technologies. The projects are intended to contribute to making Denmark independent of fossil energy by 2050. At the same time, the aim is for them to develop Danish business potential for the benefit of growth and employment. The EUDP also encourages international cooperation on new energy technology. The EUDP can be utilised by

public or private undertakings or knowledge institutions that are domiciled in Denmark, including universities and Approved Technological Service Institutes. An applicant himself must provide a significant proportion of private funding of at least 50 per cent. Applications may be made for, among other things, projects for energy savings in buildings and enterprises. The EUDP program was founded in 2007 and the total budget has been between DKK 200-400 million per year. In 2014 the EUDP budget is DDK 375 million.

Energinet.dk - ForskEl and ForskVE

www.energinet.dk

Energinet.dk, an independent public company owned by the Danish State, the ownership being handled by the Minister for Climate and Energy and Buildings, administers the PSO-financed programmes ForskEl and ForskVE. ForskEl is a RD&D program with the aim of supporting the development and use of environmentally friendly electricity production technologies. The program has an annual budget of DKK 130 million, which is set by the Minister. ForskVE is a program which promotes the dissemination of small Renewable Energy technologies, i.e. solar cells, wave energy and biogas. The program does not support research and development, but the dissemination of renewable energy sources within energy production. With the political energy agreement of March 2012 the program was prolonged for 2012-15 with an annual budget of DKK 25 million.

Dansk Energi – ELFORSK

www.elforsk.dk

Dansk Energi, the Danish association for Danish energy companies, administers the PSO-financed programme ELFORSK under supervision of the Danish Energy Agency. ELFORSK is a RD&D programme that funds project with focus on energy efficiency and energy savings and where the focal point is electricity use at the end user. This includes project regarding buildings in general, ventilation, cooling and user behavior. The program has an annual budget of DKK 25 million.

BoligJobplan

www.boligjob-plan.dk

The Danish Government together with its supporting parties entered into an agreement for a dwelling job plan (BoligJobPlan) on 1 June 2011. The scheme offers tax deductions on wage costs incurred for help and renovation work in the home. The agreement is in force from 1 June 2011 until 2014 inclusive. The grant accounts for approximately one third of the wage costs and is applicable both inside and outside the dwelling. The deduction is available to persons aged over 18 years and can be up to a maximum of DKK 15 000 per person per year. The scheme is designed as an eligible deduction in the tax assessment and offers a simple administrative solution that is no more difficult than an Internet transaction. The BoligJobPlan agreement includes, among other things, the following energy related improvements in the

dwelling: repair and replacement includes, among other things, the following energy related improvements in the dwelling: repair and replacement of windows and glazing, repair and replacement of oil-fired or gas-fired boilers and central heating systems, roof and loft insulation, insulation of external walls and installation of solar panels and solar cells.

Advisory Board on Energy Savings

www.ens.dk/DADK/FORBRUGOGBESPARELSER/ENERGISPARERAADET/Sider/Forside.aspx

The Advisory Board on Energy Saving (*Energisparerådet*) is established in 2010 as an independent entity, which consists of relevant organisations and NGOs in the field of energy savings in Denmark. The Board's task is to advise the Minister of Climate, Energy and Building and the Danish Energy Agency on effective coordination and reinforcement of energy-saving measures. One of the main tasks for the Advisory Board on Energy Saving has been to comment on the action plan of the Centre for Energy Savings each year.

However, since the closure of the Centre for Energy Savings in 2012, the main functions of the Advisory Board has been to help to coordinate energy saving initiatives across stakeholders as well as to discuss possible new energy saving initiatives and strengthening of existing initiatives. As part of the discussion the Advisory Board can on its own initiative make suggestions on new initiatives or directions for the energy savings effort. Amongst others the recommendations from the Advisory Board has included initiatives for promoting energy savings in existing buildings, energy conservation amongst industries with a special focus on SMEs, initiatives to strengthen the knowledge among building constructors and installers on energy saving possibilities through education programmes.

Danish Innovation Fund

http://innovationsfonden.dk/

The Government has reorganized and streamlined policies and funding to promote innovation in industry. As part of this effort, the Government has created the Danish Innovation Fund. One of the initiatives which will be supported by the fund is the establishment of a partnership to promote innovation in building renovation and retrofitting. This partnership includes industry, building contractors, universities and research institutes and housing companies. The aim of the partnership is to develop and demonstrate new technologies that can contribute to the reduction of energy consumption with more than 50 pct. It is expected that the partnership will be established in September 2014, and that it will receive support for a period of 3- 5 years.

Power supply and distribution companies' energy saving obligations

 $\underline{http://www.ens.dk/DADK/FORBRUGOGBESPARELSER/ENERGISELSKABERNESSPAREINDSATS/Sider/Forside.}$ aspx

The net power supply and distribution companies in the electricity, natural gas, district heating and oil sectors must play a part in the achievement of demonstrable energy savings amounting to in total 10.7 PJ/year in 2013 and 2014 and 12.2 PJ/year annual in the period 2015-2020. This initiative is aimed at the final consumption of energy and the reduction of network losses. The target is laid down in the political agreement of 22 March 2012 in respect of Danish energy policy in the years 20012-2020. The parameters for the contribution made by the companies are set out in amendments to laws on the Electricity, Natural Gas and District Heating; see Law No 1329 of 25 November 2013, Law No. 1331 of 25 November 2013 and Law No 1184 of 14 December 2011. The actual conditions for the initiative were implemented in the agreement of 13 November 2012 between the Minister of Climate and Energy and the power supply, natural gas, oil and district heating companies and in Executive Order No 1452 of 16 December 2013 in respect of energy saving measures in power supply and distribution companies. The energy companies are obliged by the agreement to take concrete steps to contribute to the achievement of energy savings for the end consumer that would not have taken place without the company's input. For example, this may take the form of advice, technical assistance or financial assistance, including grants for the implementation of energy savings. The companies are required to report the actual energy savings made on an annual basis. These reports are submitted to the co-operative bodies for the various sectors which then report to the Danish Energy Agency. In relation to the achievement of energy savings, the rules provide the basis for a market based initiative which gives the companies a high degree of freedom of choice in relation to the best and cheapest method for achieving the savings. The rules have been formulated in such a way that other players, etc. are able to contribute to the implementation of the savings. The savings effort by the energy companies is financed via the tariffs.

Nordic Built

http://www.nordicinnovation.org/nordicbuilt/

Denmark is lead country on the Nordic Built project, which is initiated by the Nordic Ministers for trade and Industry as one of five lighthouse innovation projects under Nordic Innovation. The project aims at promoting sustainable building, including energy efficient building solutions for new as well as existing buildings. The project which runs from 2012-2014 is almost fully implemented and has consisted of three elements: The creation of a charter with 10 principles for sustainable building, a retrofitting competition of five existing buildings (one in each Nordic country), and a joint Nordic funding programme for research and development.