

Renewable energy policy database and support – RES-LEGAL EUROPE

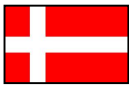
National profile: Denmark

Client: DG Energy

Contact author: Jörn Banasiak, jb@eclareon.com

Berlin, 30 December 2015





eclareon GmbH

Albrechtstraße 22

10117 Berlin

Germany

Phone: +49 30 88 66 7400

Fax: +49 30 88 66 74010

www.eclareon.com

Öko-Institut

P.O. Box 1771

79017 Freiburg

Germany

Phone : +49 761 45295-30

Fax: +49 761 45295-88

www.oeko.de

ECN

P.O. Box 1

1755 ZG Petten

The Netherlands

Phone : +31-224-564450

Fax: +31-224-568486

www.ecn.nl





TABLE OF CONTENTS

RES-E SUPPORT SCHEMES	4
<i>Summary of RES-E support schemes</i>	<i>5</i>
<i>Basic information on legal sources</i>	<i>7</i>
<i>Further information</i>	<i>9</i>
<i>Support schemes</i>	<i>10</i>
RES-E GRID ISSUES.....	32
<i>Overview</i>	<i>32</i>
<i>Basic information on legal sources</i>	<i>33</i>
<i>Further information</i>	<i>35</i>
<i>Grid issues.....</i>	<i>36</i>
RES-H&C SUPPORT SCHEMES	45
<i>Summary of support schemes</i>	<i>45</i>
<i>Basic information on legal sources</i>	<i>46</i>
<i>Further information</i>	<i>48</i>
<i>Support schemes</i>	<i>49</i>
RES-H&C GRID ISSUES	55
<i>Overview</i>	<i>55</i>
<i>Basic information on legal sources</i>	<i>56</i>
<i>Further information</i>	<i>58</i>
<i>Grid issues.....</i>	<i>59</i>
RES-T SUPPORT SCHEMES	61
<i>Summary of support schemes</i>	<i>61</i>
<i>Basic information on legal sources</i>	<i>62</i>
<i>Further information</i>	<i>64</i>
<i>Support schemes</i>	<i>65</i>
POLICIES.....	75
<i>Summary of policies</i>	<i>75</i>
<i>Basic information on legal sources</i>	<i>77</i>
<i>Further information</i>	<i>79</i>
<i>Policy categories.....</i>	<i>80</i>



Denmark – summary text

In Denmark, electricity from renewable sources is mainly promoted through a premium tariff and net-metering. Renewable energy sources for heating purposes are exempt from the tax obligations on the production, supply and use of energy sources. The use of biogas for heating purposes is supported through a direct tariff. The main incentive for renewable energy use in transport is a quota system. Selling of biogas for transport purposes is supported through a direct tariff.

Access of electricity from renewable energy sources to the grid shall be granted according to the principle of non-discrimination. With regard to the use of the grid, renewable energy shall be given priority. The connection of a heat generation plant to a district heating network in Denmark always involves grid development, since the construction of a plant must occur simultaneously with the development of the district heating grid.

There are a number of policies aiming at promoting the development, installation and use of RES installations.



RES-E support schemes

Summary of RES-E support schemes

Overview	In Denmark, electricity from renewable sources is promoted through a premium tariff and net-metering. In addition, local initiatives for the construction of wind energy plants are supported through loan guarantees.
Summary of support system	<ul style="list-style-type: none"> • Premium tariff. In Denmark, the generation of electricity from renewable sources is promoted through a premium tariff system based on bonus payments. The operators of renewable energy plants usually receive a variable bonus, which is paid on top of the market price. The sum of the market price and the bonus shall not exceed a statutory maximum per kWh, which depends on the source of energy used and the date of connection of a given plant. • Net-Metering. Electricity producers using all or part of the electricity produced for their own needs are totally or partly exempt from paying Public Service Obligation on this electricity. The Public Service Obligation is a charge levied to support renewable energy. • Loan guarantees. Associations of wind energy plant owners and other local initiatives may apply for guarantees for loans for feasibility studies that are conducted in the run-up to the construction of a wind-energy plant. •
Technologies	VE-Lov governs the promotion of technologies for the generation of electricity from wind energy, biogas, biomass, solar energy, wave and tidal energy as well as hydro-electric power stations whose capacity does not exceed 10 MW.
Statutory provisions	<ul style="list-style-type: none"> • VE-Lov (Lov om fremme af vedvarende energi No. 1392/2008 – Law on the Promotion of Renewable Energy) • Act on Electricity Supply (Bekendtgørelse af lov om elforsyning No. 1115/2006 – general provisions on the supply of electricity) • BEK 1112/2015 (Bekendtgørelse om nettoafregning for egenproducenter af elektricitet – Regulation on Net-Metering)



	<ul style="list-style-type: none">• BEK 692/2012 (Bekendtgørelse om tilskud til at fremme udbredelsen af elproduktionsanlæg med vedvarende energikilder – Regulation on grants to promote the development of electric power generated from renewable energy sources)
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------


Basic information on legal sources

Name of legal source (original language)	Lov om fremme af vedvarende energi	Bekendtgørelse af lov om elforsyning	Bekendtgørelse om nettoafregning for egenproducenter af elektricitet	Bekendtgørelse om tilskud til at fremme udbredelsen af elproduktionsanlæg med vedvarende energikilder
Full name				
Name (English)	Law on the Promotion of Renewable Energy	Act on Electricity Supply	Regulation on Net-metering for the Producers of Electricity for Own Needs	Regulation on grants to promote the development of electric power generated from renewable energy sources
Abbreviated form	VE-Lov	Act on Electricity Supply	BEK 1112/2015	BEK 692/2012
Entry into force	01.01.2009	21.11.2006	01.09.2013	01.07.2012
Last amended on	06.02.2015	30.06.2014	18.09.2015	
Future amendments				
Purpose	Promoting the generation of electricity from renewable sources.	Managing and organising the national electricity market.	This law authorises the exemption of certain producers from the surcharge on electricity.	Promoting the deployment of small installations using renewable energy sources.
Relevance for renewable energy	See purpose.	This Act stipulates binding guidelines for the promotion of electricity from renewable sources.	Operators of renewable energy plants are exempt from the surcharge on electricity.	See purpose.



RES-LEGAL EUROPE – National Profile Denmark



Link to full text of legal source (original language)	https://www.retsinformation.dk/Forms/R0710.aspx?id=167872	https://www.retsinformation.dk/Forms/R0710.aspx?id=159158	https://www.retsinformation.dk/Forms/R0710.aspx?id=174201	https://www.retsinformation.dk/Forms/R0710.aspx?id=142592
Link to full text of legal source (English)	http://www.ens.dk/sites/ens.dk/files/supply/renewable-energy/wind-power/onshore-wind-power/Promotion%20of%20Renewable%20Energy%20Act%20-%20extract.pdf Please note: This translation does not include amendments.			

Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Energistyrelsen (ENS) – Danish Energy Agency	http://www.ens.dk		+45 339 267 00	ens@ens.dk
Energitilsynet (DERA) – Danish Energy Regulatory Authority	http://energitilsynet.dk		+45 417 154 00	post@energitilsynet.dk
Klima- og Energiministeriet (KEMIN) – Danish Ministry for Climate and Energy	http://www.kemin.dk		+45 339 228 00	kebmin@kebmin.dk
Energinet.dk – Transmission System Operator	http://www.energinet.dk		+45 701 022 44	info@energinet.dk



Support schemes

Subsidy (The ForskVE-programme - Funds for small renewable energy technologies)

Abbreviated form of legal source(s)	<ul style="list-style-type: none">• VE-Lov• BEK 692/2012• Act on Electricity Supply	
Contact Authority	Energinet.dk	
Summary	Energinet.dk provides funding to promote the deployment of small electricity generation installations using renewable energy sources or technologies deemed to be of strategic importance by the competent ministry, including PV-installations, wave power plants and special installations using biogas and biomass as electricity source (§ 49 par. 1 VE-Lov in conjunction with § 1 BEK 692/2012).	
Eligible technologies	General information	Subsidies are provided for small electricity generation installations using renewable energy sources that are deemed to be of strategic importance by the competent ministry. This includes PV-installations, wave power plants and special installations using biogas and biomass as electricity source (§ 1 BEK 692/2012). Eligible installations have to be connected to the grid (§49 par. 3 VE-Lov). Only installations which are believed to be able to produce electricity on a regular basis are eligible (§ 2 BEK 692/2012).
	Wind energy	
	Solar energy	Eligible are building integrated solar energy installations (§ 1 BEK 692/2012).



RES-LEGAL EUROPE – National Profile Denmark



	Geothermal energy	
	Biogas	Electricity generation installations using gas produced through gasification of biomass are eligible (§ 1 BEK 692/2012).
	Hydro-power	Wave power plants are eligible (§ 1 BEK 692/2012).
	Biomass	Electricity generation installations using Stirling engine and other similar facilities with biomass as an energy source are eligible (§ 1 BEK 692/2012).
Amount	<p>The subsidy may be rewarded for the coverage of the following costs:</p> <ul style="list-style-type: none"> - investment, preparation or installation costs into the plant in order to enable the production of electricity and the costs of commissioning of the plant into a proving phase, including the cost of the necessary consultancy (§ 3 par. 1 no. 1 BEK 692/2012). - expenses for preparing of results concerning its finance and operations for a period after commissioning (§ 3 par. 1 no. 2 BEK 692/2012). <p>Energienet.dk has provided and manages a budget, which amounts to 25 million DKK per year (approx. € 3.35 M) until the end of 2015 (§ 49 par. 2 VE-Lov).</p>	
Addressees	<p>Subsidies are aimed to promote market introduction of installations, including pilot projects on a smaller scale (§ 49 par. 3 VE-Lov). Applicants have to be project owners, both enterprises and institutions.</p> <p>Installations receiving support through a premium tariff are still eligible for the subsidy scheme (§ 3 par. 2 BEK 692/2012).</p>	
Procedure	Process flow	<ul style="list-style-type: none"> • Tender. Tenders for the application for the ForskVE subsidies are published on a special website: www.forskel.dk (§ 10 par. 1 BEK 692/2012). • Application. An applicant has to register on this website and apply for the subsidy within a specified timeframe. • Selection procedure. Energienet.dk decides which project shall be subsidised.



		<ul style="list-style-type: none"> • Contract. The contract has to be signed between Energinet.dk and the owner of the project. • The project is allowed to begin after the contract is signed. Energinet.dk may allow a project to start before the signing of the contract. • Interim report must be drawn-up and delivered to Energinet.dk at least twice a year. • Final report. When completing the project, several documents must be submitted, including a final report, a financial statement for the entire project and an auditor's report
	Competent authority	The transmission grid operator Energinet.dk is in charge of the subsidies (§ 49 par. 1 VE-Lov).
Flexibility mechanism		
Distribution of costs	State	
	Consumers	The costs of the support system are borne by the consumers (§ 8 par. 2 Electricity Supply Act).
	Plant operator	
	Grid operator	
	European Union	



	Distribution mechanism	<ul style="list-style-type: none">• Consumers – grid operators. Every consumer is obliged to pay a surcharge, the so-called Public Service Obligation. It depends on each consumer's individual level of consumption. The surcharges are determined by Energinet.dk four times a year. According to Energinet.dk, the surcharges are collected by the grid operators.• Grid operators – Energinet.dk. According to Energinet.dk, the grid operators submit the surcharges collected to Energinet.dk. A certain part of this money is designated for the guarantees.
--	-------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



Loan (Loan guarantees for local initiatives for the construction of wind-energy plants)

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> • VE-Lov • Act on Electricity Supply 	
Contact Authority	Energinet.dk	
Summary	<p>Energinet.dk provides guarantees for loans taken out by local associations of wind plant owners and other local initiative groups to finance feasibility studies prior to the construction of wind-energy plants (§ 21 VE-Lov).</p> <p>If a given wind energy project is not completed, the guarantee paid out need not be repaid unless the project was fully or partly transferred to a third party (§ 21 par. 4 VE-Lov).</p>	
Eligible technologies	General information	Loan guarantees as stipulated by VE-Lov are provided for wind energy plants only (§ 21 VE-Lov).
	Wind energy	<p>Eligible. The following plants are ineligible:</p> <ul style="list-style-type: none"> • wind energy plants with a capacity of less than 25 kW that are connected to an energy-consuming device (§ 41 VE-Lov) • off-shore wind energy plants authorised under a tendering procedure (§ 21 VE-Lov). This procedure is used to grant an exclusive right to construct off-shore wind power plants in a specific area.
	Solar energy	
	Geothermal energy	
	Biogas	
	Hydro-power	



RES-LEGAL EUROPE – National Profile Denmark



	Biomass	
Amount	Energinet.dk has provided a budget of 10 million DKK (approx. € 1.34 million) for guarantees. Each guarantee will cover most of the loan in question. The maximum guarantee is 500,000 DKK (approx. € 67,000) per project (§ 21 par. 5 VE-Lov).	
Addressees	Guarantees are provided for local associations of plant owners and other local initiatives that intend to construct one or more wind energy plants. Such organisations and groups must have 10 members at least. The majority of the members shall be residents in the municipality in which the plants will be constructed or shall live within 4.5 kilometres of the building site. In case of off-shore wind turbines, the municipality shall be the municipality that has a coastline, located within 16 km from the site (§ 21 par. 2 no. 1 and 2 VE-Lov).	
Procedure	Process flow	<ul style="list-style-type: none"> • Application. Local organisations or initiative groups apply to Energinet.dk (§ 21 par. 5 VE-Lov). • Selection procedure. Energinet.dk decides whether a guarantee will be provided (§ 21 par. 5 VE-Lov). Applicants shall meet the preconditions specified by law (§ 21 par. 2 VE-Lov). • Loan borrowing. The organisation or initiative takes out a loan from a bank. • Guarantee. Energinet.dk declares to provide a guarantee to the bank. • According to Energinet.dk, the contract between Energinet.dk and the group is an application form signed by both parties. • Period of guarantee. The guarantee is provided until the wind turbine in question is connected to the grid and ends three months after the installation of the wings at the latest (§ 21 par. 3 VE-Lov).
	Competent authority	The transmission grid operator Energinet.dk is in charge of the guarantee system (§ 21 par. 1 VE-Lov).



Flexibility mechanism		
Distribution of costs	State	
	Consumers	The costs of the support system are borne by the consumers (§ 8 par. 2 Electricity Supply Act).
	Plant operator	
	Grid operator	
	European Union	
	Distribution mechanism	<ul style="list-style-type: none"> • Consumers – grid operators. Every consumer is obliged to pay a surcharge, the so-called Public Service Obligation. It depends on each consumer's individual level of consumption. The surcharges are determined by Energinet.dk four times a year. According to Energinet.dk, the surcharges are collected by the grid operators. • Grid operators – Energinet.dk. According to Energinet.dk, the grid operators submit the surcharges collected to Energinet.dk. A certain part of this money is designated for the guarantees.



Premium tariff (Law on the Promotion of Renewable Energy)

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> • VE-Lov • Act on Electricity Supply 	
Contact Authority	Energinet.dk	
Summary	Denmark promotes renewable electricity generation through a premium tariff. Plant operators receive a variable bonus on top of the market price. The sum of the bonus and the market price shall not exceed a certain statutory maximum, which depends on the date of connection of a given plant and the source of energy used (§§ 36-48 VE-Lov). In certain cases, plant operators are granted a guaranteed bonus on top of the market price. In such cases the maximum is not defined by law.	
Eligible technologies	General information	The Law on the Promotion of Renewable Energy promotes all technologies except for geothermal power generation (§ 2 VE-Lov).
	Wind energy	Both on-shore and off-shore plants are eligible (§§ 35 a-43 VE-Lov). Premium tariffs for off-shore wind parks are awarded through tenders (§ 23 VE-Lov).
	Solar energy	Eligible (§§ 47, 48 VE-Lov).
	Geothermal energy	
	Biogas	Eligible (§§ 43a – 43e, 44 VE-Lov).
	Hydro-power	Eligible under the following conditions (§§ 47, 48 VE-Lov): <ul style="list-style-type: none"> • Conventional hydro-electric power plants. Eligible up to a capacity of 10 MW (§ 50 par. 6 VE-Lov).



Amount		<ul style="list-style-type: none"> Wave power plants. Eligible without restriction (§§ 47 par. 1 no. 1 VE-Lov).
	Biomass	Eligible (§§ 45-46 VE-Lov).
	General information	<p>There are two types of bonuses:</p> <ul style="list-style-type: none"> Maximum bonus: The bonus varies according to the market price and the statutory maximum set for the sum of both the market price and the bonus. Guaranteed bonus: In certain cases, plant operators are granted a guaranteed bonus on top of the market price. In such cases the maximum is not defined by law (§§ 36-48 VE-Lov). <p>The following bonuses apply to new plants coming on line:</p>
	Wind energy	<p>On-shore plants commissioned on or after 01.01.2014:</p> <ul style="list-style-type: none"> Guaranteed bonus of 0.25 DKK (approx. €ct 3) but maximum subsidy (bonus plus market price) may not be higher than 0.58 DKK (approx. €ct 8) per kWh for the sum of 6,600 full load hours and 5.6 MW per 1 m² rotor area plus 0,023 DKK (€ct 0,3) for covering the balancing costs (§ 35 a VE-Lov) <p>Off-shore plants: Wind farms: maximum subsidy (bonus plus market price) depends on the location of the farm:</p> <ul style="list-style-type: none"> 0.518 DKK (approx. €ct 7) per kWh for electricity produced at the off-shore wind farm Horns Rev 2 for a total of 10 TWh, limited to 20 years from the date of connection of the wind farm (§ 37 par. 2 no. 1 VE-Lov). 0.629 DKK (approx. €ct 8) per kWh for electricity produced at the off-shore wind farm Rødsand 2 for a total of 10 TWh,



		<p>limited to 20 years from the date of connection of the wind farm (§ 37 par. 2 no. 2 VE-Lov).</p> <ul style="list-style-type: none"> • 1.051 DKK (approx. €ct 14) per kWh for electricity produced at the off-shore wind farm Anholt for a total of 20 TWh, limited to 20 years from the date of connection of the wind farm (§ 37 par. 2 no. 3 VE-Lov). The bonus will not be paid during hours in which the market price (i.e. the Nordpool spot price) is not positive. This can occur when the demand for electricity is lower than the offer. This exception, however, is restricted to max. 300 hours a year (§ 37 par. 5 VE-Lov). • Plants financed by utility companies: maximum subsidy (bonus plus market price) of 0.353 DKK (approx. €ct 5) per kWh, applicable to 42,000 full load hours, plus guaranteed bonus (unlimited term) of 0.10 DKK (approx. €ct 1) per kWh (§ 40 VE-Lov) • Off-shore wind plants, which are part of pilot projects in the territorial sea and the exclusive economic zone: 0.70 DKK (approx. €ct 9.4) per kWh for for the sum of 15,000 full load hours and 12.7 MW per 1 m² rotor. The Climate, Energy and Building Minister may, on application, grant a bonus for wind farm consisting of maximum 8 plants and need additional support to be realised. The support ends by the end of 2019 and is restricted to a total power of 50 MW. The bonus will not be paid during hours in which the market price (i.e. the Nordpool spot price) is not positive (§ 35 b VE-Lov). • Other off-shore plants commissioned on or after 21.02.2008: Guaranteed bonus of 0.25 DKK (approx. €ct 3) per kWh for 22,000 full load hours plus 0,023 DKK (€ct 0.3) for covering the balancing costs (§ 36 VE-Lov) • There is an extra bonus of 0.01 DKK (approx. €ct 0.13) for kWh of electricity produced in coastal wind farms established by public tender, if 30% of the ownership share of the wind park belongs to residents or enterprises from a
--	--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



		<p>municipality with a coastline, located within 16 km from the site (§ 37 a VE-Lov).</p> <p>Plants with an installed capacity of up to 25 kW that generate electricity for the operator's own use:</p> <ul style="list-style-type: none"> For plants connected on or after 20.11.2012: maximum subsidy (bonus plus market price) of 2.50 DKK (approx. €ct 33.5) per kWh produced in a plant with an installed capacity of up to 10 kW and 1.50 DKK (approx. €ct 20) per kWh produced in a plant with an installed capacity of more than 10 kW (§ 41 par. 3 VE-Lov). <p>The operators of plants with an installed capacity of up to 6 kW, which were connected to the grid on 20.11.2012 or later, can choose between a maximum subsidy (bonus plus market price) of 0.60 DKK (approx. €ct 8) per kWh and a maximum subsidy (bonus plus market price) of 1.30 DKK (approx. €ct 17) per kWh, the latter applicable for 10 years after the grid connection. For plants connected on or after 01.01.2014 the bonus will be reduced annually by 0.14 DKK (€ct 2) until 01.01.2018 (§ 41 par. 2 in conjunction with § 47 par. 4 No. 1 VE-Lov).</p>
	Solar energy	<p>For the installations connected to the grid on or after 11.06.2013: maximum subsidy (bonus plus market price) of 0.60 DKK (approx. €ct 8) per kWh, applicable for the first 10 years of operation, and 0.40 DKK (approx. €ct 5) per kWh, applicable for a further 10 years (§47 par. 6 VE-Lov).</p> <p>The Danish grid operator (Energinet.dk) may give the possibility of increased support for electricity produced in PV-installation connected to the grid on or after 11.06.2013 for a pool of 20 MW per</p>



		<p>year for 5 years starting in 2013. Following installations may receive an increased support:</p> <ul style="list-style-type: none"> • Installations with an installed capacity of max. 6 kW per household and connected to self-consumption installation: maximum subsidy (bonus plus market price) of 1.30 DKK (approx. €ct 17) per kWh, applicable for 10 years after the grid connection. For plants connected on or after 01.01.2014 the bonus will be reduced annually by 0.14 DKK (€ct 2) (§47 par. 7 No. 1 VE-Lov). • Common PV installations established on the roofs of buildings or integrated into buildings that are not built with the purpose of mounting solar cells: maximum subsidy (bonus plus market price) of 1.45 DKK (approx. €ct 19.4) per kWh, applicable for 10 years after the grid connection. For plants connected on or after 01.01.2014 the bonus will be reduced annually by 0.17 DKK (€ct 2) (§47 par. 7 No. 2 VE-Lov). • Common PV installations, which are not connected to self-consumption installation: maximum subsidy (bonus plus market price) of 0.90 DKK (approx. €ct 12) per kWh, applicable for the 10 years of operation. For plants connected on or after 01.01.2014 the bonus will be reduced annually by 0.06 DKK (€ct 0.8) (§47 par. 7 No. 3 VE-Lov). • Hybrid installations: for the proportion of electricity generated by a strategically important technology: guaranteed bonus of 0.26 DKK (approx. €ct 3) per kWh, applicable for the first 10 years of operation, and 0.06 DKK (approx. €ct 0.8) per kWh, applicable for a further 10 years (§ 48 par. 3 no. 1 VE-Lov).
	Geothermal energy	



	<p style="text-align: center;">Biogas</p>	<p>Maximum subsidy (bonus plus market price): 0.793 DKK (approx. €ct 11) per kWh (§ 43a par. 2 VE-Lov). The tariff is net-price indexed. It is calculated every year on 1 January and based on 60% of the increase in the net price index of the previous year as compared to 2007 (§ 43a par. 6 VE-Lov). Additionally, the operator receives a guaranteed bonus of:</p> <ul style="list-style-type: none"> • 0.26 DKK (approx. €ct 5) per kWh (§ 43a par. 5 VE-Lov). This bonus is: decreased, in case the price of the natural gas in a previous year is higher than the basis price of DKK 53.20 per GJ, by .01 DKK per kWh for every 1 DKK of this difference; increased, in case the price of the natural gas in a previous year is higher than the basis price of DKK 53.20 per GJ, by .01 DKK per kWh for every 1 DKK of this difference (§ 43 e par. 2 VE-Lov). • 0.10 (approx. €ct 5) per kWh (§ 43a par. 5 VE-Lov). As of 01.01.2016, this bonus is: decreased by 0.02 DKK (€ 0.27) and will cease by the end of 2019 (§ 43 e par. 4 VE-Lov). <p>The operators of plants with an installed capacity of up to 6 kW, which were connected to the grid on 20.11.2012 or later, can choose between maximum subsidy (bonus plus market price): 0.793 DKK (approx. €ct 11) per kWh and maximum subsidy (bonus plus market price) of 1.30 DKK (approx. €ct 17) per kWh, applicable for 10 years after the grid connection. For plants connected on or after 01.01.2014 the bonus will reduce annually by 0.14 DKK (€ct 2) until 01.01.2018 (§ 43a par.7 in conjunction with § 47 par. 4 No. 1 VE-Lov).</p> <p>Co-firing: for the proportion of electricity generated from the combustion of biogas: guaranteed bonus of 0.431 DKK (approx. €ct 5.77) per kWh (§ 43a par. 3 and 5 VE-Lov). The tariff is net-price</p>
--	--------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



		<p>indexed. It is calculated every year on 1 January and based on 60% of the increase in the net price index of the previous year as compared to 2007 (§ 43a par. 6 VE-Lov). Additionally, the operator receives a guaranteed bonus of:</p> <ul style="list-style-type: none"> • 0.26 DKK (approx. €ct 5) per kWh (§ 43a par. 5 VE-Lov). This bonus is: decreased, in case the price of natural gas in a previous year is higher than the basis price of DKK 53.20 per GJ, by 0.01 DKK per kWh for every 1 DKK of this difference; increased, in case the price of natural gas in a previous year is higher than the basis price of DKK 53.20 per GJ, by 0.01 DKK per kWh for every 1 DKK of this difference (§ 43 e par. 2 VE-Lov). • 0.10 (approx. €ct 5) per kWh (§ 43a par. 5 VE-Lov). As of 01.01.2016, this bonus is: decreased by 0.02 DKK (€ 0.27) and will cease by the end of 2019 (§ 43 e par. 4 VE-Lov). <p>The plant operator may choose between maximum subsidy (bonus plus market price): 0.793 DKK (approx. €ct 11) per kWh and a guaranteed bonus of 0.431 DKK (approx. €ct 11) per kWh (§ 43a par. 4 VE-Lov).</p>
	Hydro-power	<p>Guaranteed bonus of 0.10 DKK (approx. €ct 1) per kWh, applicable for 20 years from the date of connection of the plant (§ 47 par. 9 no. 3 VE-Lov).</p> <p>Plants deemed to be of strategic importance by the ministry in charge (currently, only wave energy comes under this definition):</p> <ul style="list-style-type: none"> • with an installed capacity of up to 6 kW: maximum subsidy (bonus plus market price) of 1.30 DKK (approx. €ct 17) per kWh, applicable for 10 years after the grid connection. For



		<p>plants connected on or after 01.01.2014 the bonus will be reduced annually by 0.14 DKK (€ct 2) until 01.01.2018 (§ 47 par. 9 No. 1 VE-Lov).</p> <ul style="list-style-type: none"> with an installed capacity of more than 6 kW: maximum subsidy (bonus plus market price) of 0.60 DKK (approx. €ct 8) per kWh, applicable for the first 10 years of operation, and 0.40 DKK (approx. €ct 5) per kWh, applicable for a further 10 years (§47 par. 5 No. 5 VE-Lov) (§ 47 par. 9 No. 2 VE-Lov). <p>Hybrid plants:</p> <ul style="list-style-type: none"> for the proportion of electricity generated from hydro-energy, guaranteed bonus of 0.10 DKK (approx. €ct 1) per kWh, applicable for 20 years from the date of connection of the plant (§ 48 par. 3 no. 2 VE-Lov). for the proportion of electricity generated by a strategically important technology: guaranteed bonus of 0.26 DKK (approx. €ct 3) per kWh, applicable for the first 10 years of operation, and 0.06 DKK (approx. €ct 0.8) per kWh for a further 10 years (§ 48 par. 3 no. 1 VE-Lov).
	Biomass	<p>Electricity produced with usage of stirling engines and other special power generation plants with biomass as an energy source:</p> <ul style="list-style-type: none"> Maximum subsidy (bonus plus market price): 0.793 DKK (approx. €ct 11) per kWh (§ 44 par. 2 VE-Lov). Co-firing: for the proportion of electricity generated from the combustion of biogas: guaranteed bonus of 0.431 DKK (approx. €ct 6) per kWh (§ 44 par. 3 VE-Lov). The tariff is net-price indexed. It is calculated every year on 1 January and based on 60% of the increase in the net price index of the previous year as compared to 2007 (§ 44 par. 4 VE-Lov).



		<ul style="list-style-type: none"> The operators of plants with an installed capacity of up to 6 kW, which were connected to the grid on 20.11.2012 or later, can choose between maximum subsidy (bonus plus market price): 0.793 DKK (approx. €ct 11) per kWh and maximum subsidy (bonus plus market price) of 1.30 DKK (approx. €ct 17) per kWh, applicable for 10 years after the grid connection. For plants connected on or after 01.01.2014 the bonus will reduce annually by 0.14 DKK (€ct 2) until 01.01.2018 (§ 44 par.5 VE-Lov). <p>Electricity generated by burning biomass:</p> <ul style="list-style-type: none"> Guaranteed bonus of 0.15 DKK (approx. €ct 2) per kWh (§ 45 par. 2 VE-Lov). Plants financed by utility companies: Maximum subsidy (bonus & market price) of 0.30 DKK (approx. €ct 4) per kWh plus guaranteed bonus of 0.10 DKK (approx. €ct 1) per kWh, applicable for 10 years from the date of connection of the plant, ends on 1 August 2011 at the earliest (§ 46 VE-Lov).
Degression	General information	
	Wind energy	
	Solar energy	
	Geothermal energy	
	Biogas	
	Hydro-power	
	Biomass	



Cap		
Eligibility period	The Law on the Promotion of Renewable Energy stipulates several terms and deadlines, which depend on the technology used and the date of commissioning of the plant in question. For more detailed information, see the Amount section (§§ 36-48 VE-Lov).	
Addressees	The persons entitled to the payment of a bonus are the owners of plants for the generation of electricity from renewable sources (§ 56 par. 2 VE-Lov).	
Procedure	Process flow	Entitlement to bonus payments arises from statutory law (§ 36-48 VE-Lov).
	Competent authority	The authority obligated to pay the bonus is the transmission grid operator Energinet.dk (§ 56 par. 1 VE-Lov).
Flexibility Mechanism		
Distribution of costs	State	
	Consumers	The costs of the support system are borne by the consumers (§ 8 par. 2 Electricity Supply Act).
	Plant operator	
	Grid operator	
	European Union	
	Distribution mechanism	<ul style="list-style-type: none"> • Consumers – grid operators. Plant operators sell their electricity to the consumers via a supply company. Every consumer is obliged to pay a surcharge, the so-called Public Service Obligation. The surcharge depends on each



		<p>consumer's individual level of consumption. The surcharges are determined by Energinet.dk four times a year. According to Energinet.dk, the surcharges are collected by the grid operators.</p> <ul style="list-style-type: none">• Grid operators – Energinet.dk. According to Energinet.dk, the grid operators submit the surcharges collected to Energinet.dk.• Energinet.dk – plant operators. Energinet.dk pays the bonus to the plant operators (Energinet.dk website).
--	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



Net-Metering

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> BEK 1112/2015 	
Contact Authority	Energinet.dk	
Summary	<p>The Regulation on Net-metering authorises the exemption of certain plant operators from paying the Public Service Obligation (PSO) or part of it. Electricity producers using all or part of the electricity produced for their own needs are completely or partially exempt from paying the Public Service Obligation on this electricity. The Public Service Obligation is a charge levied to support renewable energy.</p>	
Eligible technologies	General information	<p>All technologies except for geothermal energy are eligible for net-metering (§ 2 no. 6 BEK 1032/2013).</p> <p>Plants must be connected to a collective grid, installed at the place of consumption and fully owned by the consumer (§ 3 par. 3, § 4 par. 3 BEK 1032/2013).</p> <p>Moreover, plants must be listed in a key data register (Stamdataregistret) (§ 9 BEK 1112/2015).</p>
	Wind energy	Eligible only if the plant is connected to a private supply system or if the plant is located at the place of consumption (§ 3 par. 2, 3, 4 and § 4 par. 2, 3 BEK 1112/2015).
	Solar energy	Eligible only if the installation is connected to a private supply system or if the installation is located at the place of consumption (§ 3 par. 2, 3, 4 and § 4 par. 2, 3 BEK 1112/2015).
	Geothermal energy	
	Biogas	Eligible (§ 2 no. 7 BEK 1112/2015).
	Hydro-power	Eligible (§ 2 no. 7 BEK 1112/2015).



	Biomass	Eligible (§ 2 no. 7 BEK 1112/2015).
Amount	<p>Every consumer is obliged to pay a surcharge, the so-called Public Service Obligation (PSO). It depends on each consumer's individual level of consumption. The surcharge for the support of renewable energy is part of the PSO tariff. The surcharges are determined by Energinet.dk four times a year.</p> <p>Which surcharge a plant owner is exempt from depends on the installed capacity of his plant.</p> <ul style="list-style-type: none"> The following plants are exempt from the whole PSO tariff: <ul style="list-style-type: none"> Solar energy installations up to 50 kW Wind energy plants up to 25 kW Other technologies up to 11 kW (§ 4 par. 2 BEK 1112/2015). The following plants are exempt from the surcharge for the support of renewable energy: <ul style="list-style-type: none"> Solar energy installations > 50 kW Wind energy plants > 25 kW Other technologies > 11 kW (§ 3 par. 2 BEK 1112/2015). 	
Addressees	<p>The persons entitled to total or partial exemption from PSO (tariff) are the owners of eligible plants (§ 3 par. 3 no. 2 BEK 1112/2015). For tenants who are not the owners of eligible plants, may be entitled to total or partial exemption from the PSO tariff for own consumption of electricity produced in a plant that uses only renewable energy sources if:</p> <ol style="list-style-type: none"> the plant is 100% owned by the owner of the property, the owner of the property has made the plant available to the tenant for net metering and the tenant pays the electricity consumption directly to the grid company on an hourly basis (§ 5 BEK 1112/2015). 	
Procedure	Process flow	<p>Plant operators must apply to Energinet.dk for net-metering (§ 3, 4 BEK 1112/2015).</p> <p>The net-metering for the following plants:</p> <ul style="list-style-type: none"> Solar energy installations > 50 kW Wind energy plants > 25 kW Other technologies > 11 kW <p>is calculated on an hourly basis (§ 3 par. 1 BEK 1112/2015).</p>



		<p>Operators of the following plants:</p> <ul style="list-style-type: none"> • Solar energy installations up to 50 kW • Wind energy plants up to 25 kW • Other technologies up to 11 kW <p>may apply for net-metering to be calculated on an hourly basis (§ 4 BEK 1112/2015).</p> <p>Energinet.dk determines whether the conditions for net-metering are met and which type of net-metering will apply (§ 7 par. 1 BEK 1112/2015).</p> <p>Plant operators must submit an application for net metering for existing plants to Energinet.dk before the first day of the month with a prior notice of at least one month. For new installations request must be submitted together with the request for grid connection (§ 7 par. 2 BEK 1112/2015).</p>
	Competent authority	Energinet.dk (§ 7 par. 1 BEK 1112/2015).
Flexibility Mechanism		
Distribution of costs	State	The costs of the net-metering system are covered by the budget managed by Energinet.dk.
	Consumers	
	Plant operator	
	Grid operator	
	European Union	



	Distribution mechanism	
--	------------------------	--



RES-E grid issues

Overview

Overview of grid issues	In Denmark, access of electricity from renewable energy sources to the grid is mainly governed by the general legislation on energy and shall be granted according to the principle of non-discrimination. Electricity from renewable sources is subject to special provisions only with regard to the use of the grid, in which renewable energy shall be given priority. The grid users are not entitled to the expansion of the grid.
Connection to the grid	In return for payment, all plant operators shall be granted connection to the grid without certain plant operators being discriminated against (§ 24 Act on Electricity Supply). Renewable energy plants are not given priority.
Use of the grid	The operators of renewable energy plants are entitled by law to priority use of the grids against the grid operator.
Grid development	The grid operator is statutorily obliged to expand the grid in order to guarantee the efficient transmission of electricity. Whenever possible, the national target of increasing the competitiveness and use of renewable energy sources shall be given special attention. The plant operators are not entitled to the expansion of the grid.
Statutory provisions	<ul style="list-style-type: none"> • Act on Electricity Supply (Bekendtgørelse af lov om elforsyning No. 1115/2006 – general provisions on the supply of electricity) • Order 1063/2010 (Bekendtgørelse om nettilslutning af vindmøller og pristillæg for vindmølleproduceret elektricitet - Order on the Grid Connection of Wind Turbines and Support for Wind-generated Electricity) • VE-Lov (Lov om fremme af vedvarende energi No. 1392/2008 – Law on the Promotion of Renewable Energy)



Basic information on legal sources

Name of legal source (original language)	Bekendtgørelse om nettilslutning af vindmøller og pristillæg for vindmølleproduceret elektricitet	Bekendtgørelse af lov om elforsyning	Lov om fremme af vedvarende energi	
Name (English)	Order on the grid connection of wind turbines and the support for wind generated electricity	Act on Electricity Supply		
Abbreviated form	Order 1063/2010	Act on Electricity Supply	Law on the Promotion of Renewable Energy	
Entry into force	15.09.2010	21.11.2006	VE-Lov	
Last amended on	10.07.2014	30.06.2014	01.01.2009	
Future amendments				
Purpose		Managing and organising the national electricity market.		
Relevance for renewable energy		This Act stipulates binding guidelines for the promotion of electricity from renewable sources.	Promoting the generation of electricity from renewable sources.	
Link to full text of legal source (original language)	https://www.retsinformation.dk/Forms/R0710.aspx?id=133266	https://www.retsinformation.dk/Forms/R0710.aspx?id=159158	See purpose.	



Link to full text of legal source (English)			https://www.retsinformation.dk/Forms/R0710.aspx?id=167872	
			http://www.ens.dk/sites/ens.dk/files/supply/renewable-energy/wind-power/onshore-wind-power/Promotion%20of%20Renewable%20Energy%20Act%20-%20extract.pdf Please note: This translation does not include amendments.	



Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Energistyrelsen (ENS) – Danish Energy Agency	http://www.ens.dk		+45 339 267 00	ens@ens.dk
Energitilsynet (DERA) – Danish Energy Regulatory Authority	http://energitilsynet.dk		+45 417 154 00	post@energitilsynet.dk
Klima- og Energiministeriet (KEMIN) – Danish Ministry for Climate and Energy	http://www.kemin.dk		+45 339 228 00	kebmin@kebmin.dk
Energinet.dk – Transmission System Operator	http://www.energinet.dk		+45 701 022 44	info@energinet.dk



Grid issues

Connection to the grid

Abbreviated form of legal sources	<ul style="list-style-type: none"> • Act on Electricity Supply • Order 1063/2010 • VE-Lov
Contact Authority	Energinet.dk; Energitilsynet
Procedure	<div data-bbox="611 608 1070 1294">Process flow</div> <div data-bbox="1070 608 2045 1294"> <p>The procedural steps are not specified by law. According to Energinet.dk, the procedure to be applied depends on the capacity of a given plant and on the voltage of the grid this plant will be connected to.</p> <p>1) Connection of plants with a capacity of up to 11 kW:</p> <ul style="list-style-type: none"> • Application for connection. The installer of the plant submits the application for connection to the grid operator. • Installation of the plant. • Agreement on connection to and use of the grid with the grid operator. • Registration of the plant. • Installation of required meters. • Submission of documents to the grid operator. The plant operator must submit the required information (general and technical specifications) to the grid operator. The grid operator then forwards these documents to Energinet.dk. • Permission to operate. The grid operator gives the plant operator permission to operate. </div>



		<ul style="list-style-type: none"> • Connection to the grid. A plant is connected to the grid after the plant operator has been given permission to operate. <p>2) Connection of wind energy plants to the 100 kV grid:</p> <ul style="list-style-type: none"> • Application for connection to and use of the grid. The plant operator applies to the grid operator for connection to and use of the grid. • Assignment of connection point. The grid operator assigns a connection point to the plant operator and determines the required voltage level. • Agreement on connection to and use of the grid with the grid operator. • Registration of the wind energy plant. • Installation of the wind energy plant. • Installation of required meters. • Agreement with a licensed expert who shall be responsible for balancing the output of the plant. • Submission of documents to the grid operator. The plant operator must submit the required information (general and technical specifications) to the grid operator. The grid operator then forwards these documents to Energinet.dk. • Permission to operate. The grid operator gives the plant operator permission to operate. • Connection to the grid. A plant is connected to the grid after the plant operator has been given permission to operate. <p>3) Connection of wind farms to the > 100 kV grid:</p> <ul style="list-style-type: none"> • Application for connection. A plant operator shall apply to the transmission grid operator for connection and submit the necessary permits and licences together with the application.
--	--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



		<ul style="list-style-type: none"> • Agreement on connection with the grid operator. • Registration of the wind farm. • Installation of the wind farm. • The wind farm operator must submit the documents required for a plant test to Energinet.dk within 3 months after the wind farm was put into operation. • Installation of required meters. • Agreement with a licensed expert who shall be responsible for balancing the output of the plants. • Commissioning of the plants and commissioning report. • When the plants have been commissioned, the grid operator will give the plant operator temporary permission to operate and submit the technical documents (commissioning report and permission to operate) to Energinet.dk. • Energinet.dk then confirms the temporary permission to operate and approves the documents. • The grid operator gives the plant operator final permission to operate. • Connection to the grid. A plant is connected to the grid after the plant operator has been given permission to operate. <p>Any plant must meet the technical requirements set by the Ministry for Energy (§ 26 Act on Electricity Supply).</p> <p>The grid operator is obliged to connect any wind power plant that fulfils the grid connection requirements (§ 2 par. 2 Order 1063/2010).</p>
Overview	Plant operators are entitled against the grid operator to the connection of their plants to the grid. Electricity from renewable sources is not granted priority connection.	
	Deadlines	No deadlines are specified for the connection procedure.
	Obligation to inform	Plant operators are obliged to submit the general and technical documents required to the grid operator. The grid operator then forwards these documents to Energinet.dk. Apart from that, the owner of a wind turbine is, at any given time, obliged to provide any



		<p>information necessary for the implementation of grid connection to Energinet.dk, the competent transmission and distribution grid operators or the Danish Energy Agency (§ 18 Order 1063/2010).</p> <p>The grid operator is obliged to provide any owner of a wind plant requesting grid connection with all the necessary information including:</p> <ul style="list-style-type: none"> • a detailed estimate of all expenses for connection; • a reasonable and precise timetable for processing the grid connection application and • a reasonable indicative timetable for grid connection itself (§ 10 Order 1063/2010).
Priority to renewable energy (qualitative criteria)	<input type="checkbox"/> Priority to renewable energy <input checked="" type="checkbox"/> Non-discrimination	Plants shall be connected according to non-discriminatory procedures (§ 24 par. 2 Act on Electricity Supply).
Capacity limits (quantitative criteria)		
Distribution of costs	State	
	Consumers	
	Grid operator	The cost of connecting a wind energy plant is borne by the plant owner and the transmission grid operator (Energinet.dk or an affiliated company) (§ 30 VE-Lov).
	Plant operator	The cost of connecting a plant to the grid is borne by the plant operator. The costs a plant operator has to bear shall not exceed the costs that would be incurred if his plant was connected to the 10-20 kV grid. This rule applies even if the grid operator chooses to



RES-LEGAL EUROPE – National Profile Denmark



		connect the plant to a different grid. All other costs, including the expansion and upgrade of the grid, shall be borne by the grid operator (§ 67 Act on Electricity Supply).
	European Union	
	Distribution mechanism	



Use of the grid

Abbreviated form of legal sources	<ul style="list-style-type: none"> • Act on Electricity Supply • VE-Lov 	
Contact Authority	Energinet.dk; Energitilsynet	
Overview	The plant operator is statutorily entitled against the grid operator to use the grid (§ 24 Act on Electricity Supply). Renewable energy plants shall be given priority use of the grid.	
Procedure	Process flow	A plant operator shall be entitled to use the grid only if his plant complies with the requirements for grid use established by Energinet.dk (§ 26 Act on Electricity Supply).
	Deadlines	
	Obligation to inform	
Priority to renewable energy (qualitative criteria)	(x) Priority to renewable energy () Non-discrimination	Renewable energy shall be given priority use of the grid (§ 27c par. 5 Act on Electricity Supply).
Curtailment	Plant operators are entitled to priority use of the grid, i.e. in case of capacity shortage they shall have priority use over the producers of electricity from conventional energy sources. Producers of electricity from conventional sources are obliged to reduce their electricity exports if necessary. This principle of priority can be overruled for reasons of network security, i.e. to guarantee the technical quality and the balance of the grid (§ 27c par. 5 Act on Electricity Supply). Apart from that, the premium tariff payments for Anholt off-shore wind farm may be cancelled due to a lack of demand. The bonus for electricity generated at Anholt wind farm will not be paid during hours in which the market price (i.e. the Nordpool spot price) is negative. This can occur when the demand for electricity is lower than the offer (§ 37 par. 5 VE-Lov).	



Distribution of costs	State	
	Consumers	
	Grid operator	
	Plant operator	<p>The cost of grid use is borne by the plant operator, who has to pay use of grid charges (§ 24 Act on Electricity Supply).</p> <p>The cost of grid use by a wind energy plant is borne by the plant operator and the transmission grid operator (Energinet.dk or an affiliated company) (§ 30 VE-Lov).</p>
	European Union	
	Distribution mechanism	



Grid development

Abbreviated form of legal source	<ul style="list-style-type: none"> Act on Electricity Supply 	
Contact Authority	Energinet.dk; Energitilsynet	
Overview	<p>In general, the grid operators shall act on their own responsibility and expand their grids to the extent necessary. If a grid operator fails to satisfy his obligation to expand the grid, the Ministry for Climate and Energy shall delegate responsibility for the expansion of the grid to Energinet.dk (§ 20 Act on Electricity Supply). The grid operator is not obliged to the plant operators to expand his grid.</p>	
Procedure	Process flow	<p>The grid operator is statutorily obliged to expand the grid if the expansion is necessary to guarantee the efficient transmission of electricity (§ 20 Act on Electricity Supply).</p> <p>The target of increasing the use of renewable energy sources is given special attention whenever necessary (§ 21 Act on Electricity Supply).</p>
	Enforcement of claims	Statutory law does not give rise to an enforceable claim for grid expansion.
	Deadlines	There are no deadlines for grid reinforcement.
	Obligation to inform	
Regulatory incentives for grid expansion and development		
Distribution of costs		
	State	



RES-LEGAL EUROPE – National Profile Denmark



	Consumers	In effect, the costs of an expansion of the grid are borne by the consumers (§§ 8, 67 Act on Electricity Supply).
	Grid operator	
	Plant operator	
	European Union	
	Distribution mechanism	The costs of an expansion of the grid are first borne by the grid operator in charge (§ 67 Act on Electricity Supply). The grid operator may then pass on these costs to the consumers (§ 8 par. 7 Act on Electricity Supply). Every consumer is charged an additional fee, the so-called Public Service Obligation (PSO). The fee depends on each consumer's individual level of consumption. The fees are determined by Energinet.dk four times a year. According to Energinet.dk, the fees are then paid to the grid operators.
Grid studies		



RES-H&C support schemes

Summary of support schemes

Overview	In Denmark there are several taxes on the production, supply and use of energy sources for heating purposes. Renewable energy sources are exempt from these tax obligations. Moreover, the use of biogas for heating purposes is supported through a direct premium tariff.
Summary of support schemes	<p>Tax regulation mechanism – In Denmark, there are different taxes on the production, processing, possession, receipt and dispatch of fossil fuels for heating. Renewable energy sources are exempt from these taxes.</p> <p>Price based mechanism. The use of biogas for heating purposes is supported through a direct premium tariff.</p>
Technologies	All renewable energy technologies are exempt from the tax obligation. Only biogas is eligible for the price based mechanism.
Statutory provisions	<ul style="list-style-type: none"> • Act 313/2011 (Lov om energiafgift af mineralolieprodukter m.v. – Act on the Energy Tax on Mineral Oil Products etc.) • Act 1292/2010 (Lov om afgift af stenkul, brunkul og koks m.v. – Act on the Taxes on Coal, Lignite and Coke) • Act 321/2011 (Lov om kuldioxidafgift af visse energiprodukter - Act on the Carbon Dioxide Tax on Certain Energy Products) • VE-Lov (Lov om fremme af vedvarende energi No. 1392/2008 – Law on the Promotion of Renewable Energy)



Basic information on legal sources

Name of legal source (original language)	Lov om energiafgift af mineralolieprodukter m.v.	Lov om afgift af stenkul, brunkul og koks m.v.	Lov om kuldioxidafgift af visse energiprodukter	Lov om fremme af vedvarende energi
Full name				
Name (English)	Act on the Energy Tax on Mineral Oil Products and the like	Act on the Taxes on Coal, Lignite and Coke	Act on the Carbon Dioxide Tax on Certain Energy Products	Law on the Promotion of Renewable Energy
Abbreviated form	Act 313/2011	Act 1080/2015	Act 321/2011	VE-Lov
Entry into force	01.07.2011	01.07.1982	01.07.2011	01.01.2009
Last amended on	29.12.2015	03.09.2015	29.12.2015	06.02.2015
Future amendments				
Purpose	The Act sets rules for the taxation of the use of specific mineral oil products.	The Act sets rules for the taxation of the use of coal, lignite and coke.	The Act sets rules for the CO2 tax on the use of specific energy products.	Promoting the generation of electricity from renewable sources.
Relevance for renewable energy	Renewable energy sources are not subject to tax under this act.	Renewable energy sources are not subject to tax under this act.	Renewable energy sources are not subject to tax under this act.	See purpose.
Link to full text of legal source (original language)	https://www.retsinformation.dk/Forms/R0710.aspx?id=163901	https://www.retsinformation.dk/Forms/R0710.aspx?id=173434	https://www.retsinformation.dk/Forms/R0710.aspx?id=133858	https://www.retsinformation.dk/Forms/R0710.aspx?id=167872



RES-LEGAL EUROPE – National Profile Denmark



Link to full text of legal source (English)				
---------------------------------------------	--	--	--	--



Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Energistyrelsen (ENS) – Danish Energy Agency	http://www.ens.dk		+45 339 267 00	ens@ens.dk
Skatteministeriet (SKM) – Danish Ministry of Taxation	http://www.skm.dk/foreign		+45 33 92 33 92	skm@skm.dk
Energinet.dk – Transmission System Operator	http://www.energinet.dk		+45 701 022 44	info@energinet.dk



Support schemes

Tax regulation mechanism

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> • Act 313/2011 • Act 1080/2015 • Act 321/2011 	
Contact Authority	Skatteministeriet	
Summary	<p>In Denmark, different taxes are levied on the production, processing, possession, receipt and dispatch of fossil fuels for heating purposes, for example the energy tax on mineral oil products, taxes on coal, lignite and coke or the carbon dioxide tax on certain energy products. Renewable energy sources are exempt from these taxes, as they are not classed as taxable in the specific regulations.</p>	
Eligible technologies	General information	All renewable energy generation technologies are eligible for tax exemption.
	Aerothermal energy	
	Hydrothermal energy	
	Biogas	
	Biomass	
	Geothermal energy	
	Solar thermal energy	



RES-LEGAL EUROPE – National Profile Denmark



Amount	The amount of tax relief is equal to the tax rate entitled persons are exempt from.	
Addressees	Heating from renewable sources is exempt from these taxes. Companies producing, processing, possessing, receiving or dispatching renewable energy products are exempt from paying tax.	
Procedure	Process flow	
	Competent authority	The competent authority is the Danish Ministry of Taxation.
Flexibility mechanism		
Distribution of costs	State	The costs of the tax reliefs are borne by the state.
	Consumers	
	Plant operator	
	Grid operator	
	European Union	
	Distribution mechanism	



Price-based mechanisms (Premium tariff for biogas)

Abbreviated form of legal source(s)	VE-Lov	
Country-specific <u>support</u> system	Denmark supports use of biogas for heating purposes through a direct premium tariff for gigajoule of used biogas (§ 43 d VE-Lov).	
Contact Authority	Energinet.dk	
Promoted technologies	General information	Only biogas is eligible (§ 43 d VE-Lov).
	Aerothermal	
	Hydrothermal	
	Biogas	Eligible (§ 43 d VE-Lov).
	Biomass	
	Geothermal energy	
	Solar Thermal	
Amount	General information	There are two types of the tariff for biogas.



	Aerothermal	
	Hydrothermal	
	Biogas	<p>The sum of the following tariffs will be paid to the eligible persons:</p> <ul style="list-style-type: none"> - DKK 26 (€ 3.5) per gigajoule biogas (§ 43 d par. 2 VE-Lov) - DKK 10 (€ 1.34) per gigajoule biogas (§ 43 d par. 2 VE-Lov)
	Biomass	
	Geothermal energy	
	Solar Thermal	
Degression	General information	
	Aerothermal	
	Hydrothermal	



	Biogas	<p>As of 01.01.2013, the tariff amounting to DKK 26 per GJ of biogas will be annually:</p> <ul style="list-style-type: none"> - Decreased, in case the price of natural gas in a previous year is higher than the basis price of DKK 53.20 per GJ, by the amount of this difference - Increased, in case the price of natural gas in a previous year is lower than the basis price of DKK 53.20 per GJ, by the amount of this difference (§ 43 e par. 1 VE-Lov). <p>As of 01.01.2016, the tariff amounting to DKK 10 per gigajoule biogas will be annually decreased by DKK 2 (€ 0.27) and will cease by the end of 2019 (§ 43 e par. 3 VE-Lov).</p>
	Biomass	
	Geothermal energy	
	Solar Thermal	
Cap		
Eligibility period		
Addressees	Persons using biogas for heating purposes are eligible for the tariff (§ 43 d par. 2 VE-Lov)	
Procedure	Procedure	<ul style="list-style-type: none"> - Registration. Persons applying for receiving the tariff have to register at Energinet.dk and provide the authority with the necessary information (§ 50 a par. 3 VE-Lov).



		- Decision. Energinet.dk shall decide on the right and the amount of the grant (§ 50 a par. 4 VE-Lov).
	Competent authority	Energinet.dk (§ 50 a par. 2 VE-Lov).
Flexibility Mechanism		
Distribution of costs	State	The Danish state bears the costs of the premium tariff (§ 43 e par. 7 VE-Lov).
	Consumers	
	Plant operator	
	Grid operator	
	European Union	
	Distribution mechanism	-



RES-H&C grid issues

Overview

Overview of grid issues	Due to the nature of heat supply, the connection of a heat generation plant to a district heating network is closely linked to the construction of the plant. Grid connection always involves grid development, since the construction of a plant must occur simultaneously with the development of the district heating grid.
Statutory provisions	<ul style="list-style-type: none">• Act 1307/2014 (Lov om varmforsyning - The Heat Supply Act)


Basic information on legal sources

Name of legal source (original language)	Lov om varmeforsyning		
Full name			
Name (English)	The Heat Supply Act		
Abbreviated form	Act 1307/2014		
Entry into force	20.05.2011		
Last amended on	24.11.2014		
Future amendments			
Purpose	The objective of this act is to promote the socio-economically and environmentally sustainable use of energy for heating installations in buildings.		
Relevance for renewable energy	Also applies to district heating networks that transmit RES-H		
Link to full text of legal source (original language)	https://www.retsinformation.dk/Form/s/R0710.aspx?id=165652		



Link to full text of legal source (English)			
---------------------------------------------	--	--	--

Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Energistyrelsen (ENS) – Danish Energy Agency	http://www.ens.dk		+45 339 267 00	ens@ens.dk
Danish District Heating Association	http://www.fjernvarmen.dk		+45 76 30 80 00	mail@danskfjernvarme.dk



Grid issues

Connection to the grid

Abbreviated form of legal sources	<ul style="list-style-type: none"> Act 1307/2014 	
Contact Authority	Energistyrelsen; Danish District Heating Association	
Overview	Due to the nature of heat supply, the connection of a heat generation plant to a district heating grid coincides with the process of developing the plant and the grid. The procedure described below illustrates the process of plant construction.	
Procedure	Process flow	<p>Each district council in Denmark is responsible for preparing a plan for the district's heat supply (§ 3 Act 1307/2014).</p> <ul style="list-style-type: none"> In order to construct a heat generation plant whose capacity exceeds 250 kW, the developer has to submit a project proposal to the district council competent in the municipality in which the plant is to be constructed. The municipality conducts an evaluation of the socio-economic impact of the new plant's construction. Only if this impact is the least detrimental of all other options, the developer is allowed to build a heat generation plant (§§ 4 and 6 Act 1307/2014).
	Deadlines	
	Obligation to inform	Producers and suppliers of energy transported via district heating networks as well as consumers shall, upon request, provide the Minister of the Environment and any relevant district council with all information deemed necessary for planning the municipality's heat supply (§ 4 par. 3 Act 1307/2014).
Priority to renewable energy (qualitative criteria)	() Priority to renewable energy () Non-discrimination	The district council may, as a precondition for issuing a permission to construct a heat generation plant, require that the plant either allows to use or uses certain types of energy in its production to a specified extent (§ 7 Act 1307/2014).
Capacity limits		



(quantitative criteria)	
Distribution of costs	
	State
	Consumers
	Grid operator
	Plant operator
	European Union
	Distribution mechanism

The costs of grid connection and development are borne by the consumers (§ 20 Act 1307/2014).



RES-T support schemes

Summary of support schemes

Overview	The main incentive for renewable energy use in transport is a quota system. This scheme obliges companies importing or producing petrol, gas or diesel fuels to ensure that biofuels make up a defined percentage of the company's total annual fuel sales. Furthermore, biofuels are supported through tax incentives. Moreover selling of biogas for transport purposes is supported through a direct premium tariff.
Summary of support schemes	<ul style="list-style-type: none"> • Tax regulation mechanism. Companies producing, processing, possessing, receiving or dispatching energy products are obliged to pay a defined amount of tax. This amount is reduced for fuels blended with biofuels. • Biofuels quota. The main Support schemes for renewable energy sources used in transport is a quota obligation. Companies importing or producing petrol, gas or diesel fuels are obliged to ensure that biofuels make up a defined percentage of the company's total annual fuel sales. • Price based mechanism. Selling of biogas for transport purposes is supported through a direct premium tariff.
Technologies	The tax regulation mechanism and the quota obligation apply to biofuels only. Only biogas is eligible for a direct premium tariff.
Statutory provisions	<ul style="list-style-type: none"> • Act 674/2011 (Bekendtgørelse af lov om bæredygtige biobrændstoffer og om reduktion af drivhusgasser fra transport – Act on Sustainable Biofuels and the Reduction of Greenhouse Gas Emissions from Transport) • Act 321/2011 (Bekendtgørelse af lov om kuldioxidafgift af visse energiprodukter – Act on the Carbon Dioxide Tax on Certain Energy Products) • Act 1118/2014 (Bekendtgørelse af lov om energiafgift af mineralolieprodukter m.v. – Act on the Energy Tax on Mineral Oil Products and the like) • VE-Lov (Lov om fremme af vedvarende energi No. 1392/2008 – Law on the Promotion of Renewable Energy)


Basic information on legal sources

Name of legal source (original language)	Bekendtgørelse af lov om bæredygtige biobrændstoffer og om reduktion af drivhusgasser fra transport (biobrændstofloven)	Bekendtgørelse af lov om kuldioxidafgift af visse energiprodukter	Bekendtgørelse af lov om energiafgift af mineralolieprodukter m.v.	Lov om fremme af vedvarende energi
Full name				
Name (English)	Act on Sustainable Biofuels and the Reduction of Greenhouse Gas Emissions from Transport (Biofuels Act)	Act on the Carbon Dioxide Tax on Certain Energy Products	Act on the Energy Tax on Mineral Oil Products and the like	Law on the Promotion of Renewable Energy
Abbreviated form	Act 674/2011	Act 321/2011	Act 1118/2014	VE-Lov
Entry into force	31.12.2010	01.07.2011	01.07.2011	01.01.2009
Last amended on	23.12.2014	29.12.2015	29.12.2015	06.02.2015
Future amendments				
Purpose	The act aims to promote the use of sustainable biofuels in the transport sector and to reduce greenhouse gas emissions from transport.	The act introduces a tax on certain energy products depending on their CO2 emissions.	The act introduces a tax on mineral oil products.	Promoting the generation of electricity from renewable sources.



RES-LEGAL EUROPE – National Profile Denmark



Relevance for renewable energy	Defining an obligatory quota of biofuels	Tax on petrol and petrol blended with biofuels.	Tax on petrol and petrol blended with biofuels.	See purpose.
Link to full text of legal source (original language)	https://www.retsinformation.dk/Forms/R0710.aspx?id=137888	https://www.retsinformation.dk/Forms/R0710.aspx?id=133858	https://www.retsinformation.dk/Forms/R0710.aspx?id=163901	https://www.retsinformation.dk/Forms/R0710.aspx?id=167872
Link to full text of legal source (English)				



RES-LEGAL EUROPE – National Profile Denmark



Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Energistyrelsen (ENS) – Danish Energy Agency	http://www.ens.dk		+45 339 267 00	ens@ens.dk
Skatteministeriet – Ministry of Taxation	http://www.skat.dk/SKAT.aspx		+45 72 22 18 18	https://www.skat.dk/SKAT.aspx?old=5050
Energinet.dk – Transmission System Operator	http://www.energinet.dk		+45 701 022 44	info@energinet.dk



Support schemes

Tax regulation mechanism

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> • Act 1118/2014 • Act 321/2011 	
Contact Authority	Skatteministeriet	
Summary	The Act on the Carbon Dioxide Tax on Certain Energy Products and the Act on the Energy Tax on Mineral Oil Products oblige companies producing, processing, possessing, receiving or dispatching energy products to pay a defined amount of tax (§ 1 Act 1118/2014 and § 2 Act 321/2011). This amount is lower if the fuel is blended with biofuels (Annex 2 Act 1118/2014).	
Eligible technologies	General information	Only biofuels are subject to the reduced tax rate.
	Biofuels	Eligible
	Electricity	
	Hydrogen	
Amount	<p>The amount of tax due is lower if the taxed energy product (gas, diesel or petrol) is blended with biofuels. From 2015, the regulation of tax rates is based on the net price index's annual average in the year two years preceding the calendar year in which the rate applies. Hence, the rates increase or reduce by the same percentage as by which the net price index has changed from the level in 2013 (§ 32a Act 1118/2014).</p> <p>Tax bands for the year 2014:</p> <ul style="list-style-type: none"> - Sulfur-free diesel oil: <ul style="list-style-type: none"> o pure: 262.6 øre/liter o blended with 6.8% biofuels: 261.2 øre/litre 	



RES-LEGAL EUROPE – National Profile Denmark



	<ul style="list-style-type: none"> - Petrol: <ul style="list-style-type: none"> o pure: 413.4 øre/litre o blended with 4.8% biofuels: 406.4 øre/litre (Annex 2 1118/2014) - Low-sulfur diesel <ul style="list-style-type: none"> o sulfur content not exceeding 0.005%, pure: 262.2 øre/litre o sulfur content not exceeding 0,001%, blended with 6.8% biofuels: 262.2 øre/litre - Unleaded petrol (lead content not exceeding 0.013 g / l): <ul style="list-style-type: none"> o pure: 413.4 øre/litre o blended with 4.8% biofuels: 406.4 øre/litre (Annex 2 Act 1118/2014). 	
Addressees	Companies producing, processing, possessing, receiving or dispatching energy products are obliged to pay the tax (§ 3 Act 313/2012).	
Procedure	Process flow	The obliged companies must inform the authorities on the amount of taxable energy products on a monthly basis (§§ 6 and 7 Act 313/2011).
	Competent authority	Ministry of Taxation
Flexibility mechanism		
Distribution of costs	State	The costs of the tax relief are borne by the state.
	Consumers	
	Plant operator	
	Grid operator	



RES-LEGAL EUROPE – National Profile Denmark



	European Union	
	Distribution mechanism	



Biofuel quota (Act on Sustainable Biofuels)

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> Act 674/2011 	
Contact Authority	Energistyrelsen	
Summary	The Act on Sustainable Biofuels obliges importers and producers of petrol and diesel to meet a defined quota of biofuels (§ 3 par. 1 Act 674/2011). Obligated fuel suppliers may pass on this obligation to other companies (§ 3 par. 6 Act 674/2011).	
Eligible technologies	General information	Only biofuels are subject to the obligation.
	Biofuels	Biofuels have to meet the requirements defined in the European RES-Directive (§ 3 par. 1 and § 4 Act 674/2011).
	Electricity	
	Hydrogen	
Amount	Amount of quota and period of application	<p>The providers of petrol or diesel fuels have to ensure that biofuels make up at least 5.75% of the company's total annual fuel sales. The obligation must be fulfilled by the end of each calendar year (§ 3 par. 1 Act 674/2011).</p> <p>Petrol and diesel fuel sold for transportation to end users, must contain at least 1% of biofuels (§ 3 par. 2 Act 674/2011). This obligation does not apply to petrol fuel with 98 octane or higher (§ 3 par. 3 Act 674/2011).</p>



	Adjustment of quotas	The Climate and Energy Minister may lower the amount of quota obligation in the event of a crisis or lack of biofuels (§ 3 par. 5 Act 674/2011)
	Fees and penalty charges	If a provider fails to fulfil the quota, he will be punished by a fine (§ 8 Act 674/2011).
Addressees	The quota obligation applies to companies which import or produce petrol, gas or diesel fuels (§ 2 No. 9 and § 3 Act 674/2011).	
Procedure	Process flow	<ul style="list-style-type: none"> The obliged company sends an annual report to the Climate and Energy Minister as evidence for the fulfillment of the obligation (§ 5 Act 674/2011). Penalty charge. If a company fails to fulfil the quota, the responsible authority charges a penalty (§ 8 Act 674/2011).
	Competent authority	Danish Energy Agency
Flexibility mechanism		
Distribution of costs	State	
	Consumers	The costs are borne by the consumers.
	European Union	
	Others	



RES-LEGAL EUROPE – National Profile Denmark



	Distribution mechanism	The obliged companies pass on the costs arising from the quota obligation to the consumers by adding a surcharge to their fuel.
--	-------------------------------	---------------------------------------------------------------------------------------------------------------------------------



Price-based mechanisms (Premium tariff for biogas)

Abbreviated form of legal source(s)	VE-Lov	
Country-specific <u>support system</u>	Denmark supports the use of biogas for transport purposes, through a direct premium tariff for sold gigajoule of biogas (§ 43 b VE-Lov).	
Contact Authority	Energinet.dk	
Promoted technologies	General information	Only biogas is eligible (§ 43 b VE-Lov).
	Biofuels	Only biogas is eligible (§ 43 b VE-Lov).
	Electricity	
	Hydrogen	
Amount	General information	There are three types of tariff for biogas sold for transport purposes.
	Biofuels	<p>The sum of the following tariffs will be paid to the eligible persons:</p> <ul style="list-style-type: none"> - DKK 39 (€ 5.23) per gigajoule biogas (§ 43 b par. 2 VE-Lov). - DKK 26 (€ 3.5) per gigajoule biogas (§ 43 b par. 3 VE-Lov). - DKK 10 (€ 1.34) per gigajoule biogas (§ 43 b par. 3 VE-Lov).



Degression	Electricity	
	Hydrogen	
	General information	
	Biofuels	<p>As of 01.01.2013, the tariff amounting to DKK 26 per GJ of biogas will be annually:</p> <ul style="list-style-type: none"> - Decreased, in case the price of the natural gas in a previous year is higher than the basis price of DKK 53.20 per GJ, by the amount of this difference - Increased, in case the price of the natural gas in a previous year is lower than the basis price of DKK 53.20 per GJ, by the amount of this difference (§ 43 e par. 1 VE-Lov). <p>As of 01.01.2016, the tariff amounting to DKK 10 per gigajoule biogas will be annually decreased by DKK 2 (€ 0.27) and will cease by the end of 2019 (§ 43 e par. 3 VE-Lov).</p>
	Electricity	
	Hydrogen	



Cap		
Eligibility period		
Addressees	The persons entitled to the payment of a tariff are the sellers of biogas to end consumers for transport purposes (§ 43 b par. 4 VE-Lov).	
Procedure	Procedure	<ul style="list-style-type: none"> - Registration. Persons applying for receiving the tariff have to register at Energinet.dk and provide the authority with the necessary information (§ 50 a par. 3 VE-Lov). - Decision. Energinet.dk shall decide on the right and the amount of the grant (§ 50 a par. 4 VE-Lov).
	Competent authority	Energinet.dk (§ 50 a par. 2 VE-Lov).
Flexibility Mechanism		
Distribution of costs	State	The Danish state bears the costs of the premium tariff (§ 43 e par. 7 VE-Lov).
	Consumers	
	Plant operator	
	Grid operator	
	European Union	



	Distribution mechanism	
--	------------------------	--



Policies

Summary of policies

Overview	The following policies aim at promoting the development, installation and use of RES installations: There are 2 training programmes for RES-installers, a certification scheme for wind energy plants, a research, development and demonstration (RD&D) programme and an obligation to use renewable heating in new and renovated buildings.
Summary of policies	<ul style="list-style-type: none"> • In general, there are two types of training programmes for installers of RES plants: the Quality Assurance Scheme for the installers of solar heating plants, PV installations and biofuels, and the Heat Pump Scheme covering the installation of heat pumps. Apart from that, the vocational education for specific professions covers all the requirements of the European RES Directive. • The Danish Certification Scheme for wind energy plants comprises two kinds of certification: type certification, which certifies the general type of wind energy plant, and project certification to evaluate individual installations. • There are two types of Research, Development and Demonstration Programmes: “The Energy Technology Development and Demonstration Programme EUDP”, which supports innovative sustainable energy technologies. • The RES-H building obligation obliges owners of new or renovated buildings with a hot water consumption of more than 2,000 litres per day to install solar heating panels.
Technologies	
Statutory provisions	<ul style="list-style-type: none"> • Building regulations (Bygningsreglementet 2010 – 2010 Building Regulations) • Act 555/2007 (Lov om et Energiteknologisk Udviklings- og Demonstrationsprogram og om Green Labs DK-programmet - Act on the Energy Technology Development and Demonstration Programme and the Green Labs DK Programme)



RES-LEGAL EUROPE – National Profile Denmark



	<ul style="list-style-type: none">Executive Order No. 651/2008 (Teknisk godkendelsesordning for konstruktion, fremstilling, opstilling, vedligeholdelse og service af vindmøller - Executive Order on the Technical Certification for the Construction, Production, Installation, Maintenance and Service of Wind Energy Plants)
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------


Basic information on legal sources

Name of legal source (original language)	Lov om et Energiteknologisk Udviklings- og Demonstrationsprogram og om Green Labs DK-programmet	Bygningsreglementet 2010	Bekendtgørelse om teknisk certificeringsordning for vindmøller	Lov om fremme af vedvarende energi
Full name				
Name (English)	Act on the Energy Technology Development and Demonstration Programme and the Green Labs DK Programme	Building regulations 2010	Executive Order on the Technical Certification of Wind Energy Plants	Law on the Promotion of Renewable Energy
Abbreviated form	Act 555/2007	Building regulations	Executive Order No. 73/2013	VE-Lov
Entry into force	22.06.2007	01.06.2010	01.02.2013	01.01.2009
Last amended on	29.03.2014	01.01.2014	27.09.2015	06.02.2015
Future amendments				
Purpose	The act introduces a programme to support the development and demonstration of innovative sustainable energy technologies.	Building regulation	The order specifies the technical requirements for wind energy plants.	Promoting the generation of electricity from renewable sources.



RES-LEGAL EUROPE – National Profile Denmark



Relevance for renewable energy	Among other aims, the programme supports innovative RES technologies.	The regulation includes rules for the installation of RES installations in buildings.	This executive order applies to wind energy plants only.	See purpose.
Link to full text of legal source (original language)	https://www.retsinformation.dk/Forms/R0710.aspx?id=22684	http://www.bygningsreglementet.dk/	https://www.retsinformation.dk/Forms/R0710.aspx?id=145252	https://www.retsinformation.dk/Forms/R0710.aspx?id=167872
Link to full text of legal source (English)		http://bygningsreglementet.dk/english/0/40 Please note: The English translation does not provide information on the latest amendment of the document.		



Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Energistyrelsen (ENS) – Danish Energy Agency	http://www.ens.dk		+45 339 267 00	ens@ens.dk
Erhvervsstyrelsen – Danish Enterprise and Construction Authority	http://www.ebst.dk		+45 35 46 60 00	erst@erst.dk
Klima- og Energiministeriet (KEMIN) – Danish Ministry for Climate and Energy	http://www.kemin.dk		+45 339 228 00	kebmin@kebmin.dk



Policy categories

Training programmes for installers

Abbreviated form of legal source(s)	
Sector	Electricity, Heating & Cooling, Transport
Contact Authority	Energistyrelsen
Description	<p>The training programmes for installers in Denmark are not regulated by law. There are quality assurance agreements between the Danish Technological Institute, installers associations and the Danish Energy Agency.</p> <p>In general, there are two training schemes for installers: the Quality Assurance Scheme (Danish name: KSO) and the Heat Pump Scheme (Danish name: VPO).</p> <ul style="list-style-type: none"> • The KSO scheme applies to the solar heating, solar panel and biofuel sectors. It certifies installers working with these types of installations. • The second scheme – VPO – is a training course for heat pump installers. <p>Denmark recognises training and certification schemes from other Member States.</p>
Addressees	RES plant installers
Competent authority	Danish Energy Agency
Further information	Further information on both schemes is available at: www.kso-ordning.dk and www.vp-ordning.dk .



Distribution of costs	State	
	Private Financing	In general, the trainees themselves have to bear the costs of a training course.
	European Union	
	Others	A company which wants its employees to attend a training course may apply for support from a special fund, the Electricity Skills Development Fund (Elbranchens Kompetenceudviklingsfond). The Fund was established by TEKNIQ (Danish Mechanical and Electrical Contractors' Association) and the Danish Electricity Association (Dansk El-Forbund). Its aim is to provide funding for the training of employees. The Fund may grant 500 DKK (approx. € 67) per training day and participating employee.


Certification Programmes for RES installations (Danish Certification Scheme for Wind Energy Plants)

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> Executive Order No. 73/2013
Sector	Electricity
Contact Authority	Energistyrelsen
Description	<p>The goal of the certification scheme for wind energy plants is to ensure that on and off shore wind power plants meet the requirements laid down for energy production, safety and the environment, as well as that wind power plants are maintained as prescribed (§ 1 Executive Order No. 73/2013).</p> <p>Manufacturers and suppliers of wind power plants shall, before putting it on the market or into service, ensure that the plant carries a CE marking and is accompanied by an EC declaration of conformity upon delivery to meet the requirements for safety and health, with regulations on the design of technical aids (§ 3 par. 1 Executive Order No. 73/2013).</p> <p>The certification of wind turbines with a rotor of 40 m² must be at least equivalent to those required modules and requirements for type or prototype certification specified in the European standard DS / EN 61400-22, including DS/EN-, IEC - and ISO standards specified in annex 1 of the Executive Order (§ 5 par. 1 Executive Order No. 73/2013).</p> <p>The certification of wind turbines with a rotor area of 5 to 40 m² must be at least equivalent to those set out in Annex 1 of the Executive Order (§ 5 par. 2 Executive Order No. 73/2013).</p> <p>The certification must also include noise measurements carried out in accordance with the current regulation on noise from wind turbines (§ 5 par. 3 Executive Order No. 73/2013).</p>
Addressees	Type certification for wind turbines shall be issued to the manufacturers or suppliers of wind energy plants (§ 3 par. 1 Executive Order No. 73/2013)



RES-LEGAL EUROPE – National Profile Denmark



Competent authority	<p>The certification scheme is managed by the 'Energy Agency's Secretariat for the Danish Wind Turbine Certification Scheme' at Risø National Laboratory for Sustainable Energy (Technical University of Denmark) (§ 13 Executive Order No. 73/2013).</p> <p>The bodies responsible for assigning certificates of approval to wind energy plants must be accredited by the Danish Accreditation and Metrology Fund (Danske Akkrediterings- og Metrologifond) – DANAK or by an equivalent recognised international accreditation company (§ 11 par. 1 Executive Order No. 73/2013).</p>	
Further information	<p>Further information is available at the Danish Energy Agency's Secretariat for Wind Energy Plants: http://www.dawt.dk/</p>	
Distribution of costs	State	
	Industry	
	Plant manufacturers	<p>The costs of type certification shall be borne by the manufacturers and suppliers of a wind energy plant (§ 15 par. 1 Executive Order No. 73/2013).</p>
	European Union	
	Others	



Exemplary role of public authorities in accordance with art. 13 par. 5 RES Directive

Abbreviated form of legal source(s)	
Sector	None (Electricity, Heating & Cooling)
Contact Authority	-
Description	Regarding the exemplary role of public authorities, there are numerous measures aiming at reducing energy demand. Apart from these energy efficiency measures, there is no policy aiming at the increased use of RES by public authorities.
Addressees	
Competent authority	
Further information	Further information at: http://www.ens.dk/da-DK/ForbrugOgBesparselser/denoffentligesektor/Sider/Forside.aspx



RD&D Policies (Forsk-El Programme - Support for research and development of environmentally friendly power generation technologies)

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> • VE-Lov
Sectors	Electricity
Contact Authority	Energinet.dk
Description	Energinet.dk provides funding for a support research programme, which aims at supporting the development and integration of environmentally friendly power generation technologies for grid connection. Each year a call for funding is implemented. ForskEL is financed through a so-called Public Service Obligation (PSO), which is paid by final energy consumers.
Addressees	
Competent authority	The transmission grid operator Energinet.dk is in charge of the subsidies.
Further information	Further information is available at: http://energinet.dk/EN/FORSKNING/ForskEL-programmet/Sider/default.aspx or https://www.forskel.dk/Pages/default.aspx


RD&D Policies (The Energy Technology Development and Demonstration Programme EUDP)

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> Act 555/2007
Sectors	Electricity, Heating & Cooling, Transport
Contact Authority	Energistyrelsen
Description	<p>The programme “Energiteknologisk Udviklings- og Demonstrationsprogram” (EUDP) supports the development, demonstration and market-introduction of innovative sustainable energy technologies (§ 2 Act 555/2007). The aim of this programme is to promote the efficient use of energy and help Denmark to become independent from fossil energy by 2050.</p> <p>Funding will be allocated through a tender process. The tenders will take place 2-3 times a year. The decisions on the amount of funding to be provided and the projects to be supported are made by an independent committee appointed by the Minister of Climate, Energy and Building.</p> <p>The precondition for receiving grants is that a private investor or applicant’s partner is willing to finance more than a half of the project and to commercialise its results.</p>
Addressees	The eligible addressees are public or private companies or knowledge institutions (§ 7 Act 555/2007).
Competent authority	Danish Energy Agency
Further information	Further information is available at: http://www.ens.dk/ny-teknologi/eudp-energiteknologisk-udvikling-demonstration



RES-LEGAL EUROPE – National Profile Denmark





RES-H building obligations

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> Building Regulations
Sectors	Heating & Cooling
Contact Authority	Erhvervsstyrelsen
Description	The 2010 Building Regulations oblige owners of new or renovated buildings with a hot water consumption of more than 2000 litre per day to install solar heating panels. These panels shall cover an energy demand equivalent to the hot water consumption under normal operating conditions. This obligation does not apply to buildings using direct heating (Building Regulations art. 8.6.2. par. 2)
Obligated entities	According to the Building Act, the owner of the building is responsible for fulfilling the obligations of the Danish building regulations.
Competent authority	The Danish Enterprise and Construction Authority
Further information	http://www.bygningsreglementet.dk/
Obligation on regional level	No obligations on the regional level.

Support of RES-H infrastructure

Abbreviated form of legal source(s)	
Sectors	Heating & Cooling
Contact Authority	Klima- og Energiministeriet
Description	In Denmark, support for RES-H infrastructure is provided only on the local level. The Ministry of Climate and Energy encourages local authorities to support projects that promote the use of district heating.
Addressees	
Competent authority	Ministry of Climate and Energy and District Councils
Further information	