

# Renewable energy policy database and support – RES-LEGAL EUROPE

## National profile: Sweden

Client: DG Energy

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## **Sweden – summary text**

The Kingdom of Sweden promotes renewable electricity through the quota system, tax regulation mechanisms and a subsidy scheme. In Sweden, tax exemptions are the main incentives to support renewable heating. The main incentive for renewable energy use in transport is a tax exemption for biofuels.

In Sweden, the grid operator is obliged to connect electricity generation systems to the grid, transmit electricity and expand the grid. Renewable energy is not given priority. According to the Energy Agency, the construction, use and development of district heating infrastructure in Sweden is not regulated by law.

The following policies aim at promoting the development, installation and use of RES-installations. There are a number of voluntary training programmes and certification schemes for RES installers and grants for research and development in the field of wind energy.



## RES-E support schemes

### Summary of support schemes

Overview	The Kingdom of Sweden promotes renewable energy through various incentives, the most important of them being the quota system, which is based on a certificate trading system. Furthermore, tax regulation mechanisms and a subsidy scheme have been introduced.
Summary of support system	<ul style="list-style-type: none"><li>• <b>Quota system.</b> The main incentive for the use of renewable energy sources is a quota system in terms of quota obligations and a certificate trading system. The Electricity Certificates Act obliges energy suppliers to prove that a certain quota of the electricity supplied by them was generated from renewable energy sources. Energy suppliers shall provide this evidence by presenting tradable certificates allocated to the producers of electricity from renewable sources.</li><li>• <b>Tax regulation mechanisms.</b> Electricity generated from wind energy is eligible for tax privileges consisting in a reduction of the real estate tax as defined in the Act on the Federal Real Estate Tax, and a reduction of the energy tax as authorised by the Energy Tax Act.</li><li>• <b>Subsidy.</b> Sweden grants subsidies for photovoltaic installations.</li></ul>
Technologies	Basically, all technologies used for the generation of electricity from renewable sources are eligible for the incentives applicable in Sweden. Some incentives are limited to certain technologies.
Statutory provisions	<ul style="list-style-type: none"><li>• Act No. 2011:1200 (Lag om elcertifikat – Electricity Certificates Act)</li><li>• Regulation No. 2011:1480 (Förordning om elcertifikat – Electricity Certificates Regulation)</li><li>• Act No. 1994:1776 (Lag om skatt på energi – Energy Tax Act)</li><li>• Regulation No. 2009:689 (Förordning om statligt stöd till solceller – Regulation on State Subsidies for Solar Panels)</li><li>• Act No. 1984:1052 (Lag om statlig fastighetsskatt – Act on the Federal Real Estate Tax)</li></ul>



### Basic information on legal sources

<b>Name of legal source</b> (original language)	Lag (2011:1200) om elcertifikat	Förordning (2011:1480) om elcertifikat	Act No. 1994:1776 on Energy Tax
<b>Full name</b>			
<b>Name (English)</b>	Act No. 2011:1200 on Electricity Certificates	Regulation No. 2011:1480 on Electricity Certificates	Lag (1994:1776) om skatt på energi
<b>Abbreviated form</b>	Act No. 2011:1200	Regulation No. 2011:1480	Act No. 1994:1776
<b>Entry into force</b>	01.01.2012	01.01.2012	01.01.1995
<b>Last amended on</b>	01.08.2012		01.01.2012
<b>Future amendments</b>			
<b>Purpose</b>	Introducing the trade of certificates and a quota system; obliging electricity suppliers to purchase certificates.	The Regulation complements the Electricity Certificate Act (Act No. 2011:1200).	The Act introduces a tax on energy consumption.
<b>Relevance for renewable energy</b>	The Act aims to promote electricity from renewable sources through a quota system.	The Regulation aims to promote electricity from renewable sources through a quota system.	Tax privileges for electricity from renewable sources.



Link to full text of legal source (original language)	<a href="http://www.notisum.se/rnp/sls/laq/20111200.htm">http://www.notisum.se/rnp/sls/laq/20111200.htm</a>	<a href="http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Forordning-20111480-om-elce_sfs-2011-1480/">http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Forordning-20111480-om-elce_sfs-2011-1480/</a>	<a href="http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-19941776-om-skatt-pa-en_sfs-1994-1776/">http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-19941776-om-skatt-pa-en_sfs-1994-1776/</a>
Link to full text of legal source (English)			



<b>Name of legal source (original language)</b>	Lag (1984:1052) om statlig fastighetsskatt	Förordning (2009:689) om statligt stöd till solceller	
<b>Full name</b>			
<b>Name (English)</b>	Act No. 1984:1052 on the Federal Real Estate Tax	Regulation No. 2009:689 on State Subsidies for Solar Panels	
<b>Abbreviated form</b>	Act No. 1984:1052	Regulation No. 2009:689	
<b>Entry into force</b>	18.12.1984	01.07.2009	
<b>Last amended on</b>	01.01.2012	01.01.2012	
<b>Future amendments</b>			
<b>Purpose</b>	Act on the real estate tax.	This regulation establishes provisions on subsidies for solar energy.	
<b>Relevance for renewable energy</b>	Tax benefits for electricity generated from wind energy; tax disadvantages for hydro-electricity.	Investment grants for photovoltaic installations.	
<b>Link to full text of legal source (original language)</b>	<a href="http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-19841052-om-statlig-fas_sfs-1984-1052/">http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-19841052-om-statlig-fas_sfs-1984-1052/</a>	<a href="http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Forordning-2009689-om-statl_sfs-2009-689/">http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Forordning-2009689-om-statl_sfs-2009-689/</a>	





Link to full text of legal source (English)			
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### Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Energimyndigheten Swedish Energy Agency	<a href="http://www.energimyndigheten.se">http://www.energimyndigheten.se</a>		+46 165 442 000	<a href="mailto:registrator@energimyndigheten.se">registrator@energimyndigheten.se</a>
Svenska Kraftnät Transmission Grid Operator	<a href="http://www.svk.se">http://www.svk.se</a>		+ 46 8 475 80 00	<a href="mailto:registrator@svk.se">registrator@svk.se</a>
Näringsdepartementet Ministry of Enterprise, Energy and Communications	<a href="http://www.regeringen.se/sb/d/1470">http://www.regeringen.se/sb/d/1470</a>		+46 840 510 00	<a href="mailto:registrator@enterprise.ministry.se">registrator@enterprise.ministry.se</a>
Boverket – Swedish National Board of Housing, Building and Planning	<a href="http://www.boverket.se">http://www.boverket.se</a>		+46 455 353 000	<a href="mailto:registraturen@boverket.se">registraturen@boverket.se</a>

Support schemesSubsidy (Grants for the installation of photovoltaic installations)

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> <li>Regulation No. 2009:689</li> </ul>	
Summary	<p>Regulation No. 2009:689 authorises grants for the installation of on-grid photovoltaic installations. The installation works must have commenced on 1. July 2009 or later and be completed by 31 December 2012 (§ 2 par. 3 Regulation No. 2009:689).</p> <p>Grants awarded under this scheme cannot be received on top of other public grants, including those of the European Union (§ 2 par. 1 Regulation No. 2009:689).</p>	
Eligible technologies	General information	Grants are available for the installation of PV installations only (§ 3 par. 2 Regulation No. 2009:689).
	Wind energy	
	Solar energy	Eligible are PV-installations connected to either internal (on the given property) or external grid (§ 3 par. 2 Regulation No. 2009:689). Installations generating both electricity and heat from solar energy (hybrid installations) are eligible only if the electricity generated amounts to at least 20 % of an installation's total annual production (§ 5 par. 2 Regulation No. 2009:689). Only one PV installation per building will be funded. In blocks of flats, the number of eligible PV installations is equal to the number of flats (§ 4 Regulation No. 2009:689).



	<b>Geothermal energy</b>	
	<b>Biogas</b>	
	<b>Hydro-power</b>	
	<b>Biomass</b>	
<b>Amount</b>	<p>Grants amount to 45 % of the eligible costs (§ 5 par. 1 Regulation No. 2009:689). Eligible costs include labour costs, costs of materials and planning costs (§ 6 Regulation No. 2009:689). Costs of the connection to an external electricity grid are excluded from the eligible costs (§ 6 Regulation No. 2009:689).</p> <p>The maximum grant per installation is SEK 1.5 million (§ 5 par. 3 Regulation No. 2009:689). The total eligible costs must not exceed SEK 40,000 (plus VAT) per kW of installed maximum capacity. The eligible costs for hybrid installations must not exceed SEK 90,000 per kW of installed maximum capacity (§ 5 par. 4 Regulation No. 2009:689).</p> <p>The total budget for the scheme for 2012 is SEK 60 m.</p>	
<b>Addressees</b>	<p>Eligible are private individuals, municipalities and enterprises planning to install a photovoltaic installation (§ 2 Regulation No. 2009:689).</p> <p>The obligated party is the National Board of Housing, Building and Planning (§ 12 Regulation No. 2009:689).</p>	
<b>Procedure</b>	<b>Process flow</b>	<ul style="list-style-type: none"> <li>• <b>Application for preliminary decision.</b> The applicant shall submit his application to the provincial government in charge. Enterprises shall submit their applications prior to the commencement of the project. Other applicants are to submit their applications within 6 months from the commencement of the project (§ 10 Regulation No.</li> </ul>



		<p>2009:689).</p> <ul style="list-style-type: none"> <li>• <b>Preliminary decision.</b> The provincial government in charge decides if and to what extent a grant is awarded (§ 8 par.1 Regulation No. 2009:689). The provincial government also sets deadlines for the completion of the projects (§ 11 Regulation No. 2009:689).</li> <li>• <b>Application for payment of the grant.</b> Applicants are to submit a separate application for payment to their provincial government. They have to do so within six months after the project completion date set by the provincial government (§ 12 Regulation No. 2009:689).</li> <li>• <b>Final decision.</b> Having assessed an application, the provincial government in charge decides if and to what extent a grant shall be awarded (§ 13 Regulation No. 2009:689).</li> <li>• <b>Payment.</b> The grant decided upon shall be paid to the applicant by the National Board of Housing, Building and Planning (§ 12 par. 2 Regulation No. 2009:689).</li> </ul>
	Competent authority	<p>The provincial government in charge decides on the award of grants (§ 8 par.1 Regulation No. 2009:689). The National Board of Housing, Building and Planning is responsible for the payment of grants (§ 12 Regulation No. 2009:689).</p> <p>The Energy Agency monitors the scheme and handles claims (§§ 13, 16 and 18 Regulation No. 2009:689).</p>
Flexibility mechanism		
Distribution of costs	State	<p>The costs arising from the grant scheme are borne by the state (§ 1 Regulation No. 2009:689).</p>



	Consumers	
	Plant operator	
	Grid operator	
	European Union	
	Distribution mechanism	

Quota system

<b>Abbreviated form of legal source(s)</b>	<ul style="list-style-type: none"> <li>• Act No. 2011:1200</li> <li>• Regulation No. 2011:1480</li> </ul>		
<b>Summary</b>	<p>Act No. 2011:1200 obliges electricity suppliers, certain electricity consumers and energy-intensive companies to annually acquire renewable energy certificates in due proportion to their electricity sales and their consumption by a set date (Chapter 4 §§ 1 and 4 Act No. 2011:1200). Furthermore, the Act stipulates the conditions in which owners of renewable energy generation plants may acquire electricity certificates (Chapter 2 §§ 1-13 Act No. 2011:1200).</p>		
<b>Eligible technologies</b>	<table border="1"> <tr> <td data-bbox="698 635 1274 1284"><b>General information</b></td><td data-bbox="1274 635 2047 1284"> <p>In general, all renewable energy generation technologies are eligible for the quota system (Chapter 1 § 2 No. 2 Act No. 2011:1200).</p> <p>The following conditions apply to all renewable energy generation technologies except hydro-power plants:</p> <p>If a plant's electricity output has been increased following an investment that took place after 2006, only the additional output is eligible (Chapter 2 § 8 Act No. 2011:1200).</p> <p>Electricity certificates may be awarded for energy generation from existing plants for which certificates were issued before only if the plant was extensively renovated or other investments were made in the plant that give reason to consider it a new facility (Chapter 2 § 9 Act No. 2011:1200). The requirements for such investments are specified in § 7 Regulation No. 2011:1480.</p> </td></tr> </table>	<b>General information</b>	<p>In general, all renewable energy generation technologies are eligible for the quota system (Chapter 1 § 2 No. 2 Act No. 2011:1200).</p> <p>The following conditions apply to all renewable energy generation technologies except hydro-power plants:</p> <p>If a plant's electricity output has been increased following an investment that took place after 2006, only the additional output is eligible (Chapter 2 § 8 Act No. 2011:1200).</p> <p>Electricity certificates may be awarded for energy generation from existing plants for which certificates were issued before only if the plant was extensively renovated or other investments were made in the plant that give reason to consider it a new facility (Chapter 2 § 9 Act No. 2011:1200). The requirements for such investments are specified in § 7 Regulation No. 2011:1480.</p>
<b>General information</b>	<p>In general, all renewable energy generation technologies are eligible for the quota system (Chapter 1 § 2 No. 2 Act No. 2011:1200).</p> <p>The following conditions apply to all renewable energy generation technologies except hydro-power plants:</p> <p>If a plant's electricity output has been increased following an investment that took place after 2006, only the additional output is eligible (Chapter 2 § 8 Act No. 2011:1200).</p> <p>Electricity certificates may be awarded for energy generation from existing plants for which certificates were issued before only if the plant was extensively renovated or other investments were made in the plant that give reason to consider it a new facility (Chapter 2 § 9 Act No. 2011:1200). The requirements for such investments are specified in § 7 Regulation No. 2011:1480.</p>		

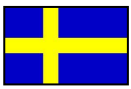


	<b>Wind energy</b>	Eligible (Chapter 1 § 2 No. 2 Act No. 2011:1200).
	<b>Solar energy</b>	Eligible (Chapter 1 § 2 No. 2 Act No. 2011:1200).
	<b>Geothermal energy</b>	Eligible (Chapter 1 § 2 No. 2 Act No. 2011:1200).
	<b>Biogas</b>	Eligible (Chapter 1 § 2 No. 2 Act No. 2011:1200; § 2 Regulation No. 2011:1480).
	<b>Hydro-power</b>	<ul style="list-style-type: none"> <li>Electricity from wave energy is fully eligible (Chapter 1 § 2 No. 2 Act No. 2011:1200).</li> <li>Other forms of hydro-electricity are eligible only if generated by plants which <ul style="list-style-type: none"> <li>were commissioned after 2002,</li> <li>were in operation on 1 May 2003 and have a capacity of no more than 1500 kW, or</li> <li>were taken out of operation before 1 July 2001 and were recommissioned after 2002 after major reconstructions or other investments so that the plant may be considered new (Chapter 2 § 5 1 Act No. 2011:1200)</li> <li>For existing plants with a capacity exceeding 1,500 kW, whose capacity was upgraded with an investment that took place after 30 April 2003. Only the additional output is eligible (Chapter 2 §§ 5 and 8 Act No. 2011:1200).</li> </ul> </li> <li>Plants not covered by these definitions may qualify only if changes in the legal framework have made their profitable operation impossible, or if they have a capacity of 15 MW or less and have become unprofitable after renewal (Chapter 2 § 6 Act No. 2011:1200).</li> </ul>





	Biomass	Eligible (Chapter 1 § 2 No. 2 Act No. 2011:1200; § 2 Regulation No. 2011:1480).																																							
Amount	Amount of quota and period of application	The quotas for the period from 2012 to 2035 have been set as follows (Chapter 4 § 4 Act No. 2011:1200):																																							
		Obligation period	Quota obligation per MWh of electricity sold or consumed	2012	0.179	2013	0.135	2014	0.142	2015	0.143	2016	0.144	2017	0.152	2018	0.168	2019	0.181	2020	0.195	2021	0.190	2022	0.180	2023	0.170	2024	0.161	2025	0.149	2026	0.137	2027	0.124	2028	0.107	2029	0.092	2030	0.076
		Obligation period	Quota obligation per MWh of electricity sold or consumed																																						
		2012	0.179																																						
		2013	0.135																																						
		2014	0.142																																						
		2015	0.143																																						
		2016	0.144																																						
		2017	0.152																																						
		2018	0.168																																						
		2019	0.181																																						
		2020	0.195																																						
		2021	0.190																																						
		2022	0.180																																						
		2023	0.170																																						
		2024	0.161																																						
		2025	0.149																																						
		2026	0.137																																						
		2027	0.124																																						
		2028	0.107																																						
2029	0.092																																								
2030	0.076																																								



		2031	0.061
		2032	0.045
		2033	0.028
		2034	0.012
		2035	0.008
	Adjustment of quotas	The procedure for changing the quota levels is not defined by law. For this reason, it will be necessary to amend the act governing the quota obligation.	
	Number of certificates according to technology	One certificate is issued for every MWh of electricity produced, regardless of the generation technology employed (Chapter 3 § 2 Act No. 2011:1200).	
	Minimum price per certificate		
Fees and penalty charges	Quota obligation fine. Obligated persons that fail to satisfy their quota obligation shall pay a quota obligation fine. Each certificate not invalidated carries a fine of 150% of the weighed, average certificate value during the applicable obligation period (Chapter 6 § 1 Act No. 2011:1200).		
Yearly Average Certificate Price	According to the Swedish Energy Agency, the average price per certificate (per MWh) was 206.45 kronor (approx. € 23.20) in the period from 1 April 2011 until 31 March 2012.		
Eligibility period	Solar and geothermal plants commissioned prior to 1st May 2003 will become ineligible at the end of 2012 (Chapter 2 § 7 no. 1 Act No. 2011:1200); Certain plants using wind or hydro energy, biogas or biomass and commissioned prior to 1 May		



	<p>2003 will become ineligible at the end of 2012 or 2014 (Chapter 2 § 7 no. 1 Act No. 2011:1200).</p> <p>The eligibility of plants commissioned after this date will end after 15 years of support (Chapter 2 § 7 Act No. 2011:1200). In any case, eligibility will cease at the end of 2035 at the latest (Chapter 2 § 11 no. 2 Act No. 2011:1200).</p>	
<b>International applicability</b>	<b>International certificate trade</b>	According to the Swedish Energy Agency, Sweden and Norway introduced a common electricity certificate market on 1 January 2012. The producers of RES electricity receive certificates in their own country. These certificates can be traded on both the Swedish and Norwegian markets (Chapter 1 § 5 Act No. 2011:1200).
	<b>Flexibility Mechanism</b>	
<b>Addressees</b>	<p>The quota obligation applies to</p> <ul style="list-style-type: none"> <li>• companies supplying electricity to the consumers,</li> <li>• electricity consumers who use electricity they have produced. The electricity consumed must exceed 60 MWh per year and have been produced in a plant with an installed capacity of more than 50 kW.</li> <li>• electricity consumers, for electricity they imported from or purchased on the Nordic electricity market, and</li> <li>• registered energy-intensive companies</li> </ul> <p>(Chapter 4 § 1 Act No. 2011:1200).</p>	
<b>Procedure</b>	<b>Process flow</b>	<ul style="list-style-type: none"> <li>• <b>Issue of electricity certificates.</b> <ul style="list-style-type: none"> <li>○ Applications must be directed to the supervising authority (Chapter 2 § 1 Act No. 2011:1200).</li> <li>○ The supervising authority authorises the plant (Chapter 2 § 1 Act No. 2011:1200).</li> <li>○ The electricity is measured and reported to the account management authority (Chapter 2 § 3 Act No. 2011:1200).</li> <li>○ The account management authority assigns</li> </ul> </li> </ul>



		<p>electricity certificates (Chapter 3 § 2 Act No. 2011:1200).</p> <ul style="list-style-type: none"> <li>• <b>Calculation of quota obligation.</b> <ul style="list-style-type: none"> <li>○ Those obliged to satisfy a quota shall register with the supervising authority (Chapter 4 § 6 Act No. 2011:1200).</li> <li>○ Until 1 March each year, the obligated persons shall declare to the supervising authority the electricity sold. This quantity will be the basis for calculating the quota obligation (Chapter 4 § 3 Act No. 2011:1200)</li> <li>○ The obligated parties shall, by 1 April, possess the defined amount of electricity certificates to be invalidated (Chapter 4 § 2 Act No. 2011:1200).</li> <li>○ The account management authority invalidates the electricity certificates (Chapter 4 § 10 Act No. 2011:1200).</li> </ul> </li> <li>• <b>Quota obligation fine.</b> If a producer fails to satisfy his quota obligation, he shall pay a fine (Chapter 6 § 1 Act No. 2011:1200).</li> <li>• <b>Obligation to pay a fee.</b> The registration and transfer of a certificate to the account management authority is subject to a fee (Chapter 6 § 7 Act No. 2011:1200).</li> <li>• <b>Appeal.</b> Appeals shall be made only against the above-mentioned measures, which are carried out by the supervising and monitoring authorities. Appeals shall be lodged with the general administrative court (Chapter 8 §§ 1-4 Act No. 2011:1200).</li> </ul>
	Competent authority	The authorities in charge of the quota system are the Swedish Energy Agency, which monitors the procedure, and the Swedish transmission grid operator (svenska kraftnät), which manages the certificate



		accounts (§ 3 Regulation No. 2011:1480).
Distribution of costs	<b>State</b>	
	<b>Consumers</b>	According to the Energy Agency, the costs are borne by the consumers.
	<b>Plant operator</b>	
	<b>Grid operator</b>	
	<b>European Union</b>	
	<b>Distribution mechanism</b>	According to the Energy Agency, electricity suppliers pass on the costs arising from the quota obligation to the consumers by adding a surcharge to their services. Since the introduction of the Swedish-Norwegian common certificate market, the costs of the quota obligation have been shared by the electricity consumers in both countries.



### Tax regulation mechanisms I (Reduced real estate tax)

<b>Abbreviated form of legal source(s)</b>	<ul style="list-style-type: none"> <li>Act No. 1984:1052</li> </ul>	
<b>Summary</b>	<p>Owners of power stations or, under certain conditions, owners of land on which a power plant is located shall pay an annual real estate tax depending on the value of the power plant (§§ 1, 3 par. 1 d) Act No. 1984:1052). This real estate tax does not differ for renewable and fossil energy sources, except for wind energy, which is subject to a reduced tax payment, and hydro-electricity, which is subject to a higher tax rate (§ 3 par. 1 d), e) and f) Act No. 1984:1052).</p>	
<b>Eligible technologies</b>	<b>General information</b>	Tax privileges are granted to wind power only; hydro-electricity is subject to an increased tax rate (§ 3 par. 1 e) and f) Act No. 1984:1052).
	<b>Wind energy</b>	Eligible (§ 3 par. 1 f) Act No. 1984/1052).
	<b>Solar energy</b>	
	<b>Geothermal energy</b>	
	<b>Biogas</b>	
	<b>Hydro-power</b>	
	<b>Biomass</b>	
<b>Amount</b>	<p>Plots on which a power plant is located are subject to a real estate tax of</p> <ul style="list-style-type: none"> <li>0.5 % of the value of the plant if the electricity is generated from renewable or fossil energy sources (§ 3 par. 1 d) Act No. 1984:1052).</li> </ul>	



	<ul style="list-style-type: none"> <li>0.2 % of the value of the plant if the electricity is generated from wind energy (§ 3 par. 1 f) Act No. 1984/1052).</li> <li>2.8 % of the value of a hydro-electric power station (§ 3 par. 1 e) Act No. 1984:1052).</li> </ul>	
<b>Addressees</b>	Every person subject to real estate tax shall be entitled, if he/she owns a piece of land on which a wind power plant is located (§§ 2, 3 par. 1 f) Act No. 1984/1052).	
<b>Procedure</b>	<b>Process flow</b>	
	<b>Competent authority</b>	
<b>Flexibility Mechanism</b>		
<b>Distribution of costs</b>	<b>State</b>	As the state levies the real estate tax, it bears the costs arising from the tax privileges (§ 8 Act No. 1984:1052).
	<b>Consumers</b>	
	<b>Plant operator</b>	
	<b>Grid operator</b>	
	<b>European Union</b>	
	<b>Distribution mechanism</b>	



### Tax regulation mechanisms II (Energy tax reduction)

<b>Abbreviated form of legal source(s)</b>	Act No. 1994:1776	
<b>Summary</b>	The state of Sweden levies a tax on the consumption of electricity; the persons liable to this tax are commercial electricity producers and suppliers (Chapters 11 §§ 1, 5 Act No. 1994:1776). Wind energy is not subject to this tax if it was generated by a non-commercial producer/ delivered by a non-commercial supplier (Chapter 11 § 2 No. 1 Act No. 1994:1776).	
<b>Eligible technologies</b>	<b>General information</b>	Only electricity from wind energy is eligible for tax privileges.
	<b>Wind energy</b>	Eligible.
	<b>Solar energy</b>	
	<b>Geothermal energy</b>	
	<b>Biogas</b>	
	<b>Hydro-power</b>	
	<b>Biomass</b>	
<b>Amount</b>	<p>The energy tax is 0.5 öre per kilowatt hour (€ct 0.05 per kWh) (industrial use), 18.5 öre per kilowatt hour (€ct 2 per kWh) (rate for certain municipalities) or 28 öre per kilowatt hour (€ct 3 per kWh) (all other consumers) (Chapter 11 § 3 par. 1 Act No. 1994:1776). As of 2011, the tax rates are multiplied by a factor based on the difference between the applicable electricity price and the price as of June 2009 (Chapter 11 § 3 par. 2 Act No. 1994/1776).</p> <p>The non-commercial supply of electricity from wind energy is exempt from the tax (Chapter 11 § 2 no. 1 Act No. 1994:1776).</p>	





<b>Addressees</b>	Every producer that supplies electricity on a non-commercial basis is eligible for tax exemption (Chapter 11 § 2 Act No. 1994:1776).	
<b>Procedure</b>	<b>Process flow</b>	
	<b>Competent authority</b>	
<b>Flexibility Mechanism</b>		
<b>Distribution of costs</b>	<b>State</b>	As the state levies the energy tax, it bears the costs arising from the tax privileges (Chapter 1 § 1 Act No. 1994:1776).
	<b>Consumers</b>	
	<b>Plant operator</b>	
	<b>Grid operator</b>	
	<b>European Union</b>	
	<b>Distribution mechanism</b>	



## RES-E grid issues

### Overview

<b>Overview of grid issues</b>	In Sweden, access of electricity from renewable sources to the grid is subject to the general provisions laid down in the Electricity Act. According to these statutory provisions, the grid operator shall hold a licence, which obliges him to connect electricity generation systems to the grid, transmit electricity and expand the grid. Renewable energy is not given priority.
<b>Connection to the grid</b>	The grid operator is statutorily obliged to connect electricity generation plants to the grid. Electricity from renewable sources is not given priority.
<b>Use of the grid</b>	Plant operators are statutorily entitled against the grid operator to use the grid. Electricity from renewable sources is not given priority.
<b>Grid expansion</b>	The grid operator is statutorily obliged to expand the grids; however, the plant operators are not entitled to an expansion. Electricity from renewable energy sources is not given priority.
<b>Statutory provisions</b>	<ul style="list-style-type: none"><li>• Electricity Act</li></ul>



### Basic information on legal sources

<b>Name of legal source</b> (original language)	Ellag (1997:857)		
<b>Full name</b>			
<b>Name (English)</b>	Swedish Electricity Act		
<b>Abbreviated form</b>	Electricity Act		
<b>Entry into force</b>	01.01.1998		
<b>Last amended on</b>	01.10.2012		
<b>Future amendments</b>			
<b>Purpose</b>	This Act establishes provisions for electricity generation plants		
<b>Relevance for renewable energy</b>	The Act regulates the connection of renewable electricity plants, the distribution of electricity from renewable sources and the obligation to expand the grid.		



Link to full text of legal source (original language)	<a href="http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Ellag-1997857_sfs-1997-857/">http://www.riksdagen.se/sv/Dokument - Lagar/Lagar/Svenskforfattningssamlin g/Ellag-1997857_sfs-1997-857/</a>		
Link to full text of legal source (English)	<a href="http://www.energimarknadsinspektionen.se/upload/ENGLISH/Electricity_Act.pdf">http://www.energimarknadsinspektionen .se/upload/ENGLISH/Electricity_Act.pdf</a>  Please note: The English translation does not provide information on the latest amendment of the Act.		

Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Svenska Kraftnät – Grid operator	<a href="http://www.svk.se">http://www.svk.se</a>		+ 46 8 475 80 00	<a href="mailto:registrator@svk.se">registrator@svk.se</a>
Energimarknadsinspektionen (EMI) – Energy Markets Inspectorate	<a href="http://www.energimarknadsinspektionen.se">http://www.energimarknadsinspektionen.se</a>		+46 16 16 27 00	<a href="mailto:registrator@ei.se">registrator@ei.se</a>



## Grid issues

### Connection to the grid

<b>Abbreviated form of legal sources</b>	<ul style="list-style-type: none"> <li>Electricity Act</li> </ul>	
<b>Overview</b>	The holder of a "line network concession" (i.e. the grid operator) is obliged to connect renewable energy plants on reasonable terms unless there are special reasons (Chapter 3 § 6 par. 1; § 7 par. 1 Electricity Act).	
<b>Procedure</b>	<b>Process flow</b>	<p>The detailed procedure is set out in the Grid Code.</p> <p>Applicants have to submit an application for connection to the grid operator (Chapter 4 § 12 Electricity Act). Both parties then sign a grid connection agreement.</p> <p>Disputes about the grid operator's obligation are settled by the Inspectorate upon request (Chapter 3 § 6 par. 2; § 7 par. 2 Electricity Act).</p>
	<b>Deadlines</b>	The holder of a line network concession (i.e. the grid operator) is obliged to deal with applications for connection within a reasonable period of time (Chapter 4 § 11 Electricity Act). Furthermore, he shall develop a roadmap for the implementation of grid connection (Chapter 4 § 12 Electricity Act).
	<b>Obligation to inform</b>	The holder of a line network concession (i.e. the grid operator) is obliged to provide all information on his network tariff (including the terms and conditions for connection) on request within a reasonable period of time (Chapter 4 § 11 par. 1 and 2 Electricity Act).
<b>Priority to renewable energy</b>	( ) Priority to renewable energy	Renewable energy is not given priority. Plants shall be connected to the grid without certain plant operators being discriminated against (Chapter 3 § 6 par. 1; § 7 par. 1



<b>(qualitative criteria)</b>	(X) Non-discrimination	Electricity Act).
<b>Capacity limits</b> <b>(quantitative criteria)</b>	According to the Swedish Energy Markets Inspectorate, the grid operator is not obliged to connect plants to the grid if grid capacity is insufficient. This is one of the above-mentioned reasons for which the obligation to connect plants may be waived.	
<b>Distribution of costs</b>		
	<b>State</b>	
	<b>Consumers</b>	
	<b>Grid operator</b>	
	<b>Plant operator</b>	The plant operator bears the costs of connection by paying the so-called network tariff (Chapter 4 § 1 and Chapter 1 § 5 Electricity Act).
	<b>European Union</b>	
	<b>Distribution mechanism</b>	



### Use of the grid

<b>Abbreviated form of legal sources</b>	<ul style="list-style-type: none"> <li>Electricity Act</li> </ul>	
<b>Overview</b>	The holder of a line network concession (i.e. the grid operator) is obliged to transmit electricity on reasonable terms (Chapter 3 § 9 par. 1 Electricity Act).	
<b>Procedure</b>	<b>Procedure</b>	
	<b>Deadlines</b>	
	<b>Obligation to inform</b>	The holder of a line network concession (i.e. the grid operator) is obliged to publish all information on his network tariff (including the terms and conditions of use of the grid) (Chapter 4 § 11 par. 3 Electricity Act).
<b>Priority to renewable energy</b>  <b>(qualitative criteria)</b>	( ) Priority to renewable energy  (X) Non-discrimination	Renewable energy is not given priority. The conditions and fees for use of the grid shall be non-discriminatory (Chapter 1 § 5 in connection with Chapter 4 § 1 par. 2 Electricity Act).
<b>Curtailment</b>	The Swedish transmission grid operator Svenska Kraftnät may request a plant operator to increase or reduce the output of a plant to guarantee grid stability (Chapter 8 § 2 par. 1 Electricity Act). If a plant operator has to reduce the output of a plant, he will be compensated for the market value of the electricity (Chapter 8 § 2 par. 1 Electricity Act). If output reduction proves to be inefficient, the transmission grid operator may request the grid operator to interrupt the transmission of electricity to the electricity consumers.	
<b>Distribution of costs</b>		
	<b>State</b>	





	<b>Consumers</b>	
	<b>Grid operator</b>	
	<b>Plant operator</b>	<p>The costs arising from the use of the grids for the transmission of electricity from renewable sources are borne by the plant operators, who are obliged to pay the so-called network tariff (Chapter 4 § 1 and Chapter 1 § 5 Electricity Act).</p> <p>Plants generating less than 1.5 MW are subject to a reduced tariff (Chapter 4 § 10 par. 1 Electricity Act).</p>
	<b>European Union</b>	
	<b>Distribution mechanism</b>	



Grid expansion

<b>Abbreviated form of legal source</b>	Electricity Act	
<b>Overview</b>	<p>In general, the grid operator is obliged to upgrade his grid if necessary (Chapter 3 § 1 Electricity Act).</p> <p>There is no law obliging the grid operator to extend the grid. However, such obligation may derive from the plant operator's entitlement to connection to the grid.</p>	
<b>Procedure</b>	<b>Procedure</b>	
	<b>Enforcement of claims</b>	A plant operator's entitlement to connection to the grid (Chapter 3 § 6 par. 1 Electricity Act) may give him the right to claim the extension of the grid from the grid operator.
	<b>Deadlines</b>	
	<b>Obligation to inform</b>	
<b>Regulatory incentives for grid expansion and innovation</b>	At the moment, there are no regulatory instruments to encourage grid development.	
<b>Distribution of costs</b>		
	<b>State</b>	
	<b>Consumers</b>	
	<b>Grid operator</b>	



	<b>Plant operator</b>	According to the Energy Markets Inspectorate, the plant operator in question bears the costs of a grid expansion if the expansion is only to his benefit.
	<b>European Union</b>	
	<b>Distribution mechanism</b>	
<b>Grid studies</b>	There are several types of grid development studies in Sweden, for example by Energy Sweden, the Wind Power Association, the TSO or the Energy Market Inspectorate.	



## RES-H&C support schemes

### Summary of support schemes

<b>Overview</b>	In Sweden, tax exemptions are the main incentives to support renewable heating.
<b>Summary of support schemes</b>	<ul style="list-style-type: none"><li>• Tax reductions for households. Act No. 2009:194 sets rules for the tax-deduction of RES-related installation works in households. The installation of renewable energy devices and the replacement of conventional heating sources with renewable ones may be deducted from tax.</li><li>• Energy and carbon dioxide taxes. In Sweden, energy and carbon dioxide taxes are levied on the supply, import and production of fossil fuels for heating purposes. Renewable energy sources are exempt from these taxes.</li><li>• Nitrous oxide tax. The producers of heat are obliged to pay a tax according to their nitrous oxide emissions. Heat producers using renewable energy sources are exempt from this obligation.</li></ul>
<b>Technologies</b>	All renewable energy technologies are exempt from the tax obligations.
<b>Statutory provisions</b>	<ul style="list-style-type: none"><li>• Act No. 2009:194 (Lag om förfarandet vid skattereduktion för hushållsarbete - Act on the Tax-Deduction Process for Installation Works in Households)</li><li>• Act No. 1994:1776 (Lag om skatt på energy - Act on the Energy Tax)</li><li>• Act No. 1990:613 (Lag om miljöavgift på utsläpp av kväveoxider vid energiproduktion - Act on Environmental Charges on Nitrous Oxide Emissions from Energy Generation)</li></ul>

**Basic information on legal sources**

<b>Name of legal source (original language)</b>	Lag (2009:194) om förfarandet vid skattereduktion för hushållsarbete	Lag (1994:1776) om skatt på energy	Lag (1990:613) om miljöavgift på utsläpp av kväveoxider vid energiproduktion
<b>Full name</b>			
<b>Name (English)</b>	Act (2009:194) on the Tax-Deduction Process for Installation Works in Households	Act (1994:1776) on the Energy Tax	Act (1990:613) on Environmental Charges on Nitrous Oxide Emissions from Energy Generation
<b>Abbreviated form</b>	Act No. 2009:194	Act No. 1994:1776	Act No. 1990:613
<b>Entry into force</b>	01.07.2009	01.01.1995	01.01.1992
<b>Last amended on</b>	01.01.2012	01.01.2012	01.01.2012
<b>Future amendments</b>			
<b>Purpose</b>	This act sets out rules for the tax deduction of installation works in households.	This act introduces a tax on energy consumption.	The act introduces a nitrous oxide tax.
<b>Relevance for renewable energy</b>	Among other measures, the purchase of small RES installations is eligible for the tax reduction.	Tax privileges for heating from renewable sources.	Tax privileges for heating from renewable sources.



Link to full text of legal source (original language)	<a href="http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-2009194-om-forfarandet-sfs-2009-194/">http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-2009194-om-forfarandet-sfs-2009-194/</a>	<a href="http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-19941776-om-skatt-pa-en-sfs-1994-1776/">http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-19941776-om-skatt-pa-en-sfs-1994-1776/</a>	<a href="http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-1990613-om-miljoavgift-sfs-1990-613/?bet=1990:613">http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-1990613-om-miljoavgift-sfs-1990-613/?bet=1990:613</a>
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)
Energimyndigheten – Swedish Energy Agency	<a href="http://www.energimyndigheten.se">http://www.energimyndigheten.se</a>		+46 165 442 000	<a href="mailto:registrator@energimyndigheten.se">registrator@energimyndigheten.se</a>
Boverket – Swedish National Board of Housing, Building and Planning	<a href="http://www.boverket.se">http://www.boverket.se</a>		+46 455 353 000	<a href="mailto:registraturen@boverket.se">registraturen@boverket.se</a>
Naturvårdsverket – Swedish Environmental Protection Agency	<a href="http://www.naturvardsverket.se/">http://www.naturvardsverket.se/</a>		+46 10 698 10 00	<a href="mailto:registrator@swedishepa.se">registrator@swedishepa.se</a>
Skatteverket – Swedish Tax Authority	<a href="http://www.skatteverket.se/">http://www.skatteverket.se/</a>		+46 771 567 567	

Support schemesTax regulation mechanism (Tax reductions for household works)

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> <li>Act No. 2009:194</li> </ul>	
Summary	<p>Act No. 2009:194 establishes rules for the income tax deduction of installation works in households. Eligible measures are the installation of renewable energy devices and the replacement of conventional heating sources with renewable ones.</p> <p>Only the labour costs are deductible. The costs of materials and other expenses related to the installation are not eligible.</p> <p>There are two possible ways to benefit from the reduction. The person commissioning eligible installation works may deduce the eligible costs from his/her income tax at the beginning of the following year or he/she can apply for a provisional tax credit that the tax authority pays before the costs have to be covered. In the latter procedure, the amount of reduction paid will be offset against the income tax the eligible person has to pay at the beginning of the following year.</p>	
Eligible technologies	General information	<p>The website of the tax authority (Skatteverket) provides a list of examples of eligible installation works (<a href="http://www.skatteverket.se/privat/skatter/fastigheterbostad/husarbete/exempelparotarbete.4.58a1634211f85df4dce80009465.html">http://www.skatteverket.se/privat/skatter/fastigheterbostad/husarbete/exempelparotarbete.4.58a1634211f85df4dce80009465.html</a>).</p> <p>As for heating from renewable energy sources, only heat pumps and solar panels are eligible.</p>
	Aerothermal	<p>The installation or replacement of a heat pump is eligible for the tax allowance.</p>
	Hydrothermal	<p>The installation or replacement of heat pumps is eligible for the tax allowance.</p>





	<b>Biogas</b>	
	<b>Biomass</b>	
	<b>Geothermal energy</b>	The installation or replacement of a heat pump is eligible for the tax allowance.
	<b>Solar Thermal</b>	The installation of or the replacement of conventional heating installations with solar panels is eligible for the tax allowance.
<b>Amount</b>	The amount of the tax reduction shall not exceed SEK 50 000 per year (approx. € 5,630) (§§ 7 and 17 Act No. 2009:194).	
<b>Addressees</b>	According to the tax authority, the person eligible for the tax reduction must reside in the house where the work was conducted or must own it as a summer cottage. Work at the house of a claimant's parents is also deductible as long as the claimant actually paid for the work conducted. In order to receive provisional tax credit, the claimant has to fully or partially own the house where his/her parents live.	
<b>Procedure</b>	<b>Process flow</b>	<p>Tax reduction may be claimed in two ways:</p> <ul style="list-style-type: none"> <li>• In order to benefit from the regular tax allowance, <ul style="list-style-type: none"> <li>• the claimant has to make a request for the allowance to the tax authority in writing by 31 January of the year following the tax year in which the work was paid for (§ 8 Act No. 2009:194).</li> <li>• The tax authority shall, without delay, decide on whether or not tax reduction is granted (§ 11 Act No. 2009:194).</li> </ul> </li> <li>• In case of preliminary tax credit, the person who has commissioned the installation works must apply for the pre-payment of the tax credit to the tax authority. The authority</li> </ul>



		<p>then pays the credit. If afterwards the tax authority decides that the preliminary payment was too high, the recipient of the credit must pay back the surplus amount (§ 17 Act No. 2009:194).</p> <p>In both cases, the installation works must have been completed and the labour costs must have been paid prior to application for tax allowance/credit (§ 8 Act No. 2009:194).</p>
	<b>Competent authority</b>	Tax authority (Skatteverket)
<b>Flexibility Mechanism</b>		
<b>Distribution of costs</b>	<b>State</b>	The costs of the tax allowance scheme are borne by the state.
	<b>Consumers</b>	
	<b>Plant operator</b>	
	<b>Grid operator</b>	
	<b>European Union</b>	
	<b>Distribution mechanism</b>	



### Tax regulation mechanism (Energy tax)

<b>Abbreviated form of legal source(s)</b>	<ul style="list-style-type: none"> <li>Act No. 1994:1776</li> </ul>	
<b>Summary</b>	<p>In Sweden, energy and carbon dioxide taxes are levied on the supply, import and generation of fossil fuels for heating purposes. Renewable energy sources are exempt from these taxes, as they are not specified in the list of taxable energy sources.</p>	
<b>Eligible technologies</b>	<b>General information</b>	<p>All renewable energy generation technologies are eligible for tax exemption, as they are not specified in the extensive list of fuels which are subject to the energy and/or carbon dioxide taxes (Chapter 2 § 1 Act No. 1994:1776). Biomass is explicitly excluded from the tax (Chapter 2 § 12 Act No. 1994:1776).</p>
	<b>Aerothermal</b>	Eligible
	<b>Hydrothermal</b>	Eligible
	<b>Biogas</b>	Eligible
	<b>Biomass</b>	Eligible
	<b>Geothermal energy</b>	Eligible
	<b>Solar Thermal</b>	Eligible
<b>Amount</b>	<p>The amount of subsidy is equal to the amount of taxes entitled persons are exempt from.</p>	



<b>Addressees</b>	Heating from renewable sources is exempt from these taxes. Suppliers, importers and producers of renewable energy products are exempt from paying the taxes (Chapter 4 § 1 Act No. 1994:1776).	
<b>Procedure</b>	<b>Process flow</b>	
	<b>Competent authority</b>	The Swedish tax authority (Skatteverket)
<b>Flexibility Mechanism</b>		
<b>Distribution of costs</b>	<b>State</b>	The costs of tax relief are borne by the state (Chapter 1 § 1 Act No. 1994:1776).
	<b>Consumers</b>	
	<b>Plant operator</b>	
	<b>Grid operator</b>	
	<b>European Union</b>	
	<b>Distribution mechanism</b>	



**Tax regulation mechanism (Nitrous oxide tax)**

<b>Abbreviated form of legal source(s)</b>	<ul style="list-style-type: none"> <li>Act No. 1990:613</li> </ul>	
<b>Summary</b>	<p>The producers of heat are obliged to pay a tax according to their nitrogen oxide emissions (§ 1 Act No. 1990:613). Heat producers using renewable energy sources are exempt from this obligation.</p>	
<b>Eligible technologies</b>	<b>General information</b>	As renewable energy sources do not produce nitrogen oxide emissions, they are exempt from the tax.
	<b>Aerothermal</b>	Eligible
	<b>Hydrothermal</b>	Eligible
	<b>Biogas</b>	Eligible
	<b>Biomass</b>	Eligible
	<b>Geothermal energy</b>	Eligible
	<b>Solar Thermal</b>	Eligible
<b>Amount</b>	<p>The amount of subsidy is equal to the amount of taxes entitled persons are exempt from. The fee is SEK 50 per full kilogram of nitrogen oxides (§ 5 Act No. 1990:613).</p>	
<b>Addressees</b>	<p>Renewable heating is exempt from these taxes. Producers of renewable heating products are exempt from the tax (§ 4 Act No. 1990:613).</p>	



Procedure	Process flow	<ul style="list-style-type: none"> <li>The taxable event occurs when nitrogen oxides are emitted in a heat production unit (§ 4 Act No. 1990:613).</li> <li>The accounting period for the levy is the calendar year (§ 8 Act No. 1990:613).</li> <li>Persons subject to the levy must register with the Environmental Protection Agency (§ 8 Act No. 1990:613).</li> <li>The declaration must be submitted to the Environmental Protection Agency by no later than 25 January of the year following the emissions (§ 10 Act No. 1990:613).</li> <li>The levy must be paid by 1 October (§ 11 Act No. 1990:613).</li> </ul>
	Competent authority	The Swedish Environmental Protection Agency (Naturvårdsverket) (§ 6 Act No. 1990:613).
Flexibility Mechanism		
Distribution of costs	State	The costs of the tax exemptions are borne by the state (§ 1 Act No. 1990:613).
	Consumers	
	Plant operator	
	Grid operator	
	European Union	
	Distribution mechanism	



## ***RES-H&C grid issues***

### Overview

<b>Overview of grid issues</b>	According to the Energy Agency, the construction, use and development of district heating infrastructure in Sweden is not regulated by law. The Act on District Heating establishes rules for the operation of district heating networks, for example on the pricing of heat. It also sets out provisions on the connection of heating plants to the heating network.
<b>Connection to the grid</b>	Companies operating a district heating network are obliged to negotiate terms with the operator of a heating plant prior to connecting the plant to the network. Yet, this obligation does not imply that the companies are obliged to connect plants to their networks.
<b>Use of the grid</b>	
<b>Grid development</b>	
<b>Statutory provisions</b>	<ul style="list-style-type: none"><li>• Act No. 2008:263 (Fjärrvärmelag – Act on District Heating)</li></ul>



### Basic information on legal sources

Name of legal source (original language)	Fjärrvärmelag (2008:263)		
Full name			
Name (English)	Act on District Heating		
Abbreviated form	Act No. 2008:263		
Entry into force	01.07.2008		
Last amended on	01.01.2012		
Future amendments			
Purpose	The Act sets out rules on the operation of district heating networks.		
Relevance for renewable energy			
Link to full text of legal source (original language)	<a href="http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Fjarrvarmelag-2008263_sfs-2008-263/">http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Fjarrvarmelag-2008263_sfs-2008-263/</a>		
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)
<b>Energimyndigheten – Swedish Energy Agency</b>	<a href="http://www.energimyndigheten.se">http://www.energimyndigheten.se</a>		+46 165 442 000	<a href="mailto:registrator@energimyndigheten.se">registrator@energimyndigheten.se</a>
<b>Svensk Fjärrvärme – Swedish District Heating Association</b>	<a href="http://www.svenskfjarrvarme.se/">http://www.svenskfjarrvarme.se/</a>		+46 8 677 25 50	<a href="mailto:kontakt@svenskfjarrvarme.se">kontakt@svenskfjarrvarme.se</a>



## Grid issues

### Connection to the grid

Abbreviated form of legal sources	<ul style="list-style-type: none"> <li>Act No. 2008:263</li> </ul>	
Overview	<p>Companies operating a district heating network are obliged to negotiate terms with the operator of a heat generation plant prior to connecting the plant to the network. This obligation, however, does not imply that the companies are obliged to connect plants to their networks (§ 37 Act No. 2008:263).</p>	
Procedure	Process flow	<p>An operator of a heat generation plant who wants to connect his plant to a district heating network in order to sell his heat to a district heating operator or use the network to distribute heat has to apply to a district heating company. The company is obliged to negotiate terms with the plant operator prior to the connection of the plant to the network (§ 37 Act No. 2008:263).</p>
	Deadlines	
	Obligation to inform	<p>If no agreement on network access can be reached, the district heating company is obliged to give reasons for denying access (§ 37 Act No. 2008:263).</p>
Priority to renewable energy (qualitative criteria)	<input type="checkbox"/> Priority to renewable energy <input type="checkbox"/> Non-discrimination	
Capacity limits (quantitative criteria)		
Distribution of costs		



	<b>State</b>	
	<b>Consumers</b>	
	<b>Grid operator</b>	
	<b>Plant operator</b>	
	<b>European Union</b>	
	<b>Distribution mechanism</b>	



## RES-T support schemes

### Summary of support schemes

Overview	The main incentive for renewable energy use in transport is a tax exemption for biofuels.
Summary of support schemes	<ul style="list-style-type: none"><li>• <b>Tax regulation mechanism.</b> Companies supplying, importing and producing fossil fuels are obliged to pay energy and carbon dioxide taxes. Biofuels are exempt from these taxes.</li></ul>
Technologies	The tax regulation mechanism applies to biofuels only.
Statutory provisions	<ul style="list-style-type: none"><li>• Act No. 1994:1776 (Lag om skatt på energy Energy Tax Act)</li></ul>

**Basic information on legal sources**

<b>Name of legal source</b> (original language)	Lag (1994:1776) om skatt på energy		
<b>Full name</b>			
<b>Name (English)</b>	Energy Tax Act (1994:1776)		
<b>Abbreviated form</b>	Act No. 1994:1776		
<b>Entry into force</b>	01.01.1995		
<b>Last amended on</b>	01.01.2012		
<b>Future amendments</b>			
<b>Purpose</b>	This act introduces a tax on energy consumption.		
<b>Relevance for renewable energy</b>	Tax privileges for renewable heating.		
<b>Link to full text of legal source</b> (original language)	<a href="http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-19941776-om-skatt-pa-en_sfs-1994-1776/">http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-19941776-om-skatt-pa-en_sfs-1994-1776/</a>		



Link to full text of legal source (English)			
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Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Energimyndigheten – Swedish Energy Agency	<a href="http://www.energimyndigheten.se">http://www.energimyndigheten.se</a>		+46 165 442 000	<a href="mailto:registrator@energimyndigheten.se">registrator@energimyndigheten.se</a>
Skatteverket – Swedish Tax Authority	<a href="http://www.skatteverket.se/">http://www.skatteverket.se/</a>		+46 771 567 567	



### Support schemes

#### Tax regulation mechanism (Energy Tax)

<b>Abbreviated form of legal source(s)</b>	<ul style="list-style-type: none"> <li>Act No. 1994:1776</li> </ul>	
<b>Summary</b>	<p>In Sweden, energy and carbon dioxide taxes are levied on the supply, import and production of fossil fuels. Renewable energy sources like biofuels are exempt from these taxes, as they are not specified in the list of taxable energy sources.</p>	
<b>Eligible technologies</b>	<b>General information</b>	<p>Biofuels are eligible for tax exemption, as they are not specified in the extensive list of fuels for which the energy or carbon dioxide taxes have to be paid (Chapter 2 § 1 Act No. 1994:1776). Fuels from biomass are explicitly excluded from these taxes (Chapter 2 § 12 Act No. 1994:1776).</p>
	<b>Biofuels</b>	Eligible
	<b>Electricity</b>	
	<b>Hydrogen</b>	
<b>Amount</b>	<p>The amount of subsidy is equal to the amount of taxes eligible persons are exempt from.</p>	
<b>Addressees</b>	<p>Fuels from renewable sources are exempt from these taxes. Suppliers, importers and producers of renewable energy products are exempt from paying these taxes (Chapter 4 § 1 Act No. 1994:1776).</p>	
<b>Procedure</b>	<b>Process flow</b>	





	<b>Competent authority</b>	The Swedish tax authority (Skatteverket)
<b>Flexibility Mechanism</b>		
<b>Distribution of costs</b>	<b>State</b>	The costs of tax relief are borne by the state (Chapter 1 § 1 Act No. 1994:1776).
	<b>Consumers</b>	
	<b>Plant operator</b>	
	<b>Grid operator</b>	
	<b>European Union</b>	
	<b>Distribution mechanism</b>	



## Policies

### Summary of policies

<b>Overview</b>	The following policies aim at promoting the development, installation and use of RES-installations. There are a number of voluntary training programmes and certification schemes for RES installers and grants for research and development in the field of wind energy.
<b>Summary of policies</b>	<ul style="list-style-type: none"><li>• In general, there are a number of voluntary training programmes and certification schemes for installers of RES-plants, organised by particular associations for specific technologies.</li><li>• There is a specific programme supporting research, development and demonstration in the field of wind energy.</li></ul>
<b>Technologies</b>	
<b>Statutory provisions</b>	<ul style="list-style-type: none"><li>• Regulation No. 2003:564 (Förordning om bidrag till åtgärder för en effektiv och miljöanpassad energiförsörjning – Regulation on Grants for Measures Promoting an Effective and Environmentally Sustainable Energy Supply)</li></ul>



### Basic information on legal sources

<b>Name of legal source (original language)</b>	Förordning (2003:564) om bidrag till åtgärder för en effektiv och miljöanpassad energiförsörjning		
<b>Full name</b>			
<b>Name (English)</b>	Regulation No. 2003:564 on Grants for Measures Promoting an Effective and Environmentally Sustainable Energy Supply		
<b>Abbreviated form</b>	Regulation No. 2003:564		
<b>Entry into force</b>	01.10.2003		
<b>Last amended on</b>	01.08.2010		
<b>Future amendments</b>			
<b>Purpose</b>	The regulation sets out rules for grants for environmental sustainability projects, the purchase of technology, and development programmes prior to market entry.		
<b>Relevance for renewable energy</b>	The regulation promotes research and development in the field of wind energy.		



Link to full text of legal source (original language)	<a href="http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Forordning-2003564-om-bidra_sfs-2003-564/">http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Forordning-2003564-om-bidra_sfs-2003-564/</a>		
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)
Energimyndigheten – Swedish Energy Agency	<a href="http://www.energimyndigheten.se">http://www.energimyndigheten.se</a>		+46 165 442 000	<a href="mailto:registrator@energimyndigheten.se">registrator@energimyndigheten.se</a>
Miljödepartementet - Ministry of the Environment	<a href="http://www.regeringen.se/sb/d/1471">http://www.regeringen.se/sb/d/1471</a>		+46 8 405 10 00	

Policy categoriesTraining programmes for installers

Abbreviated form of legal source(s)	
<b>Description</b>	<p>In Sweden, the training programmes for installers are not subject to legal regulation. There are a number of voluntary training programmes with certification schemes for installers of RES installations, e.g.:</p> <ul style="list-style-type: none"><li>• Pellsam provides a voluntary 2-day training programme with a certification scheme for the installers of pellet devices;</li><li>• Svensk solenergi (Solar Energy Association of Sweden) has a voluntary certification scheme for solar heating installers;</li><li>• Gas installers (biogas) may take part in a special training and approval scheme;</li><li>• Svenska värmepumpsföreningen (SVEP) (the Swedish Heat Pump Association) provides installer training and subsequent certification.</li></ul>
<b>Addressees</b>	RES plants installers
<b>Competent authority</b>	There is no central body responsible for installer training programmes in general. The training programmes and certification schemes are organised by different institutions.
<b>Further information</b>	<p>Further information can be found on the websites of the organisations responsible for the individual courses:</p> <ul style="list-style-type: none"><li>• Pellsam: <a href="http://www.pellsam.se/">http://www.pellsam.se/</a>;</li><li>• Solar Energy Association of Sweden: <a href="http://www.svensksolenergi.se/">http://www.svensksolenergi.se/</a>;</li><li>• Swedish Heat Pump Association: <a href="http://www.svepinfo.se/">http://www.svepinfo.se/</a></li></ul>



Distribution of costs	State	
	Private Financing	In general, the trainees themselves have to bear the costs of training.
	European Union	
	Others	

Exemplary role of public authorities in accordance with Art. 13 Abs, 5 RES Directive

Abbreviated form of legal source(s)	
Description	With regard to the exemplary role of public authorities, there are several measures aiming at reducing energy demand. Apart from these energy efficiency measures, there are no policy programmes incentivising the use of RES in public authorities.
Addressees	
Competent authority	
Further information	





### RD&D Policies (Grants for research and development in the field of wind energy)

Abbreviated form of legal source(s)	<ul style="list-style-type: none"> <li>Regulation No. 2003:564</li> </ul>
Description	<p>Regulation No. 2003:564 sets out a subsidy framework for environmental sustainability projects, the purchase of technology and research and development programmes prior to market entry. The aim of this framework is to promote the efficient and sustainable use of energy and to encourage the development, procurement and introduction of more efficient energy technologies (§ 1 Regulation No. 2003:564).</p> <p>Only the following projects in the field of wind energy are eligible for grants (§ 3 Regulation No. 2003:564):</p> <ul style="list-style-type: none"> <li><b>Offshore projects</b> (no restrictions)</li> <li><b>Onshore projects</b> must be implemented close to the sea, in areas in which the average wind speed at an altitude of 71 metres is at least 6.6 m per second (§ 3 Regulation No. 2003:564).</li> </ul> <p>The amount of grant depends on the measure taken. Grants are awarded only until the funds are exhausted.</p> <ul style="list-style-type: none"> <li><b>Environmental sustainability projects:</b> Up to 40% of the eligible costs are subsidised. Eligible costs include the cost difference between a renewable energy system and a conventional system and the costs of implementation. Small and medium-sized enterprises are eligible for grants of 50% of the eligible costs. Up to 100% of the eligible costs may be refunded if the applicant can prove that he requires the grant to install the system and assures that he will not receive other investment subsidies for the very same system in future (§ 5 Regulation No. 2003:564).</li> <li><b>Technology grants</b> may amount to a maximum of 50% of the additional costs and shall not exceed a total of € 200,000 within a period of three calendar years. These limits are specified in Regulation No. 1998/2006 of the European Commission (§ 6 Regulation No. 2003:564).</li> <li><b>Development costs prior to market entry:</b> Up to 25% of the costs arising directly from the development of energy technology products may be reimbursed (§ 7 Regulation No. 2003:564). Grants are awarded until the budget is exhausted.</li> </ul>



<b>Addressees</b>	Everybody may apply for a subsidy.
<b>Competent authority</b>	The competent authority is the Swedish Energy Agency (§ 8 Regulation No. 2003:564).
<b>Further information</b>	

RES-H building obligations

Abbreviated form of legal source(s)	
Description	<p>In Sweden there is no national, regional or local legislation that requires the use of renewable heating sources in the building sector.</p> <p>The use of renewable energy in the building sector is incentivised through direct subsidies for the use of such sources and energy-saving measures in buildings.</p>
Obligated entities	
Competent authority	
Further information	
Obligation on regional level	

Support of RES-H infrastructure

Abbreviated form of legal source(s)	
Description	<p>The support of RES-H infrastructure in Sweden occurs only on the local level. The Ministry of the Environment encourages local authorities to support projects promoting the use of district heating.</p> <p>Currently there is a programme called “Delegationen för hållbara städer” – “Delegation for Sustainable Cities” – which promotes sustainable urban development through, inter alia, government funding for district heating infrastructure.</p>
Addressees	
Competent authority	
Further information	Further information is available at: <a href="http://www.hallbarastader.gov.se/">www.hallbarastader.gov.se/</a>