



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

**National profile: Turkey** 

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## **Turkey - summary text**

In Turkey, renewable electricity production is mainly promoted through a guaranteed feed-in tariff. The connection to the grid occurs through a bidding procedure. The available connection regions and points are published by the Turkish Transmission System Operator.











# **RES-E support schemes**

#### **Summary of support schemes**

Overview	In Turkey, electricity from renewable sources is supported through a feed-in tariff.	
Summary of support system	<b>Feed-in tariff.</b> Plant operators are entitled against the grid operator to the payment of a fixed feed-in tariff for all electricity exports to the grid. The feed-in tariff varies according to the source of energy used and whether the components of the plants are made in Turkey or not.	
Technologies	All renewable energy generation technologies are eligible.	
Statutory provisions	<ul> <li>YEK (Yenilenebilir Enerji Kaynakların Elektrik Enerjisi Üretimin Amaçlı Kullanıma İlişkin Kanun – Law on the Use of Renewable Energy Sources for Electricity Production)</li> <li>EPLE (Elektrik Piyasasında Lisanssız Elektrik Üretime İliskin Yönetmenlik - Regulation on License Free Electricity Generation)</li> <li>YEK-Regulation (Yenilenebilir Enerji Kaynaklarının Belgelendirilmesi ve Desteklenmesine İlişkin Yönetmelik - Regulation on Documentation and Support of Renewable Energy Sources)</li> <li>EPLY (Elektrik Piyasası Lisans Yönetmetmeliği – Regulation of Electricity Market Licenses)</li> </ul>	











#### **Basic information on legal sources**

Name of legal source (original language)	Yenilenebilir Enerji Kaynakların Elektrik Enerjisi Üretimin Amaçlı Kullanıma İlişkin Kanun	Elektrik Piyasasında Lisanssız Elektrik Üretime İliskin Yönetmenlik	Yenilenebilir Enerji Kaynaklarının Belgelendirilmesi ve Desteklenmesine İlişkin Yönetmelik
Full name	Kanun Numarasi: 5346  Resmi Gazete Sayisi: 25819  Yenilenebilir Enerji Kaynakların Elektrik Enerjisi Üretimin Amaçlı Kullanıma İlişkin Kanun	Resmi Gazete Sayisi: 28001  Elektrik Piyasasında Lisanssız Elektrik Üretime İliskin Yönetmenlik	Resmi Gazete Sayısı : 28001  Yenilenebilir Enerji Kaynaklarının Belgelendirilmesi ve Desteklenmesine İlişkin Yönetmelik
Name (English)	Law on the Use of Renewable Energy Sources for Electricity Production	Regulation on License Free Electricity Generation	Regulation on Documentation and Support of Renewable Energy Sources
Abbreviated form	YEK	EPLE	YEK-Regulation
Entry into force	18.05.2005	21.07.2011	21.07.2011
Last amended on	08.01.2011	02.10.2013	01.10.2013
Future amendments			











Purpose	The YEK-Law promotes the generation of electricity from renewable sources to reduce the carbon emission and increase the production in this sector.	The Regulation on License Free Electricity Generation promotes electricity generation from small plants.	The YEK-Regulation describes the requirements to receive a YEK-Certificate, which is necessary to produce green electricity.
Relevance for renewable energy	The YEK-Law promotes renewable energy.	Small renewable energy plants for companies or natural persons can become affordable.	This regulation applies to RES only.
Link to full text of legal source (original language)	http://resmigazete.gov.tr/eskiler/2011/0 1/20110108-3.htm  Additional source: http://www.verginet.net/dtt/5/6094sayi likanun.aspx	http://www.epdk.org.tr/TR/Dokuman/3 <u>044</u>	http://faolex.fao.org/docs/pdf/tur15028 1.pdf
Link to full text of legal source (English)			











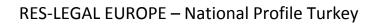
Name of legal source	Elektrik Piyasası Lisans Yönetmetmeligi	
(original language)		
Full name	Resmi Gazete Sayisi: 28809	
runname	Elektrik Piyasası Lisans Yönetmetmeliği	
Name (English)	Regulation of The Electricity Market Licence	
Abbreviated form	EPLY	
Entry into force	04.08.2002	
Last amended on	23.12.2015.	
Future amendments		
Purpose	The EPLY-Regulation frames the procedure of getting a license for juridical persons to be able to produce electricity and their rights and	
·	duties.	
Relevance for renewable energy	Only juridical persons with a license are allowed to produce electricity in a plant with a capacity of more than 500kWe.	
Link to full text of legal source		
(original language)	http://www.resmigazete.gov.tr/eskiler/2015/12/20151223-5.htm	













Link to full text of legal source (English)	











#### **Further information**

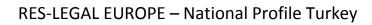
Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
T.C. Enerji ve Tabii Kaynaklar Bakanlığı Ministry of Energy and	http://www.enerji.gov.tr		Tel.: +90 312 212 64 20	
Natural Resources  Türkiye Bilimsel ve Teknoloji araştırma Kurumu (TÜBİTAK)	http://www.tubitak.gov.tr/tr		Tel.: +90 312 468 5300	
The Scientific and Technological Research Council of Turkey				
T.C. Adalet Bakanlığı  Ministry of Justice	http://www.adalet.gov.tr/		Tel.: +90 312 417 77 70	info@adalet.gov.tr
T.C. Enerji Piyasası Düzenleme Kurulu (EPDK) Energy Market Regulatory Authority	http://www.epdk.gov.tr		Tel.: +90 312 201 40 01-02	













Yenilenebilir Enerji Genel Müdürlüğü (YEGM) Renewable Enerji General Directorate	http://www.eie.gov.tr/	Tel.: +90 312 295 50 00	info@yegm.gov.tr
Devlet Su İşleri Genel Müdürlüğü (DSİ) State Hydraulic Works	http://www.dsi.gov.tr/ana-sayfa	Tel.: +90 312 417 83 00	
Meteoroloji Genel Müdürlüğü (MGM) Turkish State Meteorogical Service	http://www.mgm.gov.tr/index.aspx	Tel.: +90 312 359 75 45	
Piyasa Mali Uzlaştırma Merkezi (PMUM) Market Financial Reconciliation Centre	http://www.teias.gov.tr/mali/maliuz.htm	Tel.: +90 312 203 82 48	avni.cakir@teias.gov.tr











#### **Support Schemes**

#### Feed-in tariff

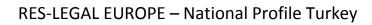
Abbreviated form of legal source(s)	<ul><li>YEK</li><li>YEK-Regulation</li><li>EPLY</li><li>EPLE</li></ul>		
Summary	In Turkey, renewable electricity production is mainly promoted through a guaranteed feed-in tariff. The YEK-Law differentiates the amount of the fixed feed-in-tariffs depending on the technology and whether the plant components were produced in Turkey or not.		
Contact Authority	Energy Market Regulatory Authority; Market Financial Reconciliation Centre		
	General information	All renewable electricity generation technologies are eligible.	
	Wind energy	Eligible, both onshore and offshore (§ 3 art. 8 YEK)	
	Solar energy	Eligible, both PV and CSP (§ 3 art. 8 YEK)	
Eligible technologies	Geothermal energy	Eligible (§ 3 art. 8 YEK)	
	Biogas	Eligible (§ 3 art. 8 YEK)	
	Hydro-power	Eligible, both traditional hydro-power and ocean energy (§ 3 art. 8 YEK)	













	Biomass	Eligible (§ 3 art. 8 YEK)
	General information	The feed-in tariff varies according to the energy source and the origin of the plant components. It has to start to be in operation between 18.05.2005 and 31.12.2015.  The feed-in tariff and the local-content bonus for the following energy sources are fixed in YEK, chart 1 and 2.
Amount	Wind energy	<ul> <li>feed-in tariff: \$ Cent 7.3 per kWh on- and off-shore (approx. €ct 5.3 per kWh)</li> <li>local-content bonus: \$ Cent 0.6-3.7 per kWh (approx. €ct 0.4-2.7 per kWh)</li> </ul>
	Solar energy	<ul> <li>PV:         <ul> <li>feed-in tariff: \$ Cent 13.3 per kWh (approx. €ct 10.3 per kWh)</li> <li>local-content bonus: \$ Cent 0.6-6.7 per kWh (approx. €ct 0.5-5.2 per kWh)</li> </ul> </li> <li>CSP:         <ul> <li>feed-in tariff: \$ Cent 13.3 per kWh (approx. €ct 10.3 per kWh)</li> <li>local-content bonus: \$ Cent 0.6-9.2 per kWh (approx. €ct 0.5-7.1 per kWh)</li> </ul> </li> </ul>











		Since 31 December 2013, the Council of Ministers is authorised to determine the total capacity of new installed solar installations which have a YEK permission. (§ 6/C art. 5, YEK)
	Geothermal energy	<ul> <li>feed-in tariff: \$ Cent 10.5 per kWh (approx. €ct 8.1 per kWh)</li> <li>local-content bonus: \$ Cent 0.7-2.7 per kWh (approx. €ct 0.5-2.1 per kWh)</li> </ul>
	Biogas	<ul> <li>feed-in tariff: \$ Cent 13.3 per kWh (approx. €ct 10.3 per kWh)</li> <li>local-content bonus: \$ Cent 0.4-3.8 per kWh (approx. €ct 0.3-2.9 per kWh)</li> </ul>
	Hydro-power	<ul> <li>feed-in tariff: \$ Cent 7.3 per kWh (approx. €ct 5.6 per kWh)</li> <li>local-content bonus: \$ Cent 1-2.3 per kWh (approx. €ct 0.7-1.8 per kWh)</li> </ul>
	Biomass	<ul> <li>feed-in tariff: \$ Cent 13.3 per kWh (approx. €ct 10.3 per kWh)</li> <li>local-content bonus: \$ Cent 0.4-1.8 per kWh (approx. €ct 0.3-1.4 per kWh)</li> </ul>
	General information	
Degression	Wind energy	
	Solar energy	











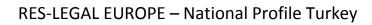
	Geothermal energy	
	Biogas	
	Hydro-power	
	Biomass	
	The total capacity of new installed solar installations capacity of a single installation was limited to 50 MV	s was limited to 600 MW until 31 December 2013, while the maximum V (§ 6/C art. 5 YEK).
Сар	Since 31 December 2013, the Council of Ministers installations which have a YEK permission. (§ 6/C art	is authorised to determine the total capacity of new installed solar 5, YEK)
Eligibility period	The feed-in tariff is limited to 10 years. The bonus tariff for local-content support is limited to the first 5 years of operation (§ 6 art. 1 YEK).	
Addressees	Entitled party:  In the first place, this support scheme entitles juridical persons producing electricity with a YEK-License, which is necessary to profit from the support scheme (§ 6 art. 1 YEK).  Also entitled are natural or juridical persons without a YEK-license producing RES-electricity in a plant with a maximum capacity of 500kWe (§§ 22 & 23 EPLE).  Obligated party:  The obliged party is each grid operator supplying the consumers with electrical energy (§ 6 art. 6 YEK).	













Procedure	Process flow	<ul> <li>A limited or joint-stock company with a production license (§ 7 art.1 EPLY) applies until 31 October to the Energy Market Regulatory Authority (EPDK) to get a YEK-License for the next year (§ 6 art 1 YEK-Regulation).</li> <li>Electricity production facilities based on solar power are required to satisfy requirements examined during inspections from the EPDK to acknowledge the production amounts for at least the last year (§ 6 art. 5 YEK).</li> <li>Electricity producing facilities based on hydro-power need to get the permission of the State Hydraulic Works (DSi), before the construction (§ 6/A art. 1 YEK).</li> <li>The Market Financial Reconciliation Center (PMUM) shall announce the RES total amount for each invoice period and determine the payment obligation rate of each supplier, which is than invoiced to the supplier in question and the collections made are paid pro rata to the entities (§ 6 art. 6 YEK).</li> </ul>
	Competent authority	The Ministry of Energy and Natural Resources shall provide coordination in implementation, steering, monitoring and assessment of the fundamental principles and obligations specified in this law, and in planning the measures to be taken (§ 9 YEK).
Flexibility Mechanism		•
Distribution of costs	State	











Consumers	The costs of the feed-in tariff are borne by the consumers via their electricity bills (§ 6 art. 1 YEK).
Plant operator	
Grid operator	
European Union	
Distribution mechanism	<ul> <li>The costs of the support scheme are borne by the grid operator. The total amount will be determinate by the PMUM and then invoiced to the supplier (§ 6 art. 6 YEK).</li> <li>The grid operators are obliged to pay that amount pro rata to the plant operators (§ 6 art. 6 YEK).</li> <li>The costs of the grid operators are borne by the consumers in terms of their electricity bills (§ 6 art. 6 YEK).</li> </ul>











# **RES-E grid issues**

#### **Overview**

Overview of grid issues	In Turkey, the connection to the grid occurs through a bidding procedure. The available connection regions and points are published by the Turkish Transmission System Operator (TEIAS).	
Connection to the grid	In Turkey, the connection to the grid occurs through a bidding procedure. The available connection regions and points are published by the TEIAS – the Turkish Transmission System Operator on every 31 March of the year. A plant operator who wants to be connected to the grid needs a production license, clarify the connection details and arrange an agreement of the connection with the TEIAS.	
Statutory provisions	<ul> <li>EMGR (Elektrik Piyasası Şebeke Yönetmeliği - Electric Market Grid Regulation)</li> <li>REMCUS Elektrik Piyasası Bağlantı ve Sistem Kullanım Yönetmeliği - Regulation of the Electricity Market Connection and Use of System</li> <li>YEK (Yenilenebilir Enerji Kaynakların Elektrikenerjisi Üretimi Amaclı Kullanıma İlişkin Kanun – Law on the Use of Renewable Energy Sources for Electricity Production)</li> <li>EEÜST (Elektrik Enerjisi Üretmek Amacıyla Aynı Bölge ve Aynı Kaynak İçin Yapılmış Birden Fazla Lisans Başvurusu Olması Halinde Seçim Yapılmasına İlişkin Usul ve Esaslar Hakkında Tebliğ - Notification Concerning the Choosing Procedure When There is More Than One Application for the Same Area and Same Resource)</li> <li>EPLY (Elektrik Piyasası Lisans Yönetmetmeliği – Regulation of Electricity Market Licenses)</li> </ul>	











#### **Basic information on legal sources**

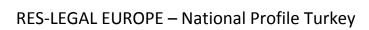
Name of legal source (original language)	Elektrik Piyasası Lisans Yönetmetmeligi	Elektrik Piyasası Şebeke Yönetmeliği	Elektrik Piyasası Bağlantı ve Sistem Kullanım Yönetmeliği
Full name	Resmi Gazete Sayisi: 28809  Elektrik Piyasası Lisans Yönetmetmeliği	Resmi Gazete Sayısı: 25001 Elektrik Piyasası Şebeke Yönetmeliği	Resmi Gazete Sayisi: 28896 Elektrik Piyasası Bağlantı ve Sistem Kullanım Yönetmeliği
Name (English)	Regulation of the Electricity Market Licence	Electric Market Grid Regulation	Regulation of the Electricity Market Connection and Use of System
Abbreviated form	EPLY	EMGR	REMCUS
Entry into force	04.08.2002	22.01.2003	28.01.2014
Last amended on	23.12.2015	07.05.2015	
Future amendments			
Purpose	The EPLY-Regulation frames the procedure of receiving a license for juridical persons to be able to produce electricity and their rights and duties.	The goal of this regulation is to build the market model described in the EPK and to achieve and keep good quality.	This regulation provides the transmission and distribution of a system connection and use of system.













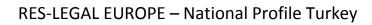
Relevance for renewable energy	Only juridical persons with a license are allowed to produce electricity in a plant with a capacity of more than 500kWe.	The EPK fixes the framework conditions for the transmission to the grid.	The regulation fixes the framework conditions for the connection and the use of the grid.
Link to full text of legal source (original language)	http://www.resmigazete.gov.tr/eskiler/2 015/12/20151223-5.htm	http://www.epdk.org.tr/TR/Dokuman/30 03	http://www.epdk.org.tr/TR/Dokuman/27 35
Link to full text of legal source (English)			













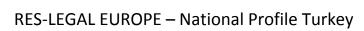
Name of legal source (original language)	Elektrik Enerjisi Üretmek Amacıyla Aynı Bölge ve Aynı Kaynak İçin Yapılmış Birden Fazla Lisans Başvurusu Olması Halinde Seçim Yapılmasına İlişkin Usul ve Esaslar Hakkında Tebliğ	Yenilenebilir Enerji Kaynakların Elektrik Enerjisi Üretimin Amaçlı Kullanıma İlişkin Kanun
Full name	Resmi Gazete Sayisi: 25531  Elektrik Enerjisi Üretmek Amacıyla Aynı Bölge ve Aynı Kaynak İçin Yapılmış Birden Fazla Lisans Başvurusu Olması Halinde Seçim Yapılmasına İlişkin Usul ve Esaslar Hakkında Tebliğ	Kanun Numarasi: 5346 Resmi Gazete Sayisi: 25819 Yenilenebilir Enerji Kaynakların Elektrikenerjisi Üretimin Amaçlı Kullanıma İlişkin Kanun
Name (English)	Notification Concerning the Choosing Procedure When There is More Than One Application for the Same Area and Same Resource	Law on the Use of Renewable Energy Sources for Electricity Production
Abbreviated form	EEÜST	YEK
Entry into force	23.07.2004	18.05.2005
Last amended on		08.01.2011
Future amendments		
Purpose	This notification names the principles and procedure how to choose, if there is more than one applicant in the same region for the same resource.	The YEK-Law promotes the generation of electricity from renewable sources to reduce the carbon emission and increase the production in this sector.













Relevance for renewable energy	Every plant operator needs to get access to the grid. That is why there have to be principles how to choose, if there is more than one applicant.	The YEK-Law promotes renewable energy.
Link to full text of legal source (original language)	http://www.esnenerji.com.tr/wp-content/uploads/2015/02/2004-07-23-tebliq.pdf	http://resmigazete.gov.tr/eskiler/2011/01/20110108-3.htm  Additional source: http://www.verginet.net/dtt/5/6094sayilikanun.aspx
Link to full text of legal source (English)		











#### **Further information**

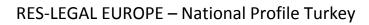
Institution (name)	Website	Name of contact person (optional)	Telephone number (head office)	E-mail (optional)
T.C. Enerji ve Tabii Kaynaklar Bakanlığı Ministry of Energy and Natural Resources	http://www.enerji.gov.tr		Tel.: +90 312 212 64 20	
T.C. Enerji Piyasasi Düzenleme Kurulu (EPDK) Energy Market Regulatory Authority	http://www.epdk.gov.tr		Tel.: +90 312 201 40 01-02	
Türkiye Elektrik Iletim Anonim Sirket (TEIAS)  Turkish Electricity Transmission Company	http://www.teias.gov.tr/		Tel.: +90 312 203 80 00	basinmail@teias.gov.tr
Yenilenebilir Enerji Genel Müdürlüğü (YEGM) Renewable Enerji General Directorate	http://www.eie.gov.tr/		Tel.: +90 312 295 50 00	info@yegm.gov.tr













Elektrik Mühendisleri Odasi (EMO)	http://www.emo.org.tr/index.php	Tel.: +90 312 425 32 72	emo@emo.org.tr
The Chamber of Electrical Engineer			
Türkiye Elektrik Ticaret ve Taahüt A.S. (TETAS)  Turkey Electricity Trade and Liability Company	http://www.tetas.gov.tr	Tel.: +90 312 215 45 30	tetas@tetas.gov.tr
Türkiye Elektrik Dagitim Anonim Sirket (TEDAS)  Turkey Electricity Transmission Company	http://www.tedas.gov.tr/	Tel.: +90312.212 69 15/30	bilgi@tedas.gov.tr











#### **Grid issues**

#### **Connection to the grid**

Abbreviated form of legal sources	<ul><li>YEK</li><li>EMGR</li><li>EEÜST</li><li>REMCUS</li><li>EPLY</li></ul>	
Overview	are published by the Turkish Transmission	essfully occurs through a bidding procedure. The available connection regions and points System Operator (TEIAS) on every 31 March of the year. A plant operator who wants to on license, clarify the connection details and arrange an agreement of the connection with
Contact Authority	Turkish Electricity Transmission Company; Energy Market Regulatory Authority	
Procedure	Process flow	Production License A plant operator who wants to be connected to the grid, needs a production license first (§ 7 par.1 EPLY).  Connection Details The TEIAS publishes on its homepage the available connection regions and points after a confirmation from the Energy Market Regulatory Authority (EPDK) taking into consideration capacity planning for a timeframe of at least 10 years, so that possible investors can apply for a connection (§ 34 par. 1 & 2 EMGR).  An applying plant operator needs to give the necessary information specified in EMGR to the TEIAS. Then both have to agree on the technical details, e.g. the voltage of the connection. A Low-Voltage connection is made when the grid capacity is up to 36 kVA,











	while a High-Voltage connection is made when the grid capacity is over 36 kVA (§ 4 art. 28 & 76 EMGR).
	If there is just one company applying, it will agree with the TEIAS for a connection point. When more companies are applying to the same connection point, a working group is built after a decision of the EPDK, which has to organise a bid-meeting with all the applying companies. They have to place their bid in a sealed envelope and hand it to the working group. If there is one highest bid, it will get the access point. If there is the same bid amount twice ore even more often, they make a new offer again in a sealed envelope, but without the companies with a bid below that until there is one highest offer left (§ $4-6$ EEÜST).
	Connection Agreement  The plant operator asks the TEIAS about a recommendation and gets an answer within 45 days (§ 7 art. 1 EMGR).  The next step is the connection point agreement between the TEIAS and the plant operator (§ 7 – 9 EMGR).  All the information asked in Ek-5 art. 1 of the EMGR is given to the TEIAS by the plant operator. The TEIAS submits an offer to the plant operator within 60 days, if they don't need more information. If the given information is not satisfying, the TEIAS can ask about the points listed in Ek-5 art. 2 of the EMGR, which means that the duration expands to 90 days (§ 8 art. 1 EMGR). If there are still some unanswered questions, the TEIAS can still ask for some changes, which have to be fixed within 30 more days (§ 10 art. 1 EMGR). Now, if everything is satisfying, the TEIAS gives the date of the connection to the plant operator (§ 10 art. 2 EMGR).
Deadlines	On 31 March of every year, the TEIAS publishes on its homepage the available connection regions and points after a confirmation from the EPDK taking into consideration capacity











		planning for a timeframe of at least 10 years, so that possible investors can apply for a connection (§ 34 art. 1 & 2 EMGR).  A plant operator gets a recommendation from the TEIAS within 45 days after requesting it (§ 7 art. 1 & 2 EMGR).  After an official apply with necessary information from Ek-5 art. 1 of the EMGR, the TEIAS sends the plant operator an offer within 60 days, if they don't need more information. If they do need more information the duration expands to 90 days (§ 8 art. 1 EMGR).  The TEIAS can still want the plant operator to fix some details within 30 more days (§ 10 art. 1 EMGR).
	Obligation to inform	
Priority to renewable energy  (qualitative criteria)	( X ) Priority for renewable energy  ( ) Non-discrimination	At the stage of making up an opinion on the connection during the evaluation of license applications by the EPDK, production facilities based on renewable energy resources will be given priority (§ 6/B art. 3 YEK).
Capacity limits (quantitative criteria)	A plant can only be connected in a bidding procedure to the available connection points published by the TEIAS. Hence, the issues of capacity limits regarding the grid connection do not occur.	
Distribution of costs	If a grid expansion is necessary, the plant operator pays for this expansion. These costs are count up with the costs of the grid access and usage costs, which the plant operator has to pay to the TEIAS anyway (§ 7 art. 3 EMGR).	
	State	











Consumers		
Grid operator		
Plant operato	r	The plant operator pays for the connection and the use of the grid (§ 22 art. 1 REMCUS).
European Uni	on	
Others		
Distribution n	nechanism	





