

Country profile –Sweden

Country: Sweden												
Support schemes	Electricity and heat production			Consumption				Transport		Supply and others		
	RES	Fossil	Nuclear	RES	Fossil	Electricity	Heat	Biofuels	Fossil	RES	Fossil	El./heat
1. Direct subsidies												
Direct on-budget subsidies	2											
Feed-in tariffs												
Feed-in premiums												
Adjustment Aids												
Inherited liabilities												
Induced transfers												
Others												
2. Fiscal measures												
Energy Tax Allowance												
Energy Tax Exemptions	6, 5			4	23, 21, 20, 16, 15, 14, 12, 11, 10, 9, 8			5	25, 24, 22, 19, 18, 17, 13	5		
Other Tax Deductions	7, 3											
Earmarked refunds of taxes												
3. Transfer of risk to government												
Adjustment Aids												
Inherited liabilities												
Others												
4. Other financial measures												
Adjustment Aids												
Other Tax Deductions												
Others												
5. Non-fiscal measures												
Quota obligations	1			1						1		
Priority Grid Access												
Others												

No.	Datasource	Description
1	RES-LEGAL	Quota system - 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).
2	RES-LEGAL	Subsidy (Grants for the installation of photovoltaic installations) - 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 2016 (§ 2 par. 3 Regulation No. 2009:689). Grants awarded under this scheme cannot be received on top of other public grants, including those of the European Union or tax reduction for labour costs (§ 2 par. 1 Regulation No. 2009:689).
3	RES-LEGAL	Tax regulation mechanisms I (Reduced real estate tax) - 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).
4	RES-LEGAL	Tax regulation mechanisms II (Energy tax reduction) - 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 is produced by someone who does not commercially supply electricity to the grid, i.e. companies or persons that generate wind power in Sweden for their own use are exempted from paying tax on the electricity production. Producers with an installed capacity of less than 100 kW are also exempted under the same condition that they are not involved in any supply activity. (Chapter 11 § 2 No. 1 Act No. 1994:1776).
5	RES-LEGAL	Tax regulation mechanism (Energy and CO ₂ -tax) - 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. Electricity use is charged energy tax (29 öre/kWh). Electricity producers do not pay energy- or CO ₂ -taxes.
6	RES-LEGAL	The nitrogen oxides charge and refund system (NO _x charge) - According to the NO _x Act the charge is to be paid for emissions of nitrogen oxides from boilers, stationary combustion engines and gas turbines with a useful energy production of at least 25 gigawatt hours (GWh) per year. The system is designed so that all revenue except the cost of administration is returned to the participating plants, in proportion to their production of useful energy. Boilers with high emissions relative to their energy output are net payers to the system, and sources with low emissions relative to energy output are net recipients. The charge is SEK 50 per kilo of emissions of nitrogen oxides.(Act No. 1990:613).
7	RES-LEGAL	Tax regulation mechanism (Tax reductions for household works) - 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. Only the labour costs are deductible. The costs of materials and other expenses related to the installation are not eligible. 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.The website of the tax authority (Skatteverket) provides a list of examples of eligible installation works.
8	OECDTADFFSS	Reduced CO ₂ -Tax Rate for District Heating Supplied to Industry. Fuels that are used for producing heat in district heating, which is then used for industrial-production processes, are subject to a lower CO ₂ -tax rate. Until the end of 2010, these fuels were granted a 79% reduction of the CO ₂ -tax rate; in 2011 this reduction was diminished to 70%. The benchmark against which this tax expenditure is calculated is the standard CO ₂ -tax rate of 1.05 SEK per kg of CO ₂ . This reduction has been declining over time and further reductions are planned: industrial consumers will be granted a 40% reduction in 2015.
9	OECDTADFFSS	Reduced Energy-Tax Rate for Fuels Used in CHP Plants. Until the end of 2010, those CHP plants that are not encompassed by the EU ETS system were granted a full energy-tax rebate for fuels that they use solely for the combined heat and power generation. In 2011, the energy-tax

		exemption was replaced by a 70% reduction in the standard tax rate on heating fuels. Companies encompassed by the EU ETS system normally don't pay CO2-Tax. But CHP plants pay 7 % CO2-tax on the portion of fossil fuel corresponding to the heat production. Other fossil heat production (not CHP) or for industry heat within the EU ETS system pay 94% of the CO2-Tax. (2012).
10	OECDTADFFSS	CO2-Tax Reduction for Energy-Intensive Companies. Fuels used for heating purposes by energy-intensive companies are granted a 24% CO2-tax reduction for that value of the CO2-tax that exceeds 1.2% of their sales value. This reduction can never imply lower CO2-tax payments than the EU-stipulated minimum. The benchmark against which this tax expenditure is calculated is the standard CO2-tax rate of SEK 1.05 per kg of CO2.
11	OECDTADFFSS	Reduced CO2-Tax Rate for Industrial Consumers Outside EU ETS. Industries outside the EU ETS are granted a reduction of the CO2-tax rate on all fossil fuels used for heating purposes. The benchmark against which this tax expenditure is calculated is the standard CO2-tax rate of 1.05 SEK per kg of CO2. This reduction has been declining through time — from 79% in 2010 to 70% in 2011 and is planned to be diminished to 40% in 2015.
12	OECDTADFFSS	Reduced Energy-Tax Rate on Heating Fuels for Industrial Consumers. Since 2011, industrial consumers, both within and outside of EU ETS, are granted a 30% reduction in the standard energy-tax rate on heating fuels. This reduction replaced a full energy-tax exemption for fossil fuels used for heating in manufacturing processes.
13	OECDTADFFSS	CO2-Tax Exemption for Diesel-Powered Trains. Diesel used as fuel in diesel-powered trains is fully exempted from the CO2-tax.
14	OECDTADFFSS	Reduced Energy-Tax Rate on Heating Fuels for Greenhouses and Agriculture. Until the end of 2010, greenhouses and the agricultural sector were granted a full energy-tax rebate for fossil fuels used for heating. The benchmark against which this tax expenditure is calculated is the energy-tax rate on heating oil. In 2011, the energy-tax exemption was replaced by a 70% reduction in the standard tax rate on heating fuels.
15	OECDTADFFSS	Specific CO2-Tax Reduction for Greenhouses and Agriculture. Fuels used for heating in the agricultural sector, forestry and aquaculture are granted a 24% CO2-tax reduction for that value of the CO2-tax that exceeds 1.2% of their sales value. This reduction can never imply lower CO2-tax payments than the EU-stipulated minimum. The benchmark against which this tax expenditure is calculated is the standard CO2-tax rate of SEK 1.05 per kg of CO2.
16	OECDTADFFSS	Reduced CO2-Tax Rate for Diesel Used by the Mining Industry. This tax expenditure was introduced in 2010. Diesel used in motorised vehicles (other than passenger cars, trucks or busses) for mining purposes is granted a 70% reduction of the CO2-tax rate on all fossil fuels used for heating purposes.
17	OECDTADFFSS	Energy-Tax Exemption for Diesel-Powered Trains
18	OECDTADFFSS	Energy-Tax Exemption for Domestic Shipping. Fuel used in commercial domestic shipping is exempted from the energy tax. The benchmark against which this tax expenditure is calculated is the energy-tax rate on gasoline in environmental class 1.
19	OECDTADFFSS	Reduced Energy-Tax Rate for Diesel used in Transport. The energy-tax rate on diesel (SEK 0.157 per kWh in 2012) is lower than the official

		benchmark for transport fuels, which is the energy-tax rate on gasoline in environmental class 1 (SEK 0.347 per kWh).
20	OECDTADFFSS	CO2-Tax Reduction for Diesel used in Agriculture and Forestry. Re payment of CO2-tax by SEK 1,7 per litre diesel.
21	OECDTADFFSS	Reduced Energy-Tax Rate on Diesel for the Mining Industry. Reduction by 86%.
22	OECDTADFFSS	CO2-Tax Exemption for Domestic Shipping
23	OECDTADFFSS	General CO2-Tax Reduction for Greenhouses and Agriculture. Reduction by 70%.
24	OECDTADFFSS	Energy-Tax Exemption for Natural Gas and LPG used in Transport. This tax expenditure reflects the fact that both natural gas and LPG used as fuel in transport are exempted from energy-tax payments. The benchmark against which this tax expenditure is calculated is the energy-tax rate on gasoline in environmental class 1.
25	OECDTADFFSS	Reduced CO2-Tax Rate for Natural Gas and LPG Used in Transport. Natural gas and LPG used in transport are subject to lower CO2-tax rates. In 2010 these fuels were granted a 41% and 48% CO2-tax rate reduction respectively. In 2011 each of these fuels was granted a 30% CO2-tax reduction. The benchmark against which this tax expenditure is calculated is the standard CO2-tax rate of SEK 1.05 per kg of CO2. This reduction has been declining over time and further reductions are planned: from a 20% reduction in 2013 to a complete phase out of this tax expenditure in 2015.