

Research RES LEGAL – Promotion system

Country: Denmark

1. Overview of promotion system

Overview of promotion system	In Denmark, electricity from renewable sources is promoted through a price regulation in terms of a variable bonus paid on top of the market price. Furthermore, Denmark allocates subsidies to small-scale renewable energy systems and provides loan guarantees for local initiatives for the erection of wind energy systems.
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) • LBK 224/2009 (Bekendtgørelse af lov om Energinet.dk – act on transmission grid operator Energinet.dk)
Promotion system	<ul style="list-style-type: none"> • Price regulation. In Denmark, the generation of electricity from renewable sources is promoted through a price regulation in terms of bonus payments. The operators of systems for the generation of electricity from renewable sources usually receive a variable bonus, which is paid on top of the market price. The sum of market price and bonus shall not exceed a statutory maximum per kWh, which depends on the source of energy used and the date of connection of the system (§§ 36-48 VE-Lov). • Subsidies. Denmark provides subsidies for small-scale systems in pursuance of VE-Lov. • Loan guarantees. Local initiative groups may apply for the provision of a guarantee for loans for feasibility studies that are conducted in the run-up to the erection of a wind-energy system.
Promoted technologies	VE-Lov prescribes 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 (§§ 2 and 47 VE-Lov).
Area of application	Only electricity generated by Danish systems is eligible for promotion.
Funding	The costs of the promotion system for renewable energy as stipulated by the Law on the Promotion of Renewable Energy are borne by the final consumers (§ 8 par. 2 Act on Electricity Supply).

2. Basic information on legal sources

Name of legal source (original language)	<i>Lov om fremme af vedvarende energi</i>	<i>Bekendtgørelse af lov om elforsyning</i>	Bekendtgørelse af lov om Energinet.dk
Name of legal source (full name)			
Name of legal source (English)	Law on the Promotion of Renewable Energy		Act on Energinet.dk
Abbreviated form	VE-Lov	Act on Electricity Supply	LBK 224/2009
Type of law	Act	Act	Act
Document structure	Chapters, articles (§)	Chapters, articles (§)	Articles (§)
Entering into force	01/01/2009	21/11/2006	27/03/2009
Latest amendment	27/03/2009	27/05/2009	
Future amendments			
Purpose	Promoting the generation of electricity from renewable sources.	Managing and organising the national electricity market.	The Act sets out the tasks of transmission grid operator Energinet.dk.
Relation to renewable energy	See purpose.	This Act stipulates binding guidelines for the promotion of electricity from renewable sources.	Among other things, Energinet.dk is in charge of all important procedures related to the promotion of electricity from renewable sources.
Link to full text of legal source (original language)	https://www.retsinformation.dk/Forms/R0710.aspx?id=122961	https://www.retsinformation.dk/Forms/R0710.aspx?id=22613	https://www.retsinformation.dk/Forms/R0710.aspx?id=124121
Link to full text of legal source (English)		http://www.ens.dk/graphics/Publikationer/Laws/GB_Lovbekg_286_2005%20elforsynin_g_ar001003.pdf The English translation does not provide	http://www.energinet.dk/NR/ronlyres/276B7459-243C-4A83-BE5F-0FCFFC1BC0CF/0/Act_on_Energinetdk.pdf

		information on the latest amendment of the Act.	The English translation does not provide information on the latest amendment of the Act.
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3. 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/en-us/Sider/forside.aspx		+45 339 267 00	
Energitilsynet (DERA) – Danish Energy Regulatory Authority	http://www.energitilsynet.dk/english/		+45 722 680 70	
Klima- og Energiministeriet (KEMIN)- Danish Ministry of Climate and Energy	http://www.kemin.dk/en-US/Sider/frontpage.aspx		+45 339 228 00	
Energinet.dk – transmission grid operator	http://www.energinet.dk/en/menu/Frontpage.htm#		+45 70 10 22 44	info@energinet.dk

4. Means of promotion

4.1. Subsidy (Subsidies for small renewable energy technologies - ForskVE)

Abbreviated form of legal source(s)	VE-Lov, Act on Electricity Supply	
Country-specific promotion system	Transmission grid operator Energinet.dk pays an additional subsidy to small systems for the generation of electricity (§ 49 par. 1 VE-Lov). Even small pilot projects are eligible (§ 49 par. 3 VE-Lov).	
Promoted technologies	These subsidies are granted to solar and wave energy systems. Systems are also eligible if they generate electricity from renewable sources and have been classified as important for the advancement and diffusion of renewable energy technologies (§ 49 par. 1 VE-Lov). According to Energinet.dk, this definition includes new and as yet unknown technologies.	
Wind energy		
Solar energy	Eligible (§ 49 par. 1 VE-Lov).	
Geothermal energy		
Biogas		
Biomass		
Hydro-electricity	Only wave-energy systems are eligible (§ 49 par. 1 VE-Lov).	
Area of application	National	Subsidies are granted to systems within Denmark only (§ 3 VE-Lov).
	International	Systems outside Denmark are ineligible (§ 3 VE-Lov).
Legal basis for a claim/addressees	() statutory basis (x) contractual basis	According to Energinet.dk's website, subsidies are paid only after the project manager has signed a contract with Energinet.dk.

	Entitled party	The persons entitled are the system owners (§ 56 par. 3 VE-Lov). Systems shall be connected to the grid (§ 49 par. 3 VE-Lov).
	Obligated party	Transmission grid operator Energinet.dk is obliged to allocate subsidies (§ 56 par. 1 VE-Lov).
Amount	Energinet.dk has its own budget for the ForskVE programme. This budget is 25 m DKK per year and applies to the period of 2008-2011 (§ 49 par. 2 VE-Lov). Energinet.dk decides on the amount of subsidy. According to the information on Energinet.dk's website, the annual budget is finalised after the application period.	
Procedure	<ul style="list-style-type: none"> • Call for proposals. One call for proposals will be published each year from 2008 to 2011. • Application. According to Energinet.dk's website, applications to Energinet.dk must be made online. • Selection. According to its website, Energinet.dk decides on the projects to be subsidised and on the amount of subsidy. • Authorisation. According to Energinet.dk's website, selected projects must be authorised by the Energy Agency (Energistyrelsen) and the supervisory board of Energinet.dk. • Contract. According to Energinet.dk's website, the project manager in question signs a contract with Energinet.dk. 	
Funding	The state as cost bearer	
	The consumer as cost bearer	The costs of promotion are borne by the consumers (§ 8 par. 2 Act on Electricity Supply).
	The system operator as cost bearer	
	The grid operator as cost bearer	
	Distribution mechanism	<ul style="list-style-type: none"> • Consumers – grid operators. Every consumer is charged an additional fee, the so-called Public Service Obligation. The fees are scaled according to the consumer's place of residence (Western or Eastern Denmark) and his individual 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 operators - Energinet.dk. According to Energinet.dk, the grid operators submit the fees collected to Energinet.dk. A certain part of this money is designated for the ForskVE project.
Control mechanisms	Project managers shall send a project progress report to Energinet.dk twice a year. Furthermore, they shall submit a final report after the conclusion of the project. According to Energinet.dk's website, the final reports are published on this very website.	

4.2. Loan (Loan guarantees for local initiatives involving the erection of wind-energy systems)

Abbreviated form of legal source(s)	VE-Lov, Act on Electricity Supply	
Country-specific promotion system	VE-Lov subsidises local initiatives and provides incentives for local groups to erect further wind-energy systems. Energinet.dk provides guarantees for loans that are taken out by local organisations and initiative groups to finance feasibility studies that are conducted in the run-up to the erection of a wind energy system (§ 21 VE-Lov).	
Promoted technologies	Loan guarantees as stipulated by VE-Lov are provided for wind energy systems only (§ 21 VE-Lov).	
Wind energy	Eligible.	
Solar energy		
Geothermal energy		
Biogas		
Biomass		
Hydro-electricity		
Area of application	National	Guarantees are provided for local organisations and initiative groups within Denmark only (§ 3 VE-Lov).
	International	Initiatives implemented outside Denmark are ineligible (§ 3 VE-Lov).
Legal basis for a claim/addressees	() statutory basis (x) contractual basis	According to Energinet.dk, the guarantee is provided on the basis of an application form, which establishes a contract between Energinet.dk and the group in question.
	Entitled party	Guarantees are provided for local wind energy system organisations and local initiative groups that want to investigate whether the erection of one or more wind energy systems is feasible. Such organisations and groups must have 10 members at least. The majority of the members shall be residents in the municipality in which

		the systems will be erected or shall live within 4.5 kilometres of the building site (§ 21 par. 2 nr. 1 and 2 VE-Lov).
	Obligated party	Energinet.dk is obliged to provide guarantees (§ 21 par. 5 VE-Lov).
Amount	Energinet.dk has provided a budget of 10 m DKK for guarantees. Each guarantee will cover most of the loan in question. The maximum guarantee is 500,000 DKK per project (§ 21 par. 5 VE-Lov).	
Procedure	<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 organisations and initiatives take 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 which is signed by both parties. • Period of guarantee. The guarantee is provided until the system 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). 	
Funding	The state as cost bearer	
	The consumer as cost bearer	The costs of promotion are borne by the consumers (§ 8 par. 2 Act on Electricity Supply).
	The grid operator as cost bearer	
	The system operator as cost bearer	
	Distribution mechanism	<ul style="list-style-type: none"> • Consumers – grid operators. Every consumer is charged an additional fee, the so-called Public Service Obligation. The fees are scaled according to the consumer's place of residence (Western or Eastern Denmark) and his individual 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 operators - Energinet.dk. According to Energinet.dk, the grid operators submit the fees collected to Energinet.dk. A certain part of this money is designated for the guarantees.

Control mechanisms	If Energinet has provided the guarantee to the bank, but the initiative for the erection of a wind energy system was not successful, the project leaders have to pay back the guarantee to Energinet.dk only if the project was either sold in full or in part or transferred (§ 21 par. 4 VE-Lov).
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4.3. Price regulation (Law on the Promotion of Renewable Energy)

Abbreviated form of legal source(s)	VE-Lov	
Country-specific promotion system	Denmark promotes the generation of electricity from renewable sources through a price regulation. System 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 the system and the source of energy used (§§ 36-48 VE-Lov). In certain cases, system operators are granted a guaranteed bonus and are thus not subject to a statutory maximum (e.g. §§ 36, 38 par. 2, 39 par. 7 VE-Lov). If the market price exceeds the total amount specified by statutory law, the exceeding amount will be deducted from future bonus payments.	
Promoted technologies	The Danish Act on Electricity Supply promotes all technologies except for geothermal power generation (§ 2 VE-Lov).	
Wind energy	Both on-shore and off-shore plants are eligible (§§ 36-43 VE-Lov).	
Solar energy	Eligible (§§ 47, 48 VE-Lov).	
Geothermal energy		
Biogas	Eligible (§ 44 VE-Lov).	
Biomass	Eligible (§§ 44-46 VE-Lov).	
Hydro-electricity	Eligible under the following conditions (§§ 47,48 VE-Lov): <ul style="list-style-type: none"> • Conventional hydro-power plants. Eligible up to a capacity of 10 <u>MW</u> (§ 50 par. 6 VE-Lov). • Wave power plants. Eligible without restriction. 	
Area of application	National	Electricity is eligible only if generated by systems in Denmark (§ 3 VE-Lov).
	International	Electricity generated outside Denmark is not eligible (§ 3 VE-Lov).
Legal basis for a claim/addressees	(x) statutory basis () contractual basis	The claim for a bonus payment is established by statutory law (§ 36-48 VE-Lov).
	Entitled party	The persons entitled to the payment of a bonus are the owners of systems for the generation of electricity from renewable sources (§ 56 par. 2 VE-Lov).
	Obligated party	Energinet.dk is the company obligated to pay the bonus (§ 56 par. 1 VE-Lov).
Payment structure	Bonus	In general, the bonus payment is variable and shall, together with the respective market price, not exceed a certain maximum amount (§ 51 par. 4 VE-Lov). In individual cases, plant operators may be entitled to a guaranteed bonus on top of

		the market price (e.g. §§ 36, 38 par. 2, 39 par. 7 VE-Lov).
	Guaranteed payment	
	Criteria for amount of payment	The amount of payment largely depends on the statutory maxima set for the sum of both the market price and the bonus payment (§§ 36-48 VE-Lov). While one part of the grant scheme is based on a guaranteed payment on top of the market price, the other part is a variable payment which, together with the market price shall not exceed a certain total amount (§ 36-48 VE-Lov).
	Adjustment mechanisms	Statutory law does not stipulate a distribution mechanism.
	Limitations/deadlines.	The Law on the Promotion of Renewable Energy stipulates several periods and deadlines, which are applied according to on the technology used and the date of commissioning of the system in question. The period of payment is usually 10 years. The maximum period of payment is 20 years (§§ 36-48 VE-Lov).
	Amount	<p>The amount of bonus varies according to the market price and the statutory maximum set for the sum of both the market price and the bonus. Statutory law differentiates between several maxima, which are applied according to the date of connection of the system, the source of energy and the technology used. In certain cases, system operators are granted a guaranteed bonus on top of the market price and are thus not subject to a statutory maximum.</p> <p>Systems only recently commissioned are eligible for the following payments:</p> <ul style="list-style-type: none"> • Wind energy: <ul style="list-style-type: none"> ○ on-shore: guaranteed bonus of 25 øre/kWh (§ 36 VE-Lov) ○ off-shore: <ul style="list-style-type: none"> - guaranteed bonus of 10 øre/kWh (§ 38 VE-Lov) - For wind farms: Maximum payment (bonus & market price) depends on the location of the farm: 51.8 or 62.9 øre/kWh (§ 37 VE-Lov). ○ Re-powering: additional bonus of 12 øre/kWh (§ 42 VE-Lov) • Biogas: Maximum payment (bonus & market price): 74.5 øre/kWh (§ 44 VE-Lov). • Biomass: guaranteed bonus of 15 øre/kWh (§ 45 VE-Lov) • Other sources: Maximum payment (bonus & market price) of 60 øre/kWh for 10 years for systems that were connected after 22nd April 2004 and categorised as of special strategic importance by the Ministry in charge (§ 47 par. 3 nr. 1 VE-Lov).
Funding	The state as cost bearer	
	The consumer as cost bearer	The costs of the promotion system are borne by the consumers (§ 8 par. 2 Act on Electricity Supply).

	The grid operator as cost bearer	
	The system operator as cost bearer	
	Distribution mechanism	<ul style="list-style-type: none"> • Consumers – grid operators. System operators sell their electricity to the consumers via a supply company. Every consumer is charged an additional fee, the so-called Public Service Obligation. The fees are scaled according to the consumer's place of residence (Western or Eastern Denmark) and his individual 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 operators - Energinet.dk. According to Energinet.dk, the grid operators submit the fees collected to Energinet.dk. • Energinet.dk – system operators. Energinet.dk pays the bonus to the system operators (website of Energinet.dk).
Control mechanisms		<ul style="list-style-type: none"> • Supervision of the procedure. Energinet.dk supervises all important procedural steps related to the promotion of electricity from renewable sources (§ 2 par. 2 LBK 224/2009). • Supervision of the electricity market. Furthermore, renewable energy is subject to the general statutory provisions related to the supervision of the electricity market. The electricity market is supervised by an independent commission (Energitilsynet- Danish Energy Regulatory Authority) (§§ 76-85 Act on Electricity Supply), which was established by the Ministry of Environment and Energy.

4.4. Quota system (name of means of promotion)

Abbreviated form of legal source(s)		
Country-specific promotion system		
Promoted technologies		
Wind energy		
Solar energy		
Geothermal energy		
Biogas		
Biomass		
Hydro-electricity		
Area of application	National	
	International	
Legal basis for a claim/addressees	<input type="checkbox"/> statutory basis <input type="checkbox"/> contractual basis	
	Entitled party	

	Obligated party	
Amount		
Procedure		
Funding	The state as cost bearer	
	The consumer as cost bearer	
	The grid operator as cost bearer	
	The system operator as cost bearer	
	Distribution mechanism	
Control mechanisms		

4.5. Fiscal regulation mechanisms (*name of means of promotion*)

Abbreviated form of legal source(s)		
Country-specific promotion system		
Promoted technologies		
Wind energy		
Solar energy		
Geothermal energy		
Biogas		
Biomass		
Hydro-electricity		
Area of application	National	
	International	
Legal basis for a claim/addressees	() statutory basis () contractual basis	
	Entitled party	
	Obligated party	
Amount		

Procedure		
Funding	The state as cost bearer	
	The consumer as cost bearer	
	The grid operator as cost bearer	
	The system operator as cost bearer	
	Distribution mechanism	
Control mechanisms		

Criticism (optional)

Criticism RES sector	
Criticism traditional energy sector	
Criticism political level	
Criticism science and research	