Research RES LEGAL – Support system
Country: Germany

1. Overview of support system

Overview of support system	In Germany, electricity from renewable sources is supported through a feed-in tariff. The criteria for eligibility and the tariff levels are set out in the Act on Granting Priority to Renewable Energy Sources (EEG). According to this Act, operators of renewable energy systems are statutorily entitled against the grid operator to payments for electricity exported to the grid. The EEG also introduced the so-called market premium and the flexibility premium for system operators who directly sell their electricity from renewable sources.
Support schemes	• **Feed-in tariff.** The support system is based on a feed-in tariff, which the grid operator pays to the system operators. The amount of tariff is set by law and is usually paid over a period of 20 years. • **Market premium.** As an alternative, system operators may claim a market premium for electricity they sell directly. The amount of the market premium shall be calculated each month. In general, system operators are free to choose between the regular feed-in tariff and the market premium for direct selling. Operators of biogas systems who sell their electricity directly may claim a flexibility premium on top of the market premium. For a system operator to be eligible for the flexibility premium, he shall provide additional installed capacity that may only be used on demand rather than on a regular basis.
Promoted technologies	In general, the EEG promotes all technologies used to generate electricity from renewable energy. However, capacity, location or materials used may give reason for excluding certain types of plants from the support system. The flexibility premium is available for biogas plants only.
Statutory provisions	• EEG (Renewable Energy Sources Act – general provisions on renewable energy) • BiomasseV (Biomass Ordinance – ordinance defining the term "biomass") • AusglMechV (Ausgleichsmechanismusverordnung – Ordinance on the Further Development of the Nationwide Equalisation Scheme) • SDLWindV (Systemdienstleistungsverordnung – Ordinance on System Services by Wind Energy Plants) • BioSt-NachV (Biomassestrom-Nachhaltigkeitsverordnung – Ordinance on Requirements Pertaining to Sustainable Production of Bioliquids for Electricity Production) • StromNEV (Stromnetzentgeltverordnung – Ordinance on Electricity Grid Access Charges)

2. Basic information on legal sources

Name of legal source (original language)	Gesetz für den Vorrang Erneuerbarer Energien (Erneuerbare-Energien-Gesetz)	Verordnung über die Erzeugung von Strom aus Biomasse (Biomasseverordnung)	Verordnung über die Entgelte für den Zugang zu Elektrizitätsversorgungsnetzen (Stromnetzentgeltverordnung)
Full name			
Name of legal source (English)	Act on Granting Priority to Renewable Energy Sources (Renewable Energy Sources Act)	Ordinance on the Generation of Electricity from Biomass	Ordinance on Electricity Grid Access Charges
Abbreviated form	EEG	BiomasseV	StromNEV
Entry into force	01.01.2012	28.06.2001	25.07.2005
Last amended on	01.01.2012	01.01.2012	28.07.2011
Future amendments			
Purpose	To protect the climate, the act aims to increase the proportion of electricity from renewable energy sources in total energy supply from at least 35% in 2020 to at least 80% by 2050 and to integrate these quantities of electricity in the electricity supply system (§ 1 EEG).	The ordinance specifies the conditions for the promotion of electricity from biomass.	This ordinance defines the method for calculating the charges (grid charges) for access to the electricity transmission and distribution grids as well as the charges for de-centralised electricity imports.
Relevance for Renewable Energy	This act promotes renewable energy only.	This ordinance applies to biomass only.	This ordinance grants a payment to system operators who export electricity to the grid. This payment may not be received on top of the feed-in tariff or the market premium.
Link to full text of legal source (original language)	http://www.bmu.de/files/pdfs/allgemein/application/pdf/eeg_2012_bf.pdf		http://www.gesetze-im-internet.de/stromnev/BJNR222500005.html
Link to full text of legal source (English)	http://www.erneuerbare-energien.de/files/english/pdf/application/pdf/eeg_2012_en_bf.pdf	http://www.erneuerbare-energien.de/files/erneuerbare_energien/downloads/application/pdf/electicity_biomass.	

		pdf This translation does not provide information on the latest amendment of the ordinance.	

Name of legal source (original language)	Ausgleichsmechanismusverordnung	Systemdienstleistungsverordnung	
Full name	Verordnung zur Weiterentwicklung des bundesweiten Ausgleichsmechanismus	Verordnung zu Systemdienstleistungen durch Windenergieanlagen	
Name of legal source (English)	Ordinance on the Further Development of the Nationwide Equalisation Scheme	Ordinance on System Services by Wind Energy Plants	
Abbreviated form	AusglMechV	SDLWindV	
Entry into force	17.07.2009	03.07.2009	
Last amended on	28.07.2011	25.06.2010	
Future amendments			
Purpose	Furthering the development of the nationwide equalisation scheme.	Regulating the requirements for wind energy plants as set out in § 6 par. 5 EEG, § 29 par. 2 sentence 4 EEG and § 66 par. 1 no. 8 EEG to improve grid integration and firing.	
Relevance for Renewable Energy	This ordinance amends the equalisation scheme with regard to the costs arising for the grid operators from the payment of the feed-in tariff as set out in the EEG.	This ordinance specifies the FIT eligibility requirements for wind energy and the eligibility requirements for the System Service Bonus.	
Link to full text of legal source (original language)	http://www.gesetze-im-internet.de/ausglmechv/index.html	http://www.gesetze-im-internet.de/sdlwindv/index.html	
Link to full text of legal source (English)	http://erneuerbare-energien.de/inhalt/45112/4596/ This translation does not provide information on the latest amendment.	http://erneuerbare-energien.de/inhalt/44629/43342/ This translation does not provide information on the latest amendment.	

3. Further information

Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)	http://www.bmu.de/		+49 301 830 50	service@bmu.bund.de
Federal Network Agency	http://www.bundesnetzagentur.de/		+49 228 140	
Federal Antitrust Agency (Bundeskartellamt)	http://www.bundeskartellamt.de/		+49 228 949 90	
German Energy Agency (dena)	http://www.dena.de/en/		+49 307 261 656 00	
Bundesverband Erneuerbare Energie e.V. (Renewable Energy Federation)	http://www.bee-ev.de/		+49 327 581 700	
KfW Förderbank	http://www.kfw.de/kfw/en/		+49 697 431 30 30	infocenter@kfw.de
Clearingstelle EEG (clearing house)	http://www.clearingstelle-eeg.de/		+ 49 30 206 1416 79	
Geiser & von Oppen – PartG (law firm)	http://www.gvo-anwaelte.de/	Margarete von Oppen	+49 30 31 01 92 00	office@gvo-anwaelte.de

Support schemes

4.1. Feed-in tariff *(EEG feed-in tariff)*

Abbreviated form of legal source(s)	EEG AusglMechV SDLWindV BiomasseV	
Country-specific support system	In Germany, the most important means to promote electricity from renewable sources is the feed-in tariff as set out in the EEG.	

Promoted technologies	**General information**	In general, all technologies used to generate electricity from renewable sources are eligible for feed-in tariffs (§ 16 par. 1 EEG). Eligibility also applies to electricity that was temporarily stored prior to being exported to the grid (§ 16 par. 2 EEG).
		
		System operators shall meet the following requirements in order to receive the feed-in tariff (§ 17 EEG):
		• Systems whose installed capacity exceeds 100 kW shall be equipped with technical devices with which the grid operator can, at any time, reduce output by remote means (§ 6 par. 1 no. 1, par. 2 no. 1 EEG). The operators of solar energy systems with an installed capacity of up to 30 kW shall either meet the above-mentioned requirement or limit the effective power exported to the grid to 70% of the installed capacity (§ 6 par. 2 no. 2 EEG). In addition, systems whose installed capacity exceeds 100 kW shall be equipped with technical devices with which the grid operator can retrieve information about the amount of electricity currently fed in by each system (§ 6 par. 1 no. 2 EEG).
		• The tariff level will be reduced to the actual market value of the specific energy source where
		  • a system operator has not registered his system as required by law (§ 17 par. 2 no. 1, 2 EEG). At the moment, this rule applies to solar energy systems only. A general register of installations for other renewable energy technologies has not yet been established, and it is still unclear when it will be introduced.
		  • a system operator fails to meet the obligation to export all electricity generated by his system or sold his electricity as balancing energy (§ 17 par. 2 no. 3 EEG in conjunction with § 16 par. 3 EEG).
		  • a system was installed to fulfil the function of a model public building pursuant to regional legislation, and the system is not a CHP plant (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG, in conjunction with.§ 17 par. 2 no. 4 EEG).
		  • a system operator who used to sell his electricity directly has not notified the grid operator in time of his change to the feed-in tariff scheme (§ 17 par. 3

		EEG).
	Wind energy	Both onshore and offshore generation are eligible with the following exceptions (§§ 29; 31 EEG): • **Fulfilment of technical requirements.** System operators shall make sure that the requirements stipulated in the Ordinance on System Services by Wind Energy Plants are met (§ 6 par. 5 EEG; SDLWindV). • **Offshore generation in protected areas.** Electricity is not eligible if generated by systems located in an area of environmental importance, such as systems constructed in a protected area or at a site of Community importance (§ 31 par. 5 EEG).
	Solar energy	Eligible unless one of the following circumstances is present (§§ 32; 33 EEG): • **Future production sites.** Electricity from a ground-mounted system is eligible only if the system was erected within the territorial application of a formal development plan (e.g. a local development plan). Systems erected within the territorial application of a local development plan drawn up after 1.9.2003 must be located on certain plots of land. The development plan shall have been formally adopted, i.e. adopted by the local council. This means that it is not necessary for the development plan to have come into force. Where a solar energy system is installed on a building, this building shall meet certain statutory requirements (§ 32 par. 1, par. 2 EEG). Systems in, attached to or on top of buildings are subject to special provisions (§ 33 par. 1, 3 EEG). • **Obligation to give notice.** The tariff level for electricity from a solar energy system will be reduced to the market value where a system operator fails to notify the Federal Network Agency or another competent authority of the location and the installed capacity of his system (§ 17 par. 2 no. 1 EEG).
	Geothermal energy	Eligible (§ 28 EEG).
	Biogas	Electricity from both biogas and biomethane is eligible. There are special provisions for biogas generated from the anaerobic fermentation of biowaste and from the fermentation of manure (§§ 27, 27a, 27b, 27c EEG). The following restrictions apply: • **Definition of biomass.** The substances regarded as biomass are specified in a separate ordinance (BiomasseV). • **Capacity limits.** Electricity generated by a biomass system put into operation after 31 December 2013 will be eligible only if the installed capacity does not exceed 750 kW (§§ 27 par. 3 EEG; 27a par. 2 EEG). For new systems generating electricity from biomass that was generated from anaerobic fermentation of manure, the maximum eligible capacity is 75 kW (§ 27b par. 1 no. 2 EEG). This rule has been applicable since 1 January 2012. • **Obligation to employ CHP technology or minimum percentage of manure.** Generators will receive the full tariff as specified in the EEG only if a certain percentage

		(usually 60% for biomethane plants and 100% for biowaste plants) is generated by CHP (§§ 27 par. 4 no. 1; 27 par. 5 no. 2, 27a par. 5 no. 2; Annex 2 EEG) or if the amount of manure used to produce the biogas is at least 60 mass percent (§ 27 par. 4 no. 2 EEG). Where a generator fails to meet these requirements, his tariff level will be reduced to the market price (§ 27 par. 7 EEG). • **Obligation to keep a record of substances.** Electricity will be eligible for the full tariff as specified in the EEG only if the system operator can prove which type of biomass is used by presenting a copy of a record of the substances used and provides evidence that no other substances are used (§§ 27 par. 5, 27a par. 5, 27b par. 3 no. 1 EEG). Where a generator fails to meet this requirement, his tariff level will be reduced to the market price (§ 27 par. 7 EEG). • **Technical requirements.** The system operator shall make sure that devices are used to avoid any escape of biogas (§ 6 par. 4 EEG). Where the biogas used is generated from the fermentation of biowaste, the installation for anaerobic fermentation of the biowaste shall be directly linked to a final composting facility for solid fermentation residues and the composted material shall be recovered (§ 27a par. 3 EEG). • **Electricity generation sites.** Where electricity is generated from biogas that was generated from anaerobic fermentation of manure, the electricity shall be produced at the site of the biogas generation plant (§ 27b par. 1 no. 1 EEG).
	Biomass	Eligible under the following conditions (§ 27 EEG): • **Definition of biomass.** The substances regarded as biomass are specified in a separate ordinance (BiomasseV). • **Obligation to employ CHP technology.** Electricity is eligible for the full tariff as specified in the EEG only if a certain percentage of the electricity (usually 60%) was generated from CHP (§ 27 par. 4 no. 1, Annex 2 EEG). Where a generator fails to meet this requirement, his tariff level will be reduced to the market price (§ 27 par. 7 EEG). • **Obligation to keep a record of substances.** Electricity will be eligible for the full tariff as specified in the EEG only if the system operator can prove which type of biomass is used by presenting a copy of a record of the substances used and provides evidence that no other substances are used (§ 27 par. 5 EEG). Where a generator fails to meet this requirement, his tariff level will be reduced to the market price (§ 27 par. 7 EEG). • **Liquid biomass is ineligible for the tariff.** In general, electricity is ineligible for the feed-in tariff if generated by new plants using liquid biomass. Where generated by new plants, this type of electricity is eligible only if the biomass is required as start-up, priming and supporting fuel (e.g. in dual-fuel CHP units) (§ 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 27 par. 5 no. 3 EEG).
	Hydro-electricity	Both new systems and modernised existing systems are eligible (§ 23 par. 1, par. 2 EEG). The following conditions apply (§ 23 EEG):

		• **Requirements of the Federal Water Act.** Plants on surface waters are eligible only if the use of hydropower complies with the requirements of the Federal Water Act (§ 23 par. 4 EEG). • **Building requirements.** Electricity from newly constructed ~~and modernised existing~~ hydro-electric power plants ~~whose output does not exceed 5 MW and electricity from newly constructed hydro-electric power systems whose capacity does exceed 5 MW~~ is eligible only if the plant was erected in the spatial context of a barrage weir or dam which had already existed before or was newly built primarily for purposes other than the generation of electricity from hydropower, or without complete weir coverage (§ 23 par. 5 EEG).
Amount	**General information**	The amount of tariff for a given system is the tariff level as defined by law minus the degression rate, which depends on the year in which the plant was put into operation. The current version of the EEG sets out the tariffs for 2012. However, the tariff levels for electricity from solar energy systems are not specified in the EEG. These tariff levels have not yet been set because the degression for 2012 depends on the additional capacity installed in 2011. The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety has published an overview of the tariff levels and degression rates as set out in the EEG. This overview includes examples on how these are calculated and is available at: http://www.bmu.de/files/pdfs/allgemein/application/pdf/eeg_2012_verguetungsdegression_bf.pdf (in German only). The amount of tariff differs for every source of energy (§§ 23 – 33 EEG). For some technologies there are several tariffs depending on the system capacity, the system location and the technology and raw materials used. In cases where the tariff is based on system output (e.g. photovoltaic energy, biomass), several systems shall be classified as one installation, notwithstanding ownership, and solely for the purpose of determining the tariff to be paid. For this rule to apply, the systems must be located on the same plot of land or in direct spatial proximity, generate electricity from the same kind of renewable energy source and have been commissioned within a period of twelve consecutive calendar months (§ 19 EEG). This regulation aims to prevent system operators from splitting their systems in order to avoid higher output categories. Whether several systems shall be regarded as one will be established on a case-by-case basis. **Criteria for amount of tariff.** The amount of tariff depends on the costs of constructing and operating a certain type of plant, i.e. investment costs, operational costs, the costs of measurement and the cost of capital. Costs and efficiency audits are carried out in exceptional cases only. The calculation of the tariff is based on the expected costs. This aims to guarantee the cost-effective operation of most systems.
	Wind energy	• **Onshore:** €ct 4.87 – 8.93 per kWh (according to duration of payment) + repowering

		bonus of €ct 0.5 per kWh and system service bonus of €ct 0.48 per kWh (§ 29 par 1-2; § 30 EEG). • **Offshore:** €ct 3.5 – 19 per kWh (according to duration of payment and scheme chosen by system operator)
	Solar energy	• €ct 21.11 – 28.74 per kWh (depending on energy source and system size, minus the respective degression rate as specified in § 20a EEG) (§ 32 par. 1, par. 2 EEG; § 33 par. 1 EEG). • Where the system operator uses the electricity generated himself, the tariff level will decrease by €ct 16.38 per kWh for the amount of electricity that does not exceed 30% of the electricity generated by his system in the same year. For the amount of electricity that exceeds 30% of the electricity generated by the system in the same year, the tariff level will decrease by €ct 12 per kWh (§ 33 par. 2 EEG).
	Geothermal energy	• €ct 25 per kWh plus (if applicable) • bonus for use of petrothermal technology of €ct 4 per kWh (§ 28 EEG)
	Biogas	• **Biogas from biomass:** €ct 6 – 25 per kWh (according to system size and fuel) (§§ 27, 27a, 27b EEG); • **Landfill gas:** €ct 5.89 – 8.60 per kWh (§ 24 EEG); • **Sewage gas:** €ct 5.89 – 6.79 per kWh (§ 25 EEG)
	Biomass	• €ct 6 – 14.3 per kWh (according to system size) plus (if applicable) • bonus of €ct 2.5 – 8 per kWh for use of special substances (§ 27 par. 1, 2 EEG in conjunction with BiomasseV)
	Hydro-electricity	€ct 3.4 – 12.7 per kWh (depending on system size and date of commissioning) (§ 23 par. 1-4 EEG).
Degression	**General information**	The tariff levels will decrease every year to provide an incentive to reduce costs through technological innovation. New systems will receive the tariff level applicable on the day they are put into operation. This tariff level will apply for the entire payment period, i.e. for 20 years (§ 20 EEG). Except for solar energy, the percentages by which the tariff levels will decrease every year are set by law and are not subject to change. If not otherwise stated, the first reduction will take effect in 2013.
	Wind energy	The degression is 7% for electricity from offshore systems from 2018 onwards (§ 20 par 2 no. 7a EEG) and 1.5% for other systems (§ 20 par. 2 no. 7b EEG).
	Solar energy	The degression rate is set by law and applies to a statutorily defined additional capacity ("regular degression"). When the total additional capacity installed exceeds or falls below a certain amount, the degression percentage increases or decreases by a statutorily fixed number of percentage points ("flexible cap"). The degression rate is set at 9% (§ 20a par. 2 EEG). Depending on market developments, this percentage may increase by up to 15 percentage points or decrease by up to 7.5 percentage points (§ 20a par. 2-4 EEG). If capacity growth is high, additional reductions in the tariff rates may take place every year in July (§ 20a par. 5 EEG). The tariffs applicable in the following payment period shall be published in the Federal Gazette

		on 31 October and on 30 May, respectively (§ 20a par. 6 EEG).
	Geothermal energy	The degression rate will be 5% from 2018 (§ 20 par. 2 no. 6 EEG).
	Biogas	The degression rate is 2% (§ 20 par. 2 no. 5 EEG).
	Biomass	The degression rate is 2% (§ 20 par. 2 no. 5 EEG).
	Hydro-electricity	The degression rate is 1% (§ 20 par. 2 no. 1 EEG).
Cap		
Eligibility period	The tariff payment period is usually 20 years plus the year in which the system or plant was put into operation (§ 21 EEG).	
Beneficiaries	A system operator is entitled against the grid operator to the payment of a tariff (§ 16 par. 1 EEG). A system operator is one who, irrespective of the issue of ownership, uses a system to generate electricity from renewable energy sources or from mine gas (§ 3 no. 2 EEG). Grid operators are the operators of grid systems of all voltages for general electricity supply (§ 3 no. 8 EEG).	
Procedure	**Procedure**	Statutory law does not set out a formal application process. According to the EEG, the conclusion of a contract between the grid operator and the system operator must not be made a condition for the payment of tariffs (§ 4 par. EEG).
	Competent authority	The implementation of the EEG is not managed or monitored by a special authority, as the EEG is a framework for private individuals – system operators and grid operators – rather than authorities. The Act is evaluated by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety on behalf of the Federal Government (§§ 65, 65a EEG).
Flexibility Mechanism		
Funding	**State**	
	Consumers	The costs of the feed-in tariff scheme are borne by the final consumers.
	Grid operator	
	System operator	
	Distribution mechanism	• **System operator – grid operator.** The grid operator is obliged to purchase all electricity generated by a system operator and pay the tariff set out by law (§§ 8 par. 1, § 16 par. 1 EEG). • **Grid operator – transmission system operator.** The grid operator is obliged to transfer the electricity received to the transmission system operator without undue delay (§ 34 EEG). The grid operator is entitled to the purchase of and payment for the quantity of electricity he has paid tariff for (§ 35 par. 1 EEG).

		• **Transmission system operator – transmission system operator.** The transmission system operators divide the costs resulting from the EEG equally among themselves (§ 36 par. 1-3 EEG). • **Transmission system operator – spot market.** The transmission system operators sell electricity from renewable sources on the spot market at the stock exchange price (§ 37 par. 1 EEG in conjunction with § 2 AusglMechV). • **Transmission system operator – utility companies.** The utility companies are obliged to reimburse the transmission system operators for their costs (§ 37 par. 2 EEG in conjunction with § 3 AusglMechV). • **Utility companies – final consumers.** The costs incurred are included in the electricity price and thus passed on to the final consumers via their electricity bills (§ 37 par. 2 EEG). Final consumers that are manufacturing companies or rail operators are exempt from this regulation. Their costs arising from the compensation payments as specified by the EEG may be reduced upon request ("special equalisation scheme", §§ 40 ff. EEG).

4.2. Premium tariff I *(market premium)*

Abbreviated form of legal source(s)	EEG AusglMechV SDLWindV BiomasseV StromNEV	
Country-specific support system	Instead of receiving the feed-in tariff for electricity from renewable sources, a system operator may choose to sell his electricity directly, i.e. to a third party by a supply agreement or at the stock market, and claim the so-called market premium from the grid operator. The amount of the market premium shall be calculated each month. In general, system operators are free to choose between the feed-in tariff and the market premium for direct selling. Large biogas plants put into operation after 31 December 2013 will not be eligible for a feed-in tariff.	
Promoted technologies	**General information**	In general, the market premium applies to all renewable energy generation technologies (§§ 33a par. 1, 33c, 33g EEG). The following conditions apply (§ 33g EEG): • **Actual sale of electricity.** The market premium will be paid only for electricity that has actually been exported to the grid and purchased by a third party (§ 33g par. 1 EEG). • **Shared meter.** Electricity which is metered together with electricity generated by at least one other system may only be sold directly if all electricity measured by this meter is sold directly (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 1 EEG). • **Obligation to register.** A system shall be registered as required by law (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 17 par. 2 no. 1, 2 EEG). At the moment, this rule applies to solar energy systems only, as a general register of installations has not yet been established and it is still unclear when it will be introduced. • **Public buildings.** A system is ineligible for the tariff if it was installed to fulfil the function of a model public building pursuant to regional legislation, and the system is not a CHP plant (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG, in conjunction with.§ 17 par. 2 no. 4). • **Avoided grid use charges.** System operators who have avoided grid use charges in accordance with § 18 par. 1 sentence 1 of the Ordinance on Electricity Grid Access Charges are ineligible (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG). • **Technical requirements.** Energy systems shall be equipped with technical devices that enable the grid operator to reduce output by remote means at any time (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 2 EEG

		in conjunction with § 6 par. 1 no. 1 EEG) and to retrieve the amount of electricity fed in by each system (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 2 EEG in conjunction with § 6 par. 1 no. 2 EEG). • **Measurement at quarter-hourly intervals.** The entire electricity exports of a system shall be measured and accounted for at quarter-hourly intervals (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 3 EEG). • **Accounting.** Electricity shall be accounted for in a balancing group or a sub-balancing group which only accounts for electricity that is directly sold and for which the market premium is received (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 4 EEG). • **Deadlines and obligation to report.** System operators may switch between different forms of direct selling or between direct selling and the feed-in tariff scheme only on the first calendar day of every month and shall inform the grid operator about this switch before the start of the previous calendar month (§ 33g par. 3 no. 2 EEG in conjunction with § 33d par. 1, par. 2 EEG).
	Wind energy	Both onshore and offshore generation are eligible with the following restrictions (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with §§ 29; 31 EEG): • **Offshore generation in protected areas.** Electricity is not eligible if generated by systems located in an area of environmental importance, such as systems constructed in a protected area or at a site of Community importance (§ 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 31 par. 5 EEG). • **Fulfilment of technical requirements.** System operators shall make sure that the requirements stipulated in the Ordinance on System Services are met (§ 33c par. 2 no. 1a EEG in conjunction with § 17 par. 1 EEG in conjunction with § 6 par. 5 EEG).
	Solar energy	Eligible under the following conditions (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with §§ 32; 33 EEG): • **Production sites.** Electricity from ground-mounted systems is eligible only if the system was constructed within the territorial application of an adopted planning scheme (e.g. a local development plan) or on certain environmentally impaired sites (land that was already sealed when the plan was adopted, land adjacent to motorways or railway tracks). Systems installed within the territorial application of a local development plan drawn up after 1 September 2003 shall be located on certain plots of land. Where

		a solar installation is attached to a building, this building shall meet certain requirements set out by law (§ 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 32 par. 1, par. 2 EEG). Systems in, attached to or on top of buildings are subject to special provisions (§ 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 33 par. 1, 3 EEG). • **Giving notice of a system's location.** An operator of a renewable energy system shall notify the Federal Network Agency or another competent authority of the location and the installed capacity of the system (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 17 par. 2 no. 1 EEG).
	Geothermal energy	Eligible (§ 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 28 EEG).
	Biogas	Both biogas and biomethane are eligible (§ 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with §§ 27, 27a, 27b, 27c EEG). The following restrictions apply: • **Definition of biomass.** The substances regarded as biomass are specified in a separate ordinance (BiomasseV). • **CHP obligation for biogas installations.** Electricity from biomethane is eligible only if generated by CHP (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 27 par. 5 no. 2, Annex 2 EEG). • **Obligation to keep a record of substances.** The system operator shall present a copy of a record of the substances used to provide proof of which type of biomass is used and that no other substances are used (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in connection with § 27 par. 5, 27a par. 5, 27b par. 3 no. 1 EEG). • **Technical requirements.** The system operator shall make sure that devices are used to avoid any escape of biogas (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 17 par. 1 EEG in conjunction with § 6 par. 4 EEG). Where the biogas used is generated from the fermentation of biowaste, the installation for anaerobic fermentation of the biowaste shall be directly linked to a final composting facility for solid fermentation residues and the composted material shall be recovered (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 27a par. 3 EEG). • **No maximum capacity for large biogas plants.** Unlike the feed-in tariff,

		the market premium will still be available for large biogas plants (capacity > 750 kW) put into operation after 31 December 2013 (§ 33c par. 3 EEG).
	Biomass	Eligible with the following restrictions (§ 27 EEG): • **Definition of biomass.** The substances regarded as biomass are specified in a separate ordinance (BiomasseV). • **Obligation to keep a record of substances.** Electricity will be eligible for the full tariff as specified in the EEG only if the system operator can prove which type of biomass is used by presenting a copy of a record of the substances used and provides evidence that no other substances are used (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 27 par. 5 EEG). • **Liquid biomass is ineligible for the tariff.** In general, electricity is ineligible for the feed-in tariff if generated by new plants using liquid biomass. Electricity generated by new plants using liquid biomass is eligible only if it is required as start-up, priming and supporting fuel (e.g. in dual-fuel CHP units) (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 27 par. 5 no. 3 EEG).
	Hydro-electricity	Both new systems and modernised existing systems are eligible (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 23 par. 1, par. 2 EEG). The following restrictions apply (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 23 EEG): • **Requirements of the Federal Water Act.** Plants on surface waters are eligible only if the use of hydropower complies with the requirements of the Federal Water Act (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 23 par. 4 EEG). • **Building requirements.** Electricity from newly constructed hydro-electric power plants is eligible only if the plant was erected in the spatial context of a barrage weir or dam which had already existed before or was newly built primarily for purposes other than the generation of electricity from hydropower, or without complete weir coverage (§ 33g par. 3 no. 1 EEG in conjunction with § 33c par. 2 no. 1a EEG in conjunction with § 16 par. 1 EEG in conjunction with § 23 par. 5 EEG).
Amount	**General information**	The amount of the market premium is calculated every calendar month and includes the following elements: 1. The difference between the feed-in tariff for the specific technology as set out in the EEG and the average stock market price, which is

		calculated every month ex post and corrected by a factor reflecting the stock market value of the specific technology. 2. On top of the market premium, eligible system operators receive a so-called management premium which covers the costs for variations of the actual grid exports compared to the forecast and for stock market participation (§ 33g par. 2 in conjunction with § 33h EEG, Annex 4 EEG).
	Wind energy	
	Solar energy	
	Geothermal energy	
	Biogas	
	Biomass	
	Hydro-electricity	
Degression	**General information**	Like the feed-in tariff, the market premium is subject to degression as set out in the EEG, as the feed-in tariff is an element of the market premium (§ 33h EEG). Moreover, the management premium, which is another element of the market premium, is reduced every year (Annex 4 EEG).
	Wind energy	
	Solar energy	
	Geothermal energy	
	Biogas	
	Biomass	
	Hydro-electricity	
Cap		
Eligibility period	Eligibility to the market premium terminates when the payment period of the feed-in tariff ends and eligibility to the feed-in tariff terminates (Annex 4 EEG). The eligibility period is usually 20 years plus the year in which the system or plant was put into operation (§ 21 EEG). The period in which electricity is sold directly and the market premium is received shall be credited against the tariff payment period in accordance with § 21 par. 2 EEG (§ 33e EEG). This means that the payment period expires regardless of whether the system operator receives the feed-in tariff or the market premium.	
Beneficiaries	System operators are entitled by law to the payment of the market premium by the grid operator (§ 33g par. 1 EEG). A system operator is one who, irrespective of the issue of ownership, uses a system to generate electricity from renewable energy sources or from mine gas (§ 3 no. 2 EEG). Grid operators are the operators of grid systems of all voltages for general electricity supply (§ 3 no. 8 EEG).	
Procedure	**Procedure**	Statutory law does not set out a formal application process. However, for a system operator to be eligible for the market premium, his electricity must have been exported to the grid, purchased by a third party and transmitted to the grid operator each month by the tenth working day of the following month (§ 33g par. 1 EEG).
	Competent authority	The implementation of the EEG is not managed or monitored by a special authority, as the EEG is a framework for private individuals – system operators and grid operators – rather than authorities. The act is evaluated by the Federal Ministry for

		the Environment, Nature Conservation and Nuclear Safety on behalf of the Federal Government (§§ 65, 65a EEG).
Flexibility Mechanism		
Funding	**State**	
	Consumers	The costs of the feed-in tariff scheme are borne by the final consumers.
	Grid operator	
	System operator	
	Distribution mechanism	• **System operator – grid operator.** The system operator sells his electricity to a third party and receives the market premium from the grid operator (§ 33g par. 1 EEG). • **Grid operator – transmission system operator.** Upstream transmission system operators are obliged to pay the premiums paid by the grid operator (§ 35 par. 1a EEG). • **Transmission system operator – transmission system operator.** Transmission system operators shall share the costs equally (§ 36 EEG). • **Transmission system operator – utility companies.** The utility companies are obliged to reimburse the transmission system operators for their costs (§ 37 par. 2 EEG in conjunction with § 3 AusglMechV). • **Utility companies – final consumers.** The costs incurred are included in the electricity price and thus passed on to the final consumers via their electricity bills (§ 37 par. 2 EEG). Final consumers that are manufacturing companies or rail operators are exempt from this regulation. Their costs arising from the compensation payments as specified by the EEG may be reduced upon request ("special equalisation scheme", §§ 40 ff. EEG).

4.3. Premium tariff II (Flexibility premium)

Abbreviated form of legal source(s)	EEG AusglMechV BiomasseV	
Country-specific support system	The operators of biogas plants who sell their electricity directly, i.e. sell them to third parties by supply agreements or at the stock market, may claim a flexibility premium for providing additional installed capacity for on-demand use. For a system operator to be eligible for the flexibility premium, he shall provide additional installed capacity that may only be used on demand rather than on a regular basis. This premium may be received on top of and separately from the market premium.	
Promoted technologies	**General information**	The flexibility premium only applies to electricity generation from biogas (§ 33i EEG).
	Wind energy	
	Solar energy	
	Geothermal energy	
	Biogas	Eligible. The following conditions apply: • **Definition of biomass.** The substances regarded as biomass are specified in a separate ordinance (BiomasseV). • **Direct selling.** All electricity generated by a plant shall be sold directly for the purpose of claiming the market premium or for other purposes (§ 33i par. 1 no. 1 EEG). • **Public buildings.** A biogas plant is ineligible for the tariff if it was installed to fulfil the function of a model public building pursuant to regional legislation, and the plant is not a CHP plant (§ 33i par. 1 no. 1 EEG, in conjunction with § 17 par. 2 no. 4). • **Obligation to register.** The plant shall be registered as required by law (§ 33i par. 1 no. 1 EEG in conjunction with § 17 par. 2 no. 1, 2 EEG). At the moment, this rule exists only in theory, as a general register of installations has not yet been established and it is still unclear when it will be introduced. • **Technical requirements.** Plants shall be equipped with technical devices that enable the grid operator to reduce output by remote means at any time (§ 33i par. 1 no. 1 EEG in conjunction with § 17 par.1 EEG in conjunction with § 6 par. 1 no. 1 EEG) and to retrieve the amount of electricity fed in by each plant (§ 33i par. 1 no. 1 EEG in conjunction with § 17 par.1 EEG in conjunction with § 6 par. 1 no. 2 EEG). The plant operator shall make sure that devices are used to avoid any escape of biogas (§ 33i par. 1 no. 1 EEG in conjunction with § 17 par. 1 EEG in conjunction with § 6 par. 4 EEG). Where the biogas used is generated from the fermentation of biowaste, the installation for anaerobic fermentation of the biowaste shall be directly

		linked to a final composting facility for solid fermentation residues and the composted material shall be recovered (§ 33i par. 1 no. 1 EEG in conjunction with § 16 par. 1 EEG in conjunction with § 27a par. 3 EEG). • **Rated annual capacity.** The rated annual capacity of a plant shall amount to at least 0.2 times the installed capacity of the plant (§ 33i par. 1 no. 2). The term "rated annual capacity" is legally defined as the ratio of the total kilowatt-hours generated in the calendar year in question to the total number of full hours for that calendar year (minus the number of full hours prior to the first generation of electricity from renewable sources by the plant and after final decommissioning of the plant) (Annex 5 no. 1 EEG, § 3 no. 2a EEG). • **Obligation to give notice.** Plant operators shall notify the Federal Network Agency or another competent authority of the location and the installed capacity of their plants and of the fact that they are claiming the flexibility premium (§ 33i par. 1 no. 3a EEG). • **Certification by an environmental verifier.** An environmental verifier who is accredited in the field of renewable energy generation shall certify that a given plant is technically suitable to be operated on a demand basis as required for the flexibility premium (§ 33i par. 1 no. 4 EEG).
	Biomass	
	Hydro-electricity	
Amount	**General information**	The amount of the flexibility premium is calculated every calendar year. The formulas on which the calculation is based are defined by law (Annex 5 EEG).
	Wind energy	
	Solar energy	
	Geothermal energy	
	Biogas	
	Biomass	
	Hydro-electricity	
Degression	**General information**	According to law, the flexibility premium is not subject to degression.
	Wind energy	
	Solar energy	
	Geothermal energy	
	Biogas	
	Biomass	
	Hydro-electricity	
Cap		

Eligibility period	The flexibility premium shall be paid for a period of ten years (§ 33i par. 4 EEG).	
Beneficiaries	System operators are entitled by law to the payment of the flexibility premium by the grid operator (§ 33i par. 1 EEG). A system operator is one who, irrespective of the issue of ownership, uses a system to generate electricity from renewable energy sources or from mine gas (§ 3 no. 2 EEG). Grid operators are the operators of grid systems of all voltages for general electricity supply (§ 3 no. 8 EEG).	
Procedure	**Procedure**	Statutory law does not set out a formal application process. However, plant operators shall inform the grid operator in advance of their first claim for the flexibility premium (§ 33i EEG).
	Competent authority	The implementation of the EEG is not managed or monitored by a special authority, as the EEG is a framework for private individuals – system operators and grid operators – rather than authorities. The act is evaluated by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety on behalf of the Federal Government (§§ 65, 65a EEG).
Flexibility Mechanism		
Funding	**State**	
	Consumers	The costs of the feed-in tariff scheme are borne by the final consumers.
	Grid operator	
	System operator	
	Distribution mechanism	• **System operator – grid operator.** A system or plant operator may claim the flexibility premium from the grid operator (§ 33i par. 1 EEG). • **Grid operator – transmission system operator.** Upstream transmission system operators are obliged to pay the premiums paid by the grid operator (§ 35 par. 1a EEG). • **Transmission system operator – transmission system operator.** Transmission system operators shall share the costs equally (§ 36 EEG). • **Transmission system operator – utility company.** The utility companies are obliged to reimburse the transmission system operators for their costs (§ 37 par. 2 EEG in conjunction with § 3 AusglMechV). • **Utility companies – final consumers.** The costs incurred are

		included in the electricity price and thus passed on to the final consumers via their electricity bills (§ 37 par. 2 EEG). Final consumers that are manufacturing companies or rail operators are exempt from this regulation. Their costs arising from the compensation payments as specified by the EEG may be reduced upon request ("special equalisation scheme", §§ 40 ff. EEG).