

Renewable energy policy database and support – RES-LEGAL EUROPE

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TABLE OF CONTENTS

RES-E SUPPORT SCHEMES 4

Summary of support schemes 4
Basic information on legal sources 6
Further information 10
Support schemes 11

RES-E GRID ISSUES 30

Overview 30
Basic information on legal sources 32
Further information 38
Grid issues 39

RES-H&C SUPPORT SCHEMES 48

Summary of support schemes 48
Basic information on legal sources 49
Further information 51
Support schemes 52

RES-T SUPPORT SCHEMES 54

Summary of support schemes 54
Basic information on legal sources 55
Further information 57
Support schemes 58

POLICIES 64

Summary of policies 64
Basic information on legal sources 66
Further information 69
Policy categories 70

RES-E support schemes

Summary of support schemes

Overview	In Spain, the generation of electricity from renewable sources is mainly promoted through a price regulation system. Plant operators may choose between two options: a guaranteed feed-in tariff and a guaranteed bonus (premium) paid on top of the electricity price achieved on the wholesale market. The price regulation system is currently suspended through Real Decreto-ley 1/2012, i.e. no new installation can access the scheme. The reason for this suspension is traced in the preamble of RDL 1/2012. RD 6/2009 established that by 2013 a part of the consumers' electricity bill (the "peajes the acceso") should be able to fully balance the costs incurred by the State arising from the support scheme. It is deemed, however, that the present situation will not allow this goal to be reached by 2013. For this reason, and together with the high growth of RES-E in the past years, even beyond the set goals, all support schemes for RES-E were suspended by RDL 1/2012. Investments in plants and equipment required for the generation of electricity from renewable sources may still be deducted from tax.
Summary of support system	**Price regulation** (currently suspended). In Spain, the generation of electricity from renewable sources is promoted through a price regulation system. Plant operators may choose between a feed-in tariff and a bonus, which is paid on top of the electricity price achieved in the wholesale market (arts.1, 24 RD 661/2007). This system only applies to those amounts of electricity that are within the statutory maximum production capacities set for each individual technology (arts. 37 to 42 RD 661/2007; arts. 10, 5 RD 1578/2008). Both the feed-in tariff and the bonus regulated are by RD 661/2007 and are thus subject to similar legal provisions. **Tax regulation mechanisms.** Between 1 May 2011 and 31 December 2012, all entities whose income is below € 71,007.20 per year are entitled to a tax credit equal to 20% of all investments related to the use of renewable energy or similar measures in their building of residence.
Technologies	In general, all technologies are eligible.

Statutory provisions	• RD 661/2007 (Real Decreto 661/2007, de 25 de mayo, por el que se regula la actividad de producción de energía eléctrica en régimen especial – Royal Decree on electricity production through a special feed-in tariff scheme ("Régimen Especial"). • RD 1578/2008 (Real Decreto 1578/2008, de 26 de septiembre, de retribución de la actividad de producción de energía eléctrica mediante tecnología solar fotovoltaica para instalaciones posteriores a la fecha límite de mantenimiento de la retribución del Real Decreto 661/2007, de 25 de mayo, para dicha tecnología - Royal Decree on photovoltaic electricity generation) • Ley 54/1997 (Ley del Sector Eléctrico – Law on the Electricity Sector) • Ley 35/2006 (Ley del Impuesto sobre la Renta de las Personas Físicas y de modificación parcial de las leyes de los Impuestos sobre Sociedades, sobre la Renta de no Residentes y sobre el Patrimonio - Law No. 35/2006 of 28th November 2006 on the Tax on Income of Natural Persons, and on Changes to the Laws on Taxes on Companies, on Income of Non-residents and on Property) • RD 1955/2000 (Real Decreto 1955/2000, de 1 de diciembre, por el que se regulan las actividades de transporte, distribución, comercialización, suministro y procedimientos de autorización de instalaciones de energía eléctrica – Royal Decree on the Distribution and Transmission of Electricity) • Real Decreto 2017/1997 (Real Decreto 2017/1997, de 26 de diciembre, por el que se organiza y regula el procedimiento de liquidación de los costes de transporte, distribución y comercialización a tarifa, de los costes permanentes del sistema y de los costes de diversificación y seguridad de abastecimiento - Royal Decree No. 2017/1997 of 26th December 1997 Organising and Regulating the Procedures for the Liquidation of Costs related to Transport, Distribution and Commercialisation, of Permanent System Costs, and of Costs related to Diversification and Security of Supply.) • RD 1/2012 (Real Decreto-ley por el que se procede a la suspensión de los procedimientos de preasignación de retribución y a la supresión de los incentivos económicos para nuevas instalaciones de producción de energía eléctrica a partir de cogeneración, fuentes de energía renovables y residuos - Royal legislative decree 1/2012 of 27th January, suspoending the pre-assignation proceedings for compensation and the block of support schemes for new RES.E installations). • RDL 6/2009 (Real Decreto-ley 6/2009, de 30 de abril, por el que se adoptan determinadas medidas en el sector energético y se aprueba el bono social - Royal legislative decree 6/2009 of 30 April 2009, approving specific measures in the energy sector and the social bonus)

Basic information on legal sources

Name of legal source (original language)	Real Decreto 661/2007	Real Decreto 1578/2008	Ley 54/1997, de 27 de noviembre, del Sector Eléctrico	Ley 35/2006
Full name	Real Decreto 661/2007, de 25 de mayo, por el que se regula la actividad de producción de energía eléctrica en régimen especial	Real Decreto 1578/2008, de 26 de septiembre, de retribución de la actividad de producción de energía eléctrica mediante tecnología solar fotovoltaica para instalaciones posteriors a la fecha límite de mantenimiento de la retribución del Real Decreto 661/2007, de 25 de mayo, para dicha tecnología	Ley 54/1997, de 27 de noviembre, del Sector Eléctrico	Ley 35/2006, de 28 de noviembre, del Impuesto sobre la Renta de las Personas Físicas y de modificación parcial de las leyes de los Impuestos sobre Sociedades, sobre la Renta de no Residentes y sobre el Patrimonio.
Name (English)	Royal Decree No. 661/2007 of 25 May on the Regulation of Electricity Production through a Special Feed-in System ("Régimen Especial")	Royal Decree No. 1578/2008 of 26 September on the Payment for Electricity Generated by Photovoltaic Plants that were Registered after the Deadline for Eligibility for Payment under Royal Decree No. 661/2007 of 25 May.	Law No. 54/1997 of 27 November on the Electricity Sector	Law No. 35/2006 of 28 November 2006 on the Tax on Income of Natural Persons, and on Changes to the Laws on Taxes on Companies, on Income of Non-residents and on Property.
Abbreviated form	RD 661/2007	RD 1578/2008	Ley 54/1997	Ley 35/2006

Entry into force	01.06.2007	28.09.2008	29.11.1997	29.11.2006
Last amended on	28.01.2012	28.01.2012	31.03.2012	10.03.2012
Future amendments				
Purpose	Establishing legal and economic provisions for electricity producers under "Régimen Especial".	Regulating photovoltaic electricity generation.	Regulating the electricity sector	Act No. 35/2006 includes important amendments to Spanish business tax law as regards the promotion of renewable energy.
Relevance for renewable energy	This Decree directly promotes the generation of electricity from renewable energy sources.	This decree stipulates that operators of renewable electricity generation plants that would like to benefit from RD 661/2007 have to register their plants with a preliminary register (art. 4 RD 1578/2008).	This law also applies to plants that generate electricity from renewable sources (Articles 27-31).	This Act provides tax incentives for investments in renewable energy.
Link to full text of legal source (original language)	*http://www.boe.es/aeboe/consultas/bases_datos/doc.php?coleccion=iberlex&id=2007/10556*	*https://www.boe.es/aeboe/consultas/bases_datos/act.php?id=BOE-A-2008-15595*	*http://www.boe.es/aeboe/consultas/bases_datos/act.php?id=BOE-A-1997-25340*	*http://www.boe.es/g/es/bases_datos/doc.php?coleccion=iberlex&id=2006/20764*
Link to full text of legal source (English)				

Name of legal source (original language)	Real Decreto 1955/2000	Real Decreto 2017/1997	Real Decreto-ley 1/2012	Real Decreto-ley 6/2009
Full name	Real Decreto 1955/2000, de 1 de diciembre, por el que se regulan las actividades de transporte, distribución, comercialización, suministro y procedimientos de autorización de instalaciones de energía eléctrica	Real Decreto 2017/1997, de 26 de diciembre, por el que se organiza y regula el procedimiento de liquidación de los costes de transporte, distribución y comercialización a tarifa, de los costes permanentes del sistema y de los costes de diversificación y seguridad de abastecimiento	Real Decreto-ley 1/2012, de 27 de enero, por el que se procede a la suspensión de los procedimientos de preasignación de retribución y a la supresión de los incentivos económicos para nuevas instalaciones de producción de energía eléctrica a partir de cogeneración, fuentes de energía renovables y residuos.	Real Decreto-ley 6/2009, de 30 de abril, por el que se adoptan determinadas medidas en el sector energético y se aprueba el bono social.
Name (English)	Royal Decree No. 1955/2000 of 1 December on the Transmission, Distribution, Marketing, and Supply of Electricity and the Authorisation Procedure for Electricity Generation Plants	Royal Decree No. 2017/1997 of 26 December 1997 Organising and Regulating the Procedures for the Liquidation of Costs related to Transport, Distribution and Commercialisation, of Permanent System Costs, and of Costs related to Diversification and Security of Supply.	Royal legislative decree 1/2012 of 27 January, suspending the pre-assignation proceedings for compensation and the block of support schemes for new RES.E installations.	Royal legislative decree 6/2009 of 30 April 2009, approving specific measures in the energy sector and the social bonus
Abbreviated form	RD 1955/2000	RD 2017/1997	RDL 1/2012	RDL 6/2009

Entry into force	16.01.2001	01.01.1998		07.05.2009
Last amended on	08.12.2011	07.12.2011	27.01.2012	27.03.2012
Future amendments				
Purpose	Regulating the connection and access of electricity to the grid and the transmission and distribution of electricity.	Securing a free and transparent electricity market through a framework of provisions on the generation and sale of electricity.	Halting support schemes and incentives for new RES-E installations.	To approve specific measures in the energy sector and the social bonus
Relevance for renewable energy	This decree also applies to plants that generate electricity from renewable energy sources.	This Decree applies to electricity generated from all primary sources of energy. RD 2017/1997 regulates the distribution of the costs incurred to the grid operator as a result of the promotion of electricity from renewable sources.	This decree stops the incentive scheme of "Regimen especial" for RES-E plants.	Introduction of pre-assignation registers.
Link to full text of legal source (original language)	*http://www.boe.es/aeboe/consultas/bases_datos/act.php?id=BOE-A-2000-24019*	*http://www.boe.es/aeboe/consultas/bases_datos/act.php?id=BOE-A-1997-27816*	*http://www.boe.es/diario_boe/txt.php?id=BOE-A-2012-1310*	*http://www.boe.es/aeboe/consultas/bases_datos/act.php?id=BOE-A-2009-7581*
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)
Instituto para la Diversificación y Ahorro de la Energía (IDAE) – Energy Agency	http://www.idae.es/index.php/mod.indice/mem.i		+34 914 564 900	comunicacion@idae.es
Comisión Nacional de Energía (CNE) - Energy Market Regulator	http://www.cne.es/		+34 914 329 600	dre@cne.es
Ministerio de Industria, Energía y Turismo (Ministry of Industry, Energy and Tourism)	http://www.minetur.gob.es/		+34 902 44 60 06	

Support schemes

Feed-in tariff (Régimen Especial)

Abbreviated form of legal source(s)	• RD 661/2007 • RD 1578/2008 • Ley 54/1997 • RD 1955/2000 • RD 2017/1997 • RD 6/2009 • RDL 1/2012
Summary	**This incentive scheme has been currently suspended by RDL 1/2012 and no new installations can access this scheme. The re-opening date of the scheme has not yet been set.** In Spain, the generation of electricity from renewable sources is mainly promoted through a price regulation system. • **Plant capacity must not exceed 50 MW**. Only plants whose capacity does not exceed 50 MW are eligible (art. 27 Ley 54/1997). Moreover, a plant's capacity shall be within the statutory maximum capacity set for the respective source of energy. • **Guaranteed Feed-in tariff for solar power.** Electricity generated by photovoltaic plants shall be purchased at a guaranteed feed-in tariff, which is adjusted for new plants every quarter (RD 1578/2008). • **Right to choose for plants that generate up to 50 MW.** Operators of plants that generate electricity from renewable sources other than photovoltaic energy and whose capacity does not exceed 50 MW may choose between the guaranteed feed-in tariff and a bonus, which is paid on top of the price achieved in the free market (art. 24 RD 661/2007 in connection with art. 45 RD 661/2007). • **Bonus for plants that generate 50 to 100 MW.** Operators of plants whose capacity is 50 to 100 MW are only entitled to a bonus for high plant efficiency and for the use of reactive energy (art. 28, 29 RD 661/2007), which is paid on top of the sale price. Except for operators of solar power installations, plant operators may choose between two feed-in tariffs. A plant operator's

	decision is binding for one year (art. 24, art. 26 par. 3 RD 661/2007). • **Guaranteed feed-in tariff.** RD 661/2007 provides guaranteed tariffs in terms of state-regulated minimum tariffs for each source of energy (arts. 35-43 RD 661/2007). • **Variable feed-in tariff.** Operators of hydro-electricity and biomass plants may also opt for a variable, time-dependent tariff, which is set by statutory law. This tariff is composed of different elements, which depend on the time of day and the season (art. 26 RD 661/2007 in connection with First Final Provision of RD 1578/2008).	
Eligible technologies	**General information**	In Spain, all technologies are generally eligible, with the following exceptions: • **Technology-specific capacity limits.** If the market cap set by the government for the respective plant type is reached, the exceeding amount of electricity will not be eligible for subsidies (art. 22, 35-42 RD 661/2007; arts. 5, 10 RD 1578/2008). • **Plant-specific capacity limits.** All plants that generate electricity from renewable sources and whose installed capacity does not exceed 50 MW are eligible for support (art. 27.1 Ley 54/1997; art. 45 RD 661/2007). Plants whose capacity exceeds this limit are not eligible. • **Direct sales.** In pursuance of "Régimen Especial", electricity that is transferred and sold directly is not eligible for subsidies (§ 24 par. 3 RD 661/2007).
	Wind energy	Both onshore and offshore wind energy plants are eligible until the market cap of 20,155 MW of installed capacity is reached (art 38 RD 661/2007).
	Solar energy	PV and solar thermal are eligible. The capacity limits for the different installation types are re-defined during the review of the application

		conditions every quarter (art. 5 RD 1578/2008, Annex III RD 1578/2008). Prior to the end of an application period, the market caps specified for each installation type are published on the website of the Ministry of Industry, Tourism and Trade (art. 5 RD 1578/2008).
	Geothermal energy	Eligible, including hot-dry-rock energy (art. 2 RD 661/2007). Statutory law does not specify a market cap.
	Biogas	Eligible, if the main fuel is bio-fuel or biogas from anaerobic digestion of agricultural and livestock wastes, bio-degradable industrial waste and sewage sludge or landfill gas. Biogas and biomass from manure are eligible for subsidies until the cap of 250 MW (for both sources combined) is reached (arts. 2, 41 RD 661/2007).
	Hydro-power	Plants whose primary source of energy is wave energy, tidal energy, ocean thermal energy and ocean current energy are eligible. Traditional hydro-electric stations are also eligible, if their entry capacity does not exceed 50 MW (arts. 2 b) 3, 45.2 RD 661/2007). Hydro-electricity plants that generate up to 10 MW are eligible for subsidies until the market cap of 2,400 MW is reached (art. 40 RD 661/2007).
	Biomass	Eligible. Biomass from energy crops, agricultural or gardening waste, residues from forest harvesting, other silvicultural operations in woodlands and agricultural areas, or waste from industrial plants are eligible for subsidies until the total capacity reaches 1371 MW (arts. 2, 41 RD 661/2007). Biomass from manure and biogas are eligible for subsidies until the total capacity (of both sources) reaches 250 MW (arts. 2, 41 RD

		661/2007).
Amount	**General information**	The tariff differs according to the source of energy (arts. 35, -44 RD 661/2007 in connection with the website of the Ministry of Industry, Tourism and Trade). The guaranteed feed-in tariffs for the individual renewable energy sources are listed below.
	Wind energy	**Wind (onshore) – category b.2.1 in RD 661/2007.** • for 20 years: €ct 8.1270 per kWh • from the 21st year onwards: €ct 6.7921 per kWh
	Solar energy	**PV (art. 11 RD 1578/2008).** • for 25 years: €ct 12.1716 – 26.6208 per kWh (depending on installation size and location)(art. 12 RD 1578/2008 in conjunction with the website of the Ministry of Industry, Tourism and Trade). **Solar-thermal generation – category b.1.2 in RD 661/2007.** • for 25 years: €ct 29.8957per kWh • from the 26th year onwards: €ct 23.9164 per kWh
	Geothermal energy	**Geothermal power – category b.3 in RD 661/2007.** • for 20 years: €ct 7.6467 per kWh • from the 21st year onwards: €ct 7.2249 per kWh
	Biogas	**Biogas – categories b.7.1 and b.7.2 in RD 661/2007.** • for 15 years: €ct 8.8697 – 14.5042 per kWh (depending on plant size) • from the 16th year onwards: €ct 7.2249 per kWh

	Hydro-power	**Hydro-electricity (up to 10 MW) – category b.4 in RD 661/2007.** • for 25 years: €ct 8.6565 per kWh • from the 26th year onwards: €ct 7.7909 per kWh • Plant capacities of 10 -50 MW are subject to the formula laid down in art. 36 RD 661/2007. **Wave and tidal – category b.3 in RD 661/2007.** • for 20 years: €ct 7.6467 per kWh • from the 21st year onwards: €ct 7.2249 per kWh
	Biomass	**Biomass – categories b.6, b.7.3 and b.8 in RD 661/2007.** • for 15 years: €ct 5.9487 – 17.6339 per kWh (depending on energy source and plant size) • from the 16th year onwards: €ct 5.9487 – 13.0882 per kWh (depending on energy source and plant size)
Degression	**General information**	
	Wind energy	
	Solar energy	
	Geothermal energy	
	Biogas	
	Hydro-power	
	Biomass	
Cap	Different caps are in place for each technology. Time limits related to these caps are not provided. Further details and legal references are provided in the section on eligibility.	

	• Wind: 20,155 MW
	• Solar:
	  ○ 500 MW for solar-thermal installations.
	  ○ The capacity limits for the different PV installation types are re-defined during the review as part of the application conditions every quarter (art. 5 RD 1578/2008, Annex III RD 1578/2008). Prior to the end of an application period the market caps specified for each installation type are published on the website of the Ministry of Industry, Tourism and Trade (art. 5 RD 1578/2008).
	• Geothermal energy: no cap established
	• Biogas: 250 MW
	• Hydro-energy (plants up to 10 MW): 2,400 MW
	• Biomass: 1371 MW

Eligibility period	• **Feed-in tariff for the actual period of operation.** The feed-in tariffs are paid during the entire time of operation of a plant. The payment starts on the date of commissioning of the plant. It is reduced after a certain period of operation specified by statutory law (hydro-electricity: 25 years; wind energy: 20 years; geothermal energy: 20 years; biomass: 15 years). • **PV installations:** 25 years (art. 11 RD 1578/2007). During the period of payment, the feed-in tariffs are subject to adjustments (art. 44 RD 661/2007, art. 12 RD 1578/2008). • **Bonus for a limited time of operation.** Eligibility for the payment of a bonus ends after 15, 20, 25 or 28 years of plant operation, depending on the source of energy used (see above in this section).

Addressees	**Entitled party**. The persons entitled are those plant operators that meet the following requirements:
	
	• **Plants shall come under "Régimen Especial".** The plant in question shall come under the definition laid down by art 27.1 Ley 54/2007 in conjuntion with art. 2 RD 661/2007. Plants come under this definition if they meet the following requirements:
	  ○ **Technology.** The primary source of energy used by the plant in question shall be a renewable source as specified by the regulation (art. 2 RD 661/2007).
	  ○ **Official classification.** Plants shall be classified as coming under "Régimen Especial" by official notice (arts. 6, 14 par. 1 RD 661/2007).

	○ **Connection to a central control system.** All plants that generate electricity as specified under "Régimen Especial" and whose capacity exceeds 10 MW shall be connected to a central control system, which shall be the interface with the grid operator. The control system shall provide real-time plant information and make sure that the grid operator's instructions are implemented in such a way as to guarantee the reliability of the grid (art. 18 RD 661/2007). **Obligated party**. The persons obligated are the operators of distribution and transmission grids (depending on the level at which electricity is fed in), (art. 17 RD 661/2007).	
Procedure	**Process flow**	In order to access the scheme, plants should be registered in the following: • **Register of plants.** Plants shall be registered in the register of plants. The register of plants is an official register kept by the Ministry of Industry, Tourism and Trade (art. 9 RD 661/2007). Autonomous regions may also keep such a register (art. 10 RD 661/2007). Registration of a plant in the register of plants is usually carried out in two steps: ○ **Preliminary registration.** On request at the authority in charge, the plant is preliminarily registered. The authority issues a notice on the registration. To be preliminarily registered, the applicant shall present the document on commencement of trial operation and prove that the technical contract with the grid operator on access to the grid has been concluded (art. 11 RD 661/2007). Preliminary registration is cancelled if final registration is not applied for within three months after the issuing of the notice on preliminary registration (art. 13 RD 661/2007) ○ **Final registration**. On request at the authority in

		charge, the plant is finally registered in the register of plants. The authority shall decide on the registration within one month after the application (art. 12.2 RD 661/2007). The authority shall issue a notice on the registration (art 12.3 RD 661/2007.) One of the preconditions for final registration is the presentation of the document on commencement of regular operation of the plant (art. 132 RD 1955/2000; art. 12.2 RD 661/2007). • **Pre-assignation registers.** Plants registered in the pre-assignation register are eligible for promotion. The registers for PV are ruled by Art. 6 RD 1578/2008, whereas the registers for other sources are ruled by Art. 4 RD 6/2009. This register aims at selecting plants for support scheme until the annual market cap for is reached. The plants are selected chronologically, i.e. the plant that has been entitled the longest according to the documents submitted in the course of the application for registration will be selected first (Art 4 RD 6/2009 and Art. 6 RD 1578/2008).
	Competent authority	Ministry of Industry, Energy and Tourism.
Flexibility Mechanism		
Distribution of costs	**State**	
	Consumers	Costs for the "régimen especial" must be covered by consumers (Art 4, par. 2, l. h and Art. 6, par. 2,3 RD 2017/1997).
	Plant operator	

	Grid operator	
	European Union	
	Distribution mechanism	• **Comisión Nacional de la Energia.** The cost of the support scheme for electricity from renewable sources is first borne by the CNE (Art. 3 RD 2017/1997). • **Consumers.** The CNE recover such costs through some additional amounts on the consumers' bill. DSOs are in charge of collecting such amounts. (Art. 6, par. 2,3 RD 2017/1997).. The Spanish electricity tariff is composed by the sum of: • The production cost of electricity • The access fee (peaje de acceso), set by the government • The commercialisation costs of electricity. The peajes de acceso are used to cover the costs of the PV support scheme, among the other costs of the Spanish electric plant. Historically, the peajes de acceso set by the Government haven't been sufficient to cover all these costs and have thus caused the creation of a deficit (Déficit tarifario). This deficit is intended to be covered through (i) an increase of the peajes de acceso from 2012 onwards, and (ii) a reduction of costs. The latter is one of the main reasons for which the support scheme for RES-E has been halted.

Premium tariff

Abbreviated form of legal source(s)	• RD 661/2007 • RD 1578/2008 • Ley 54/1997 • RD 1955/2000 • RD 2017/1997 • RD 6/2009 • RDL 1/2012	
Summary	**This incentive scheme has been currently suspended by RDL 1/2012 and no new installations can access this scheme. The re-opening date of the scheme has not yet been set.** In Spain, the generation of electricity from renewable sources is mainly promoted through a price regulation system. • **Plant capacity must not exceed 50 MW.** Only plants whose capacity does not exceed 50 MW are eligible (art. 27 Ley 54/1997). A plant's capacity shall also be within the statutory maximum capacity set for the respective source of energy. • **Right to choose for plants that generate up to 50 MW.** Operators of plants that generate electricity from renewable sources other than photovoltaic energy and whose capacity does not exceed 50 MW may choose between the guaranteed feed-in tariff and a bonus, which is paid on top of the price achieved in the free market (art. 24 RD 661/2007 in connection with art. 45 RD 661/2007). • **Bonus for plants that generate 50 to 100 MW.** Operators of plants whose capacity is 50 to 100 MW are only entitled to a bonus for high plant efficiency and for the use of reactive energy (art. 28, 29 RD 661/2007). This bonus is paid on top of the sale price.	
Eligible technologies	**General information**	In Spain, all technologies are generally eligible, with the following exceptions: • **Technology-specific capacity limits.** If the market cap set by the government for the respective plant type is reached, the exceeding amount of electricity will not be eligible for

		subsidies (art. 22, 35-42 RD 661/2007; arts. 5, 10 RD 1578/2008). • **Plant-specific capacity limits.** All plants that generate electricity from renewable sources and whose installed capacity does not exceed 50 MW are eligible for promotion (art. 27.1 Ley 54/97; art. 45 RD 661/2007). Plants whose capacity exceeds this limit are not eligible. • **Direct sale.** In pursuance of "Régimen Especial", electricity that is transferred and sold directly is not eligible for subsidies (§ 24 par. 3 RD 661/2007).
	Wind energy	Both onshore and offshore wind energy plants are eligible until the market cap of 20.155 MW of installed capacity is reached (arts. 2, 38 RD 661/2007).
	Solar energy	Only Solar-thermal installations are eligible (art. 2 RD 661/2007). PV plants are regulated by RD 1578/2008, which only allows for a feed-in tariff regime for PV plants.
	Geothermal energy	Eligible, including hot-dry-rock energy (art. 2 RD 661/2007). Statutory law does not specify a market cap.
	Biogas	Eligible, if the main fuel is bio-fuel or biogas from anaerobic digestion of agricultural and livestock wastes, bio-degradable industrial waste and sewage sludge, or landfill gas. Biogas and biomass from manure are eligible for subsidies until the cap of 250 MW (for both) is reached (arts. 2, 41 RD 661/2007).
	Hydro-power	Plants whose primary source of energy is wave energy, tidal energy, ocean thermal energy or ocean current energy are eligible. Traditional

		hydro-electric stations are also eligible if their entry capacity does not exceed 50 MW (arts. 2 b) 3, 45.2 RD 661/2007). Hydro-electricity plants that generate up to 10 MW are eligible for subsidies until the market cap of 2,400 MW is reached (art. 40 RD 661/2007).
	Biomass	Eligible. Biomass from energy crops, agricultural or gardening waste, residues from forest harvesting, other silvicultural operations in woodlands and agricultural areas or waste from industrial plants are eligible for subsidies until the total capacity reaches 1371 MW (arts. 2, 41 RD 661/2007). Biomass from manure and biogas are eligible for subsidies until the total capacity (of both sources) reaches 250 MW (arts. 2, 41 RD 661/2007).
Amount	**General information**	The amount of payment differs according to the source of energy (arts. 35-44 RD 661/2007 in connection with the website of the Ministry of Industry, Tourism and Trade).
	Wind energy	**Wind (onshore) – category b.2.1 in RD 661/2007.** o €ct 2.0142 per kWh **Wind (offshore) – category b.2.2 in RD 661/2007.** o €ct 9.3557 per kWh
	Solar energy	PV installationsare not eligible. The tariff for **solar-thermal installations (category b.1.2 in RD 661/2007)** is as follows: • For 25 years: €ct 28.1894 per kWh • from the 26th year onwards: €ct 22.5515 per kWh
	Geothermal energy	**Geothermal power – category b.3 in RD 661/2007** • for 20 years: €ct 4.2667 per kWh

		• from the 21st year onwards: €ct 3.3960 per kWh
	Biogas	**Biogas – categories b.7.1 and b.7.2 in RD 661/2007.** • €ct 4.6914 – 11.3405 per kWh for 15 years (depending on plant size)

	Hydro-power	• **Hydro-electricity (up to 10 MW) – category b.4 in RD 661/2007.**
		  ○ for 25 years: €ct 2.7795 per kWh
		  ○ from the 26th year onwards: €ct 1.4920 per kWh
		• **Hydro-electricity (between 10 and 50 MW) – category b.5 in RD 661/2007.**
		  ○ for 25 years: €ct 2.3355 per kWh
		  ○ from the 26th year onwards: €ct 1.4920 per kWh
		Wave and tidal – category b.3 in RD 661/2007.
		• for 20 years: €ct 4.2667 per kWh
		• from the 21st year onwards: €ct 3.3960 per kWh

	Biomass	**Biomass – categories b.6, b.7.3 and b.8 in RD 661/2007.** • €ct 2.6571 – 13.2937 per kWh (depending on energy source and plant size)
Degression	**General information**	
	Wind energy	
	Solar energy	
	Geothermal energy	
	Biogas	

	Hydro-power	
	Biomass	
Cap	Different caps are in place for each technology. Time limits related to these caps are not provided. Further details and legal references are provided in the section on eligibility. • Wind: 20,155 MW • Solar: • 500 MW for solar-thermal installations. • Geothermal energy: no cap established • Biogas: 250 MW • Hydro-energy (plants up to 10 MW): 2,400 MW • Biomass: 1371 MW	
Eligibility period	**Premiums for the actual period of operation.** Except for onshore wind, premiums are paid during the entire time of operation of a plant. The payment starts on the date of commissioning of the plant. It is reduced after a certain period of operation specified by statutory law (hydro-electricity and solar thermal: 25 years; geothermal energy: 20 years; biomass: 15 years). Onshore wind premium payment is limited to 20 years. **Bonus for a limited time of operation.** Eligibility for the payment of a bonus ends after 15, 20, 25 years of plant operation, depending on the source of energy used. .	

Addressees	**Entitled party.** The persons entitled are those plant operators that meet the following requirements:
	• **Plants shall come under "Régimen Especial".** The plant in question shall come under the definition laid down by Art. 27.1 Ley 54/2007 in connection with Art. 2 RD 661/2007. Plants come under this definition if they meet the following requirements:
	  ○ **Technology.** The primary source of energy used by the plant in question shall be a renewable source as specified by the regulation (art. 2 RD 661/2007).
	  ○ **Official classification.** Plants shall be classified as coming under "Régimen Especial" by official notice (arts. 6, 14 par. 1 RD 661/2007).
	  ○ **Connection to a central control system.** All plants that generate electricity as specified under "Régimen	

	Especial" and whose capacity exceeds 10 MW shall be connected to a central control system, which shall be the interface with the grid operator. The control system shall provide real-time plant information and make sure that the grid operator's instructions are implemented in such a way as to guarantee the reliability of the grid (art. 18 RD 661/2007). **Obligated party.** The persons obligated are the operators of distribution and transmission grids (depending on the level at which electricity is fed in), (art. 17 RD 661/2007).	
Procedure	**Process flow**	In order to access the scheme, plants should be registered in the following: • **Register of plants.** Plants shall be registered in the register of plants. The register of plants is an official register kept by the Ministry of Industry, Tourism and Trade (art. 9 RD 661/2007). Autonomous regions may also keep such a register (art. 10 RD 661/2007). Registration of a plant in the register of plants is usually carried out in two steps: ○ **Preliminary registration.** On request at the authority in charge, the plant is preliminarily registered. The authority issues a notice on the registration. To be preliminarily registered, the applicant shall present the document on commencement of trial operation and prove that the technical contract with the grid operator on access to the grid has been concluded (art. 11 RD 661/2007). Preliminary registration is cancelled if final registration is not applied for within three months after the issuing of the notice on preliminary registration (art. 13 RD 661/2007) ○ **Final registration.** On request at the authority in charge, the plant is finally registered in the register

		of plants. The authority shall decide on the registration within one month after the application (art. 12.2 RD 661/2007). The authority shall issue a notice on the registration (art 12.3 RD 661/2007.) One of the preconditions for final registration is the presentation of the document on commencement of regular operation of the plant (art. 132 RD 1955/2000; art. 12.2 RD 661/2007). • **Pre-assignation registers.** Plants registered in the pre-assignation register are eligible for promotion. The register is ruled by Art. 4 RD 6/2009. This register aims at selecting plants for support scheme until the annual market cap for is reached. The plants are selected chronologically, i.e. the plant that has been entitled the longest according to the documents submitted in the course of the application for registration will be selected first (Art 4 RD 6/2009).
	Competent authority	Ministry of Industry, Energy and Tourism.
Flexibility Mechanism		
Distribution of costs	**State**	
	Consumers	The costs of the bonus system for electricity from renewable sources are borne by the consumers.
	Plant operator	
	Grid operator	

	European Union	
	Distribution mechanism	• **Comisión Nacional de la Energia.** The cost of the support scheme for electricity from renewable sources is first borne by the CNE (Art. 3 RD 2017/1997). • **Consumers.** The CNE recover such costs through some additional amounts on the consumers' bill. DSOs are in charge of collecting such amounts. (Art. 6, par. 2,3 RD 2017/1997). The Spanish electricity tariff is composed by the sum of: • The production cost of electricity • The access fee (peaje de acceso), set by the government • The commercialisation costs of electricity. The peajes de acceso are used to cover the costs of the PV support scheme, among the other costs of the Spanish electric system. Historically, the peajes de acceso set by the Government haven't been sufficient to cover all these costs and have thus caused the creation of a deficit (Déficit tarifario). This deficit is intended to be covered through (i) an increase of the peajes de acceso from 2012 onwards, (ii) a reduction of costs. The latter is one of the main reasons for which the support scheme for RES-E has been halted.

Tax regulation mechanisms (Business Tax Reduction)

Abbreviated form of legal source(s)	• Ley 35/2006	
Summary	From 1 May 2011 to 31 December 2012, taxpayers whose income is below € 71,007.20 per year are entitled to a tax credit equal to 20% of all investments related to the use of renewable energy or similar measures in their building of residence. For incomes below € 53,007.20 per year, the annual deduction is subject to a maximum of € 6,750. For incomes between € 53,007.20 and 71,007.20 per year, the annual maximum deduction is: 6.750 – 0.375 multiplied with (income - 53,007.20). The maximum deduction between 1 May 2011 and 31 December 2012 shall not exceed € 20,000.	
Eligible technologies	**General information**	In general, all technologies are eligible for a tax reduction.
	Wind energy	Eligible.
	Solar energy	Eligible.
	Geothermal energy	Eligible.
	Biogas	Eligible.
	Hydro-power	Eligible.
	Biomass	Eligible.
Amount	• Tax credit of 20% of all investments related to the use of renewable energy or similar measures for taxpayers whose income is below € 71,007.20; • € 6.750 maximum for incomes below € 53,007.20 per year; • € 6.750 – 0.375 *(income - 53,007.20) for incomes between € 53,007.20 and 71,007.20.	

	The maximum deduction between 1 May 2011 and 31 December 2012 shall not exceed € 20,000.	
Addressees	**Entitled party.** Any legal entity whose income is below € 71,007.20 per year (Additional disposition 29, Ley 35/2006) **Obligated party.** The obligated party is the state.	
Procedure	**Process flow**	Evidence for the investment costs shall be submitted together with the tax return. The tax reduction is taken account of when the tax is calculated.
	Competent authority	
Flexibility Mechanism		
Distribution of costs	**State**	The cost of the subsidy is borne by the state.
	Consumers	
	Plant operator	
	Grid operator	
	European Union	
	Distribution mechanism	

RES-E grid issues

Overview

Overview of grid issues	In Spain, renewable energy plants are statutorily entitled to priority access to, connection to and use of the grid. Renewable electricity is granted priority dispatch in the electricity markets at no cost, provided the stability and security of the grid infrastructure can be maintained. Renewable energy plants operate under the so-called "Special Regime". Real Decreto 1/2012 partially modified and suspended parts of this regime, however exclusively in economic terms (support schemes). As regards connection, use and development of the grid with respect to RES-E, Real Decreto 1/2012 has no effect, as confirmed by the National Energy Commission (CNE). Plant operators may be contractually entitled to the expansion of the grid. If the expansion is required for a plant to be connected to the grid, the operator of the plant shall bear the costs of the expansion works ("deep" connection charges). Apart from that, the grid operator is obligated to expand his grid in compliance with the general legislation on energy.
Connection to the grid	Plant operators are contractually entitled against the grid operator to priority access and connection of their plants to the grid.
Use of the grid	Plant operators are contractually entitled to priority use of the grids export and transmit electricity until grid capacity is used up and as long as stability is maintained.
Grid development	Plant operators may be contractually entitled to the expansion of the grid. If the expansion is required for a plant to be connected to the grid, the grid operator shall bear the costs of the expansion works. Apart from that, the grid operator is obliged to expand his grid in compliance with the general legislation on energy.
Statutory provisions	• Ley 54/1997 (Ley del Sector Eléctrico – Law on the Electricity Sector) • RD 1955/2000 (Real Decreto 1955/2000, de 1 de diciembre, por el que se regulan las actividades de transporte, distribución, comercialización, suministro y procedimientos de autorización de instalaciones de energía eléctrica – Royal Decree on the Distribution and Transmission of Electricity)

	• RD 661/2007 (Real Decreto 661/2007, de 25 de mayo, por el que se regula la actividad de producción de energía eléctrica en régimen especial – Royal Decree on electricity production through a special feed-in tariff scheme ("Régimen Especial"). • RD 1669/2011 (Real Decreto por el que se regula la conexión a red de instalaciones de producción de energía eléctrica de pequeña potencia – Royal Decree setting the conditions regulating grid connection of small capacity electricity production plants) • RD 1/2012 (Real Decreto-ley por el que se procede a la suspensión de los procedimientos de preasignación de retribución y a la supresión de los incentivos económicos para nuevas instalaciones de producción de energía eléctrica a partir de cogeneración, fuentes de energía renovables y residuos - Royal legislative decree 1/2012 of 27th January, suspoending the pre-assignation proceedings for compensation and the block of support schemes for new RES.E installations). • RD 1565/2010 (Real Decreto por el que se regulan y modifican determinados aspectos relativos a la actividad de producción de energía eléctrica en régimen especial – Royal Decree modifying certain aspects of the operation of generators under "Régimen Especial") • RD 6/2009 (Real Decreto-ley 6/2009, de 30 de abril, por el que se adoptan determinadas medidas en el sector energético y se aprueba el bono social – Royal Decree establishing new regulations for the energy sector) • RD 1578/2008 (Real Decreto 1578/2008, de 26 de septiembre, de retribución de la actividad de producción de energía eléctrica mediante tecnología solar fotovoltaica para instalaciones posteriores a la fecha límite de mantenimiento de la retribución del Real Decreto 661/2007, de 25 de mayo, para dicha tecnología - Royal Decree on photovoltaic electricity generation) • PO 3.7 (Procedimiento Operativo 3.7 - Programación de la generación de origen renovable no gestionable - Programming of variable RES-E generation)

Basic information on legal sources

Name of legal source **(original language)**	Ley 54/1997, de 27 de noviembre, del Sector Eléctrico	Real Decreto 1955/2000	Real Decreto 661/2007
Full name	Ley 54/1997, de 27 de noviembre, del Sector Eléctrico	Real Decreto 1955/2000, de 1 de diciembre, por el que se regulan las actividades de transporte, distribución, comercialización, suministro y procedimientos de autorización de instalaciones de energía eléctrica	Real Decreto 661/2007, de 25 de mayo, por el que se regula la actividad de producción de energía eléctrica en régimen especial
Name (English)	Law No. 54/1997 of 27 November on the Electricity Sector	Royal Decree No. 1955/2000 of 1 December on the Transmission, Distribution, Marketing, and Supply of Electricity and the Authorisation Procedure for Electricity Generation Plants	Royal Decree No. 661/2007 of 25 May on the Regulation of Electricity Production through a Special Feed-in System ("Régimen Especial")
Abbreviated form	Ley 54/1997	RD 1955/2000	RD 661/2007
Entry into force	29.11.1997	16.01.2001	01.06.2007
Last amended on	31.03.2012	08.12.2011	28.01.2012
Future amendments			

Purpose	Regulating the electricity sector	Regulating the connection and access of electricity to the grid and the transmission and distribution of electricity.	Establishing legal and economic provisions for electricity producers under "Régimen Especial".
Relevance for renewable energy	This law also applies to plants that generate electricity from renewable sources (Articles 27-31).	This decree also applies to plants that generate electricity from renewable energy sources.	This Decree directly promotes the generation of electricity from renewable energy sources.
Link to full text of legal source (original language)	*http://www.boe.es/aeboe/consultas/bases_datos/act.php?id=BOE-A-1997-25340*	*http://www.boe.es/aeboe/consultas/bases_datos/act.php?id=BOE-A-2000-24019*	*http://www.boe.es/aeboe/consultas/bases_datos/doc.php?coleccion=iberlex&id=2007/10556*
Link to full text of legal source (English)			

Name of legal source **(original language)**	Real Decreto 1699/2011	Real Decreto-ley 1/2012	Real Decreto 1565/2010
Full name	Real Decreto 1699/2011, de 18 de noviembre, por el que se regula la conexión a red de instalaciones de producción de energía eléctrica de pequeña potencia.	Real Decreto-ley 1/2012, de 27 de enero, por el que se procede a la suspensión de los procedimientos de preasignación de retribución y a la supresión de los incentivos económicos para nuevas instalaciones de producción de energía eléctrica a partir de cogeneración, fuentes de energía renovables y residuos.	Real Decreto 1565/2010, de 19 de noviembre, por el que se regulan y modifican determinados aspectos relativos a la actividad de producción de energía eléctrica en régimen especial
Name (English)	Royal Decree No. 1669/2011 of 18 November regulating grid connection of small capacity electricity production plants	Royal legislative decree 1/2012 of 27 January, suspending the pre-assignation proceedings for compensation and the block of support schemes for new RES.E installations.	Royal Decree no. 1565/2010 of 18 November which regulates and modificates certain aspects concerning the production of electric energy within the "Régimen Especial"
Abbreviated form	RD 1669/2000	RDL 1/2012	RD 1565/2010
Entry into force	09.12.2011		19.11.2010
Last amended on		27.01.2012	
Future amendments			

Purpose	Regulating the connection of small-capacity generation units.	Halting support schemes and incentives for new RES-E installations.	Regulation and modification of the "Régimen Especial"
Relevance for renewable energy	This decree establishes specific rules for small generation units.	This decree brings to a complete stop the incentive scheme of “Regimen especial” for RES-E plants.	This Decree directly promotes the generation of electricity from renewable energy sources.
Link to full text of legal source (original language)	https://www.boe.es/aeboe/consultas/bases_datos/act.php?id=BOE-A-2011-19242	http://www.boe.es/diario_boe/txt.php?id=BOE-A-2012-1310	http://www.boe.es/boe/dias/2010/11/23/pdfs/BOE-A-2010-17976.pdf
Link to full text of legal source (English)			

Name of legal source **(original language)**	Real Decreto Ley 6/2009	Real Decreto 1578/2008	Procedimiento Operativo 3.7
Full name	Real Decreto Ley 6/2009, de 30 de abril, por el que se adoptan determinadas medidas en el sector energético y se aprueba el bono social	Real Decreto 1578/2008, de 26 de septiembre, de retribución de la actividad de producción de energía eléctrica mediante tecnología solar fotovoltaica para instalaciones posteriors a la fecha límite de mantenimiento de la retribución del Real Decreto 661/2007, de 25 de mayo, para dicha tecnología	Procedimiento Operativo 3.7 - Programación de la generación de origen renovable no gestionable
Name (English)	Royal Decree Law No. 6/2009 of 30 April establishing certain measures for the energy sector and adopting the social bonus	Royal Decree No. 1578/2008 of 26 September on the Payment for Electricity Generated by Photovoltaic Plants that were Registered after the Deadline for Eligibility for Payment under Royal Decree No. 661/2007 of 25 May.	Operation procedure 3.7 – Programming of variable RES-E generation
Abbreviated form	RD 6/2009	RD 1578/2008	PO 3.7
Entry into force	07.05.2009	28.09.2008	28.05.2009
Last amended on	27.03.2012	28.01.2012	
Future amendments			

Purpose	Establishing a new framework for the energy sector.	Regulating photovoltaic electricity generation.	To guarantee system security by establishing rules for operating variable RES-E plants
Relevance for renewable energy	This decree stipulates that operators of renewable electricity generation plants that would like to benefit from RD 661/2007 have to register their plants with a preliminary register (art. 4 RD 6/2009).	This decree stipulates that operators of renewable electricity generation plants that would like to benefit from RD 661/2007 have to register their plants with a preliminary register (art. 4 RD 1578/2008).	This decree establishes procedures for safely operating variable RES-E on the grid.
Link to full text of legal source (original language)	*http://www.boe.es/aeboe/consultas/bases_datos/doc.php?coleccion=iberlex&id=2009/07581#analisis*	*http://www.boe.es/aeboe/consultas/bases_datos/doc.php?coleccion=iberlex&id=2008/15595*	*http://www.ree.es/operacion/procedimientos_operacion.asp*
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)
Instituto para la Diversificación y Ahorro de la Energía (IDAE) – Energy Agency	http://www.idae.es/index.php/mod.indice/mem.i		+34 914 564 900	comunicacion@idae.es
Asociación de Productores de Energías Renovables (APPA) – Association of Spanish producers of electricity from renewable sources	http://www.appa.es/index.php	Dr. Mischa Bechberger (International Affairs Manager)	+ 34 93 241 93 63	mbechberger@appa.es
Comisión Nacional de Energía (CNE) - Energy Market Regulator	http://www.cne.es/cne/home2_english.jsp?id_nodo=3		+34 914 329 600	dre@cne.es
Red Electrica de España – Electric System Operator and only Transmission grid operator	http://www.ree.es/operacion/procedimientos_operacion.asp		+34 91 650 85 00	redelectrica@ree.es

Grid issues

Connection to the grid

Abbreviated form of legal sources	• RD 1955/2000 • RD 661/2007 • L 54/1997	
Overview	Any producer of electricity is entitled to connection (Art. 24, par.1, L 54/1997 and Artt. 53, 62, RD 1955/2000). The operators of renewable energy plants are entitled against the grid operator to connection to the grid (art. 17 RD 661/2007). Entitled party. The persons entitled are operators of plants that come under the so-called “Special Regime” ("Régimen Especial"), (art. 2 RD 661/2007). The electricity generation plants entitled to Régimen Especial are those that respect the following conditions: • Technologies: The plants' primary source of energy shall be a renewable source of energy as defined by statutory law (art. 2 par. 1 no. 2 b RD 661/2007). Classification by the authorities: Plants shall be officially notified of their admission to Régimen Especial (art. 6-14 RD 661/2007). Obligated party. The person obligated is the grid operator (Artt. 53, 62, RD 1955/2000 and art. 17 RD 661/2007).	
Procedure	**Process flow**	In general, the procedure for access and connection consists of the following steps: • Application for access point • Provisional assignation of access point • Connection request • Negotiation of connection contract • Agreement and signature of contract • Execution of connection works • Connection

		The procedure for connecting RES installations to the distribution or transmission grid, are established in articles 53 to 66 of RD 1995/2000 and in Annex XI of RD 661/2007. Additionally, Red Eléctrica de España's P.O.s (Procedimiento de Operación) 12.1 and 12.2 further define the technical and procedural rules for connection to the transmission infrastructure.
	Deadlines	For the connection to the transmission grid, the deadlines are set in articles 53,57,58 and 59 of RD 1955/2000: • Once the transmission grid operator receives from an applicant an access and connection request, it shall respond on the feasibility of access and connection within 2 months. • Successively, the applicant has to request connection from the owner of the access point, who shall produce a technical report and pass it to the transmission grid operator within 1 month. The transmission grid operator shall assess and finally accept the report within another month. • The transmission grid operator and the applicant shall then negotiate and agree on the connection contract within one month. Thereafter, the connection works may start. The connection contract shall not be signed unless all administrative authorisations for the connection works have been obtained. For the connection to the distribution grid, the deadlines are set in articles 62,63 and 66 of RD 1955/2000: • Once a distribution grid operator receives from an applicant a request for access to its infrastructure, it shall respond whether there is sufficient access capacity within 15 days. The distribution grid operator shall forward to the transmission grid operator all access requests that may have an influence on the transmission infrastructure as established in article 63 of RD 1955/2000.

		• A positive access capacity response from a distribution grid operator will have a validity of 6 months. During this period, the applicant may request connection. • Where a distribution grid operator receives a connection request that might have an influence on the transmission grid infrastructure, the distribution grid operator shall inform the transmission grid operator within one month, who shall respond on the feasibility of the connection within two months. The distribution grid operator shall then inform the applicant. • The distribution grid operator and the applicant may then, in case of a positive response, enter in the contract negotiation phase. Plants shall be connected to the grid after the contract on the technical conditions has been concluded (art. 58 RD 1955/2000) and a bank guarantee of € 500 per kW of installed capacity for photovoltaic installations and € 20 per kW for other plants has been provided (art. 66 bis RD 1955/2000).
	Obligation to inform	The transmission grid operator and distribution grid operators are obliged to explain the cases where access to the grid was denied and to provide alternative access points. The transmission grid operator and the distribution grid operators also have to make publicly available the information on all access and connection requests in their areas of competence (articles 53, 62 RD 1955/2000).
Priority to renewable energy **(qualitative criteria)**	(X) Priority to renewable energy ( ) Non-discrimination	Renewable energy plants shall be given priority connection, i.e. they shall be connected prior to conventional power plants (art. 17e, Annex XI no. 4 RD 661/2007).
Capacity limits **(quantitative criteria)**		

Distribution of costs		
	State	
	Consumers	
	Grid operator	
	Plant operator	The plant operator shall bear the costs of connection to and the possible expansion of the grid (Annex XI no. 8, 9 RD 661/2007). Furthermore, the operators of plants, or clusters of plants connected to the same access point, whose capacity exceeds 10 MW, must be connected to a control system and shall bear the costs of installation and maintenance of the control systems, including installation and maintenance of the communication lines to the grid operator (art. 18 d RD 661/2007).
	European Union	
	Other	
	Distribution mechanism	Plant operators may not pass on the costs of connection to the grid.

Use of the grid

Abbreviated form of legal sources	• RD 1955/2000 • RD 661/2007 • RD 1565/2010 • RD 1669/2011 • P.O. 3.7 • RD 6/2009 • RD 1578/2008 • L 54/2007
Overview	The plant operators are statutorily entitled against the grid operator to priority export and dispatch of renewable electricity (art. 17 RD 661/2007). However, plant operators and grid operators are obligated to conclude an agreement that regulates the qualitative and quantitative conditions for the electricity to be exported to the grid. The agreement shall comply with the model contract provided by the Ministry of Energy and Mining (art. 20 par. 2, art. 16 RD 661/2007). **Entitled party.** all electricity producers are entitled to the usage of the grid (Art. 26, par. 1, L 54/1997 and Artt. 56, 65 RD 1955/2000). As regards RES, the persons entitled are operators of plants that come under the so-called special regulation ("Régimen Especial"), (art. 17 RD 661/2007 in conjunction with art. 2 par. 1 b RD 661/2007). The following power plants have a special status: • **Technologies.** The plants' primary source of energy shall be a renewable source of energy like solar or wind energy as defined by statutory law (art. 2 par. 1 b RD 661/2007). • **Classification by the authorities.** Plants shall be classified as coming under the special regulation by official notice (art. 6, 14 par. 1 RD 661/2007). • **Connection to a central control system.** All plants, or clusters of plants connected to the same access point that generate electricity as specified by the special regime regulation and whose capacity exceeds 10 MW shall be connected to a central control system (CECRE), which shall be the interface to the plant operator. The control system, managed by the Transmission grid operator, shall provide real-time system information and make sure that the plant operator's instructions are implemented in such a way as to guarantee the reliability of the electric system. All RES installations or clusters larger than 1 MW are required to provide to the transmission grid operator real-time telemetry information about their operating

	conditions (Art. 18, RD 661/2007). • **Other operation requirements** for RES installations may involve, depending on the technology used and the capacity installed, power factor ranges to be respected and low voltage ride through (LVTR) capability (Artt. 18, 29, Annex V RD 661/2007). Plants are required to be listed in the register of plants in order to be awarded the status of plant under the special regulation (art. 9 RD 661/2007). A different registry is the pre-assignation retribution registry (Registro de pre-asignación de retribución). This is the necessary condition for economic treatment under the special regulation. Inscription to this registryFor renewable energy systems to be eligible for the register of systems, they must be registered in the preliminary register ("Registro de Pre-asignación). Registration in the preliminary register is conditional upon certain criteria (art. 4 RD 6/2009, art. 4 RD 1578/2008). Real Decreto 1/2012 blocked a Access to pre-assignation retribution registry the above-mentioned registries is currently suspended, thus effectively blocking the economic treatment under the special regulation together with the incentive systems for RES-E "regimen especial" due to the block imposed by Real Decreto 1/2012. This however, has no effect in any other area of the special regulation (e.g. priority connection) apart from economic treatment, as confirmed by the National Energy Commission (CNE).	
Procedure	**Process flow**	• Grid connection • The claim for purchase and transmission arises when the plant is connected to the grid. • The grid operator is then obliged to accept and transmit the electricity. RES-E plants below 100 kV connected to networks with voltage below 1 kV (1000kV capacity and 36 kV line voltage for biomass plants) benefit of a simplified procedure with lower administrative requirements (RD 1669/2011)
	Deadlines	In general, the grid operator shall satisfy his obligation to take in RES electricity unconditionally and without undue delay. However, he may impose limitations if the capacity of the grid is fully used up or if there are other technical concerns (Annex XI RD 661/2007).
	Obligation to inform	The procedure to be followed by the transmission grid operator is described in PO 3.7. In summary, the transmission grid operator, via the CECRE and the generation control centres connected to it, may send instructions to the RES production facilities. RES facilities must

		comply with these instructions within 15 minutes.
Priority to renewable energy **(qualitative criteria)**	(X) Priority to renewable energy ( ) Non-discrimination	Electricity from renewable sources shall be fed in and dispatched with priority, i.e. prior to electricity from conventional sources of energy. However, this priority ceases for plant operators not complying with the conditions laid down by the contract on the technical relations between a plant and grid operator (art. 17e, Annex XI no. 3, 4 RD 661/2007).
Curtailment	The grid operator is obligated to take in all net electricity generated by a plant operator whenever the export of electricity to its infrastructure is technically possible (art. 17b, 20 RD 661/2007). Net electricity shall refer to the gross amounts of electricity generated by a plant less the plant's own consumption. The transmission grid operator may reduce electricity imports for the following reasons: grid stability or short-circuit power warnings, grid congestion, inadequate active or reactive power levels, production variations, balancing issues and minimum load. RES generators may be curtailed only after conventional generators have been curtailed wherever possible. In practice, wind farms are curtailed more often than other RES installations (Artt. 56, 65, 52 – 66bis RD 1955/2000, RD 661/2007, RD 1565/2010).	
Distribution of costs		
	State	
	Consumers	
	Grid operator	
	Plant operator	The costs of feeding in and transmission of electricity are borne by the plant operator through a fee given to the grid operator (Art. 24, par. 2, and Art. 3 par. 1, L 54/1997).
	European Union	
	Other	
	Distribution mechanism	There are no special mechanisms allowing for the costs to be passed on to the consumers

Grid development

Abbreviated form of legal source	• RD 1955/2000 • RD 661/2007	
Overview	A plant operator may be contractually entitled against the grid operator to an expansion of the grid, if the expansion is required for his plant to be connected to the grid (entitlement arises from the obligation to bear the costs, as specified by Annex XI no. 9 RD 661/2007). However, the grid operator is not directly obligated to expand the grid. Yet, the grid operator has the obligation to expand his grid according to general criteria specified by legislation (art. 8-16 RD 1955/2000). Possible individual claims for an expansion may arise if grid development is required for a plant to be connected to the grid (Annex XI no. 9 RD 661/2007). **Entitled party.** A plant operator may be entitled to an expansion, if the expansion is necessary to connect his plant and this right has been laid down in the contract. **Obligated party.** The contracts concluded with the plant operators may oblige the grid operator to expand his grid. As far as the grid operator's general obligation to expand the grid is concerned, he shall elaborate a grid development plan in co-operation with the Ministry of Industry Tourism and Trade every four years. The plan shall take into account the number of existing and new plants and the opinions of various stakeholders (art. 11 RD 1955/2000).	
Procedure	**Process flow**	The plant operator may be contractually entitled against the grid operator to the expansion of the grid, if grid development is required for his plant to be connected to the grid (entitlement arises from the obligation to bear the costs as specified in Annex XI no. 9 RD 661/2007). However, the grid operator is not directly obligated to expand the grid. Yet, the grid operator has the obligation to expand his grid according to general criteria specified by energy law (art. 8-16 RD 1955/2000). Possible individual claims for an expansion may arise if grid development is required for a plant to be connected to the grid (Annex XI no. 9 RD 661/2007).
	Enforcement of claims	The circumstances in which an individual claim arises depend on the conditions of the contract.

	Deadlines	Time limitations and deadlines of an expansion of the grid depend on the terms of the contract.
	Obligation to inform	
Regulatory incentives for grid expansion and innovation		
Distribution of costs		
	State	
	Consumers	
	Grid operator	The costs of a general expansion of the grid are borne by the grid operator (Annex XI, 9, 10 RD 661/2007).
	Plant operator	If the expansion is to the benefit of the plant operator only, he shall bear the costs of the expansion (Annex XI, 9, 10 RD 661/2007).
	European Union	
	Other	
	Distribution mechanism	Statutory law does not provide for distribution mechanisms.
Grid studies	**Ministry of Industry Tourism and Trade (2008):** http://www.mityc.es/energia/planificacion/Planificacionelectricidadygas/Desarrollo2008/Paginas/Desarrollo2008.aspx	

RES-H&C support schemes

Summary of support schemes

Overview	A tax reduction mechanism is in place for solar thermal installations.
Summary of support schemes	At a national level, a tax reduction mechanism is in place for solar thermal installation, subject to specific conditions. The Spanish National Renewable Action Plan indicated also that a price-based mechanism for RES-H is to be established (”ICAREN”), however up to now no further information is available.
Technologies	Solar thermal
Statutory provisions	• Ley 35/2006 (Ley 35/2006, de 28 de noviembre, del Impuesto sobre la Renta de las Personas Físicas y de modificación parcial de las leyes de los Impuestos sobre Sociedades, sobre la Renta de no Residentes y sobre el Patrimonio - Law No. 35/2006 of 28th November 2006 on the Tax on Income of Natural Persons, and on Changes to the Laws on Taxes on Companies, on Income of Non-residents and on Property)

Basic information on legal sources

Name of legal source **(original language)**	Ley 35/2006		
Full name	Ley 35/2006, de 28 de noviembre, del Impuesto sobre la Renta de las Personas Físicas y de modificación parcial de las leyes de los Impuestos sobre Sociedades, sobre la Renta de no Residentes y sobre el Patrimonio.		
Name (English)	Law No. 35/2006 of 28th November 2006 on the Tax on Income of Natural Persons, and on Changes to the Laws on Taxes on Companies, on Income of Non-residents and on Property.		
Abbreviated form	Ley 35/2006		
Entry into force	29.11.2006		
Last amended on	10.03.2012		
Future amendments			

Purpose	Act No. 35/2006 includes important amendments to Spanish business tax law as regards the promotion of renewable energy.		
Relevance for renewable energy	This Act provides tax incentives for investments in renewable energy.		
Link to full text of legal source (original language)	*http://www.boe.es/g/es/bases_datos/doc.php?coleccion=iberlex&id=2006/20764*		
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)
Instituto para la Diversificación y Ahorro de la Energía (IDAE) – Energy Agency	http://www.idae.es/index.php/mod.indice/mem.i		+34 914 564 900	comunicacion@idae.es

Support schemes

Tax regulation mechanism

Abbreviated form of legal source(s)	• Ley 35/2006	
Summary	From 1 May 2011 to 31 December 2012, taxpayers whose income is below € 71,007.20 per year are entitled to a tax credit equal to 20% of all investments related to the use of renewable energy or similar measures in building of their residence. For incomes below € 53,007.20 per year, the annual deduction is subject to a maximum of € 6,750. For incomes between € 53,007.20 and 71,007.20 per year, the annual maximum deduction is: € 6.750 minus 0.375 multiplied with (income minus € 53,007.20). The maximum deduction between 1 May 2011 and 31 December 2012 shall not exceed € 20,000.	
Eligible technologies	**General information**	Solar thermal is eligible
	Aerothermal	
	Hydrothermal	
	Biogas	
	Biomass	
	Geothermal energy	
	Solar Thermal	Eligible, if the installation contributes to a minimum of 50% of the building's demand of warm sanitary water.
Amount	• Tax credit of 20% of all investments related to the use of renewable energy or similar measures for taxpayers whose income is below € 71,007.20; • € 6.750 maximum for incomes below € 53,007.20 per year;	

	• € 6.750 – 0.375 *(income - 53,007.20) for incomes between € 53,007.20 and 71,007.20. The maximum deduction between 1 May 2011 and 31 December 2012 shall not exceed € 20,000.	
Addressees	Eligible for the tax credit is any legal entity whose income is below € 71,007.20 per year (Additional disposition 29 Ley 35/2006).	
Procedure	**Process flow**	Evidence for the investment costs shall be submitted together with the tax return. The tax reduction is taken account of when the tax is calculated.
	Competent authority	
Flexibility Mechanism		
Distribution of costs	**State**	The cost of the tax credit is borne by the state.
	Consumers	
	Plant operator	
	Grid operator	
	European Union	
	Distribution mechanism	

RES-T support schemes

Summary of support schemes

Overview	Promotion of biofuels in Spain consists of two measures: a quota system and a tax regulation mechanism. The tax regulation mechanism is in place until 2013.
Summary of support schemes	Until 2013, the tax regulation mechanism provides a special tax rate (€ 0 per 1000 litres) for the production of biofuels, which can be modified through a specific legislative measure. Production or import of biofuels for pilot projects for the development of less contaminating products is exempt from tax payments. The quota system obliges whoever feeds fuels in the national system (retail and wholesale operators) as well as consumers relying on sources other than retail and wholesale operators, to feed in or consume a certain amount of biofuels every year. This amount is established in percentage and compliance is proven to the national energy commission (CNE) through certificates. At the end of each year, obligated parties must turn in the certificates corresponding to their biofuel sale / consumption. The CNE checks compliance and collects fees for non compliance from obligated parties. The penalty fees paid by the parties who did not reach their quota are redistributed among the parties who sold or consumed more biofuels than their set quota. These amounts are redistributed in proportion to the amount of biofuels that complying parties have sold or consumed in addition to their set quota.
Technologies	• Biofuels and biohydrogen
Statutory provisions	• RD 459/2011 • Orden ITC/2877/2008 • L 38/1992

Basic information on legal sources

Name of legal source (original language)	Real Decreto 459/2011	Orden ITC/2877/2008	Ley 38/1992
Full name	Real Decreto 459/2011, de 1 de abril, por el que se fijan los objetivos obligatorios de biocarburantes para los años 2011, 2012 y 2013.	ORDEN ITC/2877/2008, de 9 de octubre, por la que se establece un mecanismo de fomento del uso de biocarburantes y otros combustibles renovables con fines de transporte.	Ley 38/1992, de 28 de diciembre, de Impuestos Especiales.
Name (English)	Royal Decree 459/2011 of 1 April, establishing mandatory goals for biofuels for 2011, 2012, 2013.	Order ITC/2877/2008 of 9 October establishing a support scheme for biofuels and other renewable fuels for transport	Law 38/1992 of special tax rates
Abbreviated form	RD 459/2011	Orden ITC/2877/2008	L 38/1992
Entry into force	01.04.2011	09.10.2008	29.12.1992
Last amended on		07.01.2011	31.03.2011
Future amendments			
Purpose	This decree establishes quotas for biofuels.	This decree establishes a support scheme for biofuels.	This decree establishes special tax rates for specific products

Relevance for renewable energy	This decree directly supports biofuels development	This decree supports biofuels development	Biofuels are given, through this law, a special tax rate
Link to full text of legal source (original language)	*http://www.boe.es/aeboe/consultas/bases_datos/doc.php?id=BOE-A-2011-5937*	*http://www.cne.es/cne/doc/legislacion/Orden_Biocarb141008.pdf*	*https://www.boe.es/aeboe/consultas/bases_datos/act.php?id=BOE-A-1992-28741*
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)
Comisión Nacional de Energía – National Energy Commission	http://www.cne.es/cne/Home		+34 91.432.96.00	dri@cne.es

Support schemes

Tax regulation mechanism (Tipo Impositivo Especial – Special Tax rate)

Abbreviated form of legal source(s)	• L 38/1992	
Summary	Until the end of 2012, no taxes are in place for the production of biofuels.	
Eligible technologies	**General information**	Biofuels are eligible (Art. 50, L 38/1992)
	Biofuels	The following biofuels are eligible: • Bioethanol • Biomethanol • Biodiesel (Art. 50, par. 1, L 38/1992)
	Electricity	
	Hydrogen	
Amount	The tax rate for the production of eligible fuels is set at € 0 per 1000 litres (Art. 50.1 , L 38/1992). This rate may be modified through a specific legislative measure ("Leyes de Presupuestos Generales del Estado") depending on the evolution of biofuel production costs (Art. 50 bis, par. 1, L 38/1992). The use or import of biofuels for pilot projects for the development of less contaminating products is exempt from tax payments (Art. 51, par. 3, L 38/1992).	
Addressees	**Entitled Party:** Owners (personal or juridical personality) of production facilities or of oil networks where fuel transformation may take place (Art. 7, par. 1 L. 38/1992).	

	Obligated Party: the State.	
Procedure	**Process flow**	This special tax rate applies directly to the produced goods at the moment in which they exit the production facility (Art. 7, par. 1 L. 38/1992).
	Competent authority	The Spanish Tax Agency (Agencia Tribuatria)
Flexibility Mechanism		
Distribution of costs	**State**	The State carries the costs in terms of minor incomes from taxes.
	Consumers	
	Plant operator	
	Grid operator	
	European Union	
	Distribution mechanism	

Biofuel quota (support mechanism for the use of biofuels and other renewable fuels for transport means)

Abbreviated form of legal source(s)	• Orden ITC/2877/2008 • RD 459/2011	
Summary	Wholesale and retail operators of fuels, as well as consumers of fuels not supplied by wholesale or retail operators, are obliged to sell / consume a minimal quota of biofuels. The minimal amount is set at a general level (all biofuels) and at a specific level (minimal amount of biofuels in diesel and in gasolines). Each obligated subject will have to present a number of certificates to the National Energy Commission (CNE) to prove compliance. Certificates have a value of 1 toe. In case of non-compliance with the goals, a penalty fee applies. In case of overcompliance (some parties selling or consuming more than they are obliged to), the amounts collected from the penalty fees are redistributed by the CNE proportionally to the subjects that sold / consumed biofuels exceeding their set quota obligation.	
Eligible technologies	**General information**	Several types of biofuels and biohydrogen are promoted.
	Biofuels	The following fall under the definition of "biofuels" in the context of this obligation (Art. 2, par. 1, Orden ITC/2877/2008): • Bioethanol, • Biodiesel • Biogas • DME • Biomethanol • bioETBEbioMTBE • pure vegetable oil • Other biomass-based fuels for transport.

<table>
<tr><td rowspan="2"></td><td>Electricity</td><td></td></tr>
<tr><td>Hydrogen</td><td>Biohydrogen is promoted (Art. 2, par. 1, Orden ITC/2877/2008).</td></tr>
<tr><td rowspan="3">Amount</td><td>Amount of quota and period of application</td><td>Addressees must deliver to the CNE an amount of certificates sufficient to satisfy the following minimal amounts of sale or consumption of biofuels (Art. 3 RD 459/2011).

<table><tr><td></td><td>2012</td><td>2013</td></tr><tr><td>Total minimal amount of sold / consumed biofuels</td><td>6.5%</td><td>6.5%</td></tr><tr><td>Total minimal amount of sold / consumed biofuels in diesel</td><td>7.0%</td><td>7.0%</td></tr><tr><td>Total minimal amount of sold / consumed biofuels in gasoline</td><td>4.1%</td><td>4.1%</td></tr></table></td></tr>
<tr><td>Adjustment of quotas</td><td>Quotas are set through publication of new laws / decrees.</td></tr>
<tr><td>Fees and penalty charges</td><td>Penalties and fees for non compliance are established through the formulas of Art. 11 Orden ITC/2877/2008. The Order sets a value of 350 € per certificate.

Each certificate indicates that the obligated party has sold or consumed 1 toe of biofuels in one year (Art.2, par. 3, Orden ITC/2877/2008).</td></tr>
<tr><td>Addressees</td><td colspan="2">The following subjects are required to satisfy the quota:

• Wholesale operators for fuel for their sales in the national market, excluding their sales to other wholesale operators;
• Retail operators for fuel in the national market, for their sales in the national market not covered by wholesale operators;
• Consumers of fuels products, for their yearly consumption of fuels not supplied by wholesale or retail operators (Art. 2</td></tr>
</table>

	RD 459/2011).	
Procedure	**Process flow**	Sale or consumption of biofuels of year n may be accredited by the CNE up to **1 April** of year n+1; By **1 June** of year n+1 the CNE will communicate to the addressees the amount of certificates they accredited, the number needed for complying with their obligation and the additional number needed to comply with their obligation, if any. By **1 July** of year n+1, all addressees that did not meet their quota will transfer the amount of their penalty to the CNE; By **1 August** of year n+1 the CNE will re-distribute the amounts received to subjects that have met a quota of biofuels beyond their goal. Re-distribution will take place in accordance with the formulas outlined on Art. 11, Orden ITC/2877/2008 (Art. 12, Orden ITC/2877/2008).
	Competent authority	The National Energy Commission (CNE) (Art. 6, Orden ITC/2877/2008).
Flexibility Mechanism		
Distribution of costs	**State**	
	Consumers	Consumers pay the additional costs of the biofuel obligation.

	European Union	
	Others	
	Distribution mechanism	• The State imposes an obligation on Producers • Producers comply with the obligation and incur additional costs for compliance • Producers cover these additional costs through higher sale prices, thus transferring the costs to consumers, as confirmed by the CNE

Policies

Summary of policies

Overview	Spain has a national training system for installers and an obligatory certification for solar thermal panels. In addition, there are two wider frameworks, the R&D plan and the building code, that include RES as an area of interest.
Summary of policies	**Training programmes for installers.** The national system of qualification and professional formation (NSQPF) provides a structured framework for the provision of vocational training also for energy. **Certification Programmes for RES installations.** As regards certification, an obligation to be certified is in place for solar thermal panels to comply with international standards. **RD&D Policies.** National plan of scientific research, development and technological innovation 2008 – 2011 is the programming instrument that establishes goals and priorities of the national research policy in the mid-term. The plan covers very different areas and topics. One of its strategic actions is "Energy and Climate Change". This plan has been extended from its original deadline in 2011 to until the new plan is published. **Building obligations.** With respect to buildings and RES, it is stated in the technical building code that all new buildings or buildings undergoing major renovation in which there is demand for warm sanitary water / air conditioning of a covered swimming pool must satisfy some of this demand through solar thermal installations.
Technologies	All policies apply to solar thermal. The NSQPF also applies to PV installations and wind power plants. The national plans of R&D do not specify technologies, but only types of projects. It is possible that technologies are specified in the single calls under the R&D plan.

Statutory provisions	• L 5/2002 (Ley 5/2002, de 19 de junio, de las Cualificaciones y de la Formación Profesional -Law 5/2002 of June 19 of qualifications and professional formation) • ORDEN ITC/71/2007 (ORDEN ITC/71/2007, de 22 de enero, por la que se modifica el anexo de la Orden de 28 de julio de 1980, por la que se aprueban las normas e instrucciones técnicas complementarias para la homologación de paneles solares - ORDER ITC/71/2007, of the 22th of January, modifying the Annex to Order of 28 July 1980, approving regulations and technical instructions for the homologation of solar panels) • Plan Nacional de Investigación Científica, Desarrollo e Innovación Tecnológica (2008 – 2011) - National plan of scientific research, development and technological innovation 2008 – 2011 • CTE (Código Técnico de la Edificación - National building code)

Basic information on legal sources

Name of legal source **(original language)**	Ley 5/2002,	ORDEN ITC/71/2007	Plan Nacional de Investigación Científica, Desarrollo e Innovación Tecnológica /2008-2011)
Full name	Ley 5/2002, de 19 de junio, de las Cualificaciones y de la Formación Profesional	ORDEN ITC/71/2007, de 22 de enero, por la que se modifica el anexo de la Orden de 28 de julio de 1980, por la que se aprueban las normas e instrucciones técnicas complementarias para la homologación de paneles solares	Plan Nacional de Investigación Científica, Desarrollo e Innovación Tecnológica (2008 – 2011)
Name (English)	Law 5/2002 of June 19 of qualifications and professional formation	ORDER ITC/71/2007, of the 22th of January, modifying the Annex to Order of 28 July 1980, approving regulations and technical instructions for the homologation of solar panels.	National plan of scientific research, development and technological innovation 2008 – 2011
Abbreviated form	L 5/2002	ORDEN ITC/71/2007	Plan Nacional de Investigación Científica, Desarrollo e Innovación Tecnológica (2008-2011)
Entry into force	20.06.2002	26.01.2007	14.09.2007
Last amended on	12.03.2011	03.10.2008	07.10.2011

Future amendments			
Purpose	To establish a framework for certifications and vocational training	This decree establishes new regulations and technical instructions for certifying solar panels.	This document is the basis for all R&D policy in Spain.
Relevance for renewable energy	RES installers are also included in the certification and vocational training scheme	This decree applies to RES only.	RES projects are explicitly included in the plan.
Link to full text of legal source (original language)	*http://www.boe.es/aeboe/consultas/bases_datos/act.php?id=BOE-A-2002-12018*	*http://www.boe.es/aeboe/consultas/bases_datos/doc.php?id=BOE-A-2007-1613*	*www.idi.mineco.gob.es/stfls/MICINN/Investigacion/FICHEROS/PLAN_NACIONAL_CONSEJO_DE_MINISTROS.pdf*
Link to full text of legal source (English)			

Name of legal source (original language)	Código Técnico de la Edificación		
Full name	Código Técnico de la Edificación		
Name (English)	National building code		
Abbreviated form	CTE		
Entry into force	28.03.2006		
Last amended on	04.05.2010		
Future amendments			
Purpose	This document is the reference framework for building standards in Spain		
Relevance for renewable energy	The CTE establishes minimal RES obligations for buildings		
Link to full text of legal source (original language)	*http://www.codigotecnico.org/web/recursos/documentos/parte1/RealDecreto/*		
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)
Ministerio de Educación - Ministry of Education	http://www.educacion.gob.es		+34 913277681	
Ministerio de, Industria Energía y Turismo - Ministry of Industry, Energy and Tourism	http://www.minetur.gob.es		+34 91 349 46 40	
Ministerio de Economía y Competitividad - Ministry of Economics and Competitiveness	http://www.idi.mineco.gob.es/		+34 902 218 600	

Policy categories

Training programmes for installers (National system of qualification and professional formation)

Abbreviated form of legal source(s)	• L 5/2002	
Description	The national system of qualification and professional formation (NSQPF) provides a structured framework for the provision of vocational training in 26 different professional areas, among which "energy" is also considered. Within this area, the following certifications are listed, along with the training requirements necessary for their achievement: • Installation and maintaining of PV facilities; • Installation and maintaining of solar thermal facilities; • Installation and maintaining management of wind parks. INCUAL (the National Qualifications Institute, a technical instrument of the General Council of Vocational Education and Training) elaborates and actualises the national catalogue of professional qualifications. On the basis of this catalogue, courses aimed at reaching those qualifications are offered and developed by the Ministry of Education or the local authorities, as confirmed by INCUAL.	
Obligated entities	Any professional who wishes to develop a specific professional knowledge and/or to obtain an official certification related to its activity.	
Competent authority	General Council of Vocational Education and Training	
Further information	• http://www.educacion.gob.es/educa/incual/ice_consejoGeneral_ing.html • http://www.sepe.es/contenido/empleo_formacion/formacion/certificados_de_profesionalidad/ENA.html	
Distribution of costs	**State**	The costs are borne by regional communities (comunidades autonomas), as confirmed by the Ministry of Education.
	Private Financing	
	European Union	
	Others	

Certification Programmes for RES installations

Abbreviated form of legal source(s)	• ORDEN ITC/71/2007	
Description	This is an obligatory certification for solar thermal panels to comply with international standards UNE-EN 12975 and UNE-EN 12976. Specifically, UNE-EN 12975 applies to solar panels with liquid cooling systems and UNE-EN 12976 applies to prefabricated thermal solar panels.	
Obligated entities	This scheme applies to producers of solar collectors.	
Competent authority	The Ministry of Industry, Energy and Tourism.	
Further information	http://www.minetur.gob.es/energia/desarrollo/EnergiaRenovable/Paginas/faqs.aspx	
Distribution of costs	**State**	
	Industry	
	System Producers	Plant producers are the ones that need to comply with the obligation
	European Union	
	Others	

RD&D Policies (National plan of scientific research, development and technological innovation 2008 - 2011)

Abbreviated form of legal source(s)	• Plan Nacional de Investigación Científica, Desarrollo e Innovación Tecnológica (2008-2011)
Description	This plan has been extended from its original deadline in 2011 to until the new plan is published. This plan is the programming instrument that establishes goals and priorities of the national research policy in the mid-term. The plan covers very different areas and topics. One of its strategic actions is "Energy and Climate Change". Within this strategic action, support is directed along three guidelines: 1. Energy, climate change mitigation, energy efficiency; 2. Sustainable mobility / transport; 3. Other climate change areas. Four types of R&D projects are funded: 1. Fundamental research projects: High-risk and frontier projects funded through public calls. Grants of maximum 5 years. 2. Applied research projects: Projects aimed at creating new products processes or services, or at improving them. Projects are funded through public calls. Grants of maximum 3 years. 3. Experimental development projects: Projects aimed at creating new products processes or services, or at significantly improving them from a technological point of view. Projects are funded through public calls. Grants of maximum 3 years. 4. Innovative projects: Projects directly connected to improving the company's competitiveness. Projects are funded through public calls. Grants of maximum 3 years.
Obligated entities	Public and private institutions, public research institutes, universities, hospitals, technological centres, companies, organisations supporting technological transfer, innovative company clusters.
Competent authority	The Ministry of Economics and Competitiveness
Further information	http://www.idi.mineco.gob.es/portal/site/MICINN/menuitem.7eeac5cd345b4f34f09dfd1001432ea0/?vgnextoid=83b192b9036c2210VgnVCM1000001d04140aRCRD

RES-H building obligations (Minimal solar contribution of warm sanitary water – Contribución solar minima de agua caliente sanitaria)

Abbreviated form of legal source(s)	• CTE
Description	All new buildings or buildings undergoing major renovation in which there is demand for warm sanitary water / air conditioning of a covered swimming pool must satisfy some of this demand through solar thermal installations (4.1.1.1.1, DB HE, CTE). The contribution varies between 30 and 70% of the total warm sanitary water demand of the building, depending on the demand level, the geographic position, the main heating source. Under presence of supply of warm sanitary water from other RES, under certain conditions that render the satisfaction of the obligation physically impossible, or as determined by the local competent authority for historic-artistic protection reasons, the obligation can be lowered or bypassed
Obligated entities	To all new buildings or buildings undergoing major renovation in which there is demand for warm sanitary water / air conditioning of a covered swimming pool.
Competent authority	Ministry of Development.
Further information	http://www.codigotecnico.org/web/recursos/documentos/dbhe/he4/
Obligation on regional level	Yes, as confirmed by the Ministry of Development