This country-specific Q&A provides an overview to energy laws and regulations that may occur in Turkey.

For a full list of jurisdictional Q&As visit [here](#)
1. **Does your jurisdiction have an established upstream oil and gas industry? What are the current production levels and what are the oil and gas reserve levels?**

As far as is currently known, Turkey has limited crude oil and natural gas reservoirs. Nonetheless, there is an established upstream oil and gas industry with respect to the reserves that Turkey currently discovered. Turkish Petroleum Joint Stock Company (“TPAO”), which is a state owned company, is the dominant actor in the upstream oil and gas industry. Current situation regarding natural gas or oil exploration or exploitation licenses can be seen from the map published by the General Directorate of Mine and Petroleum Affairs by clicking [here](#). Most recently, TPAO is searching for natural gas on the north and the west of Cyprus Island which has been the culprit of a tension between Greece and Turkey.

According to the 2018 Report on Oil Market of the Energy Market Regulation Agency (hereinafter “EMRA”), total refinery production for oil in Turkey was 25,002,286,570 tons. Likewise, according to EMRA’s report on Natural Gas Market, 428 million Sm3 was produced in the year 2018. In EMRA’s website, figures relating to September, October and November 2019 were not available, neither for oil nor for natural gas, at the time of writing of this guide. However, as far as the available data is concerned, 2019 natural gas production until August 2019 has been 323,09 Sm3. Therefore, roughly, 480 Sm3 of natural gas production can be expected for the year 2019 if the production after August has not been significantly different than average of 40 Sm3 per month. Oil production until August 2019 has been 22,340,552,642 million tons. Therefore roughly 30,000,000,00 million tons of crude oil production can be expected for the year 2019.

According to the statistics published by Ministry of Energy and Natural Resources General Directorate of Mining and Petroleum Affairs (“GDMPA”), by the end of 2018, Turkey’s natural gas reserves were 25,848,484,470 cubic meters. Total crude oil reserve is 1,074,859,105 million tons.

2. **How are rights to explore and exploit oil and gas resources granted? Please provide a brief overview of the structure of the regulatory regime for upstream oil and gas. Is the regime the same for both onshore and offshore?**

Oil and gas exploration and exploitation which includes searching for, recovery and bringing to the surface crude oil and gas amount to upstream oil and gas activities. Oil and natural gas are both in the scope of the definition of “petroleum” in the Turkish Petroleum Act numbered 6491 (“TPA 6491”) section 2. Therefore, the main pieces of legislation for upstream oil and natural gas activities is TPA 6491 and secondary legislation enacted based on TPA 6491. It should also be noted that Turkey is a contracting party to many conventions and international agreements with regards to the international oil and gas market including, inter alia, the International Convention on Readiness, Response and Cooperation With Regards to Oil Pollution and Its Annexes dated 27 November 1992 (London) and the International Agreement on Establishment of an International Fund Regarding the Indemnification of the
GDMPA which is affiliated with the Ministry of Energy and Natural Resources ("MENR") is the main regulatory authority for supervising the upstream oil and gas activities. GDMPA is responsible for setting the national policy for petroleum affairs, ensuring the utilisation of oil and gas fields and granting oil and gas exploration and exploitation licences.

According to TPA 6491, it is prohibited to engage in any kind of activity involving petroleum without having been granted with the relevant licences. Initially, TPA 6491 sets forth that a research permit shall be issued by GDMPA, which would allow its holder to conduct certain research activities. The exploration and/or operation licences issued for a part of the area for which a research permit is requested do not constitute an impediment for research permit issuance. There is no minimum or maximum term for research permits issued by GDMPA. Apart from the research permit, there are two main types of licences required for exploration and operation activities.

**Exploration Licences**: An exploration licence entitles its holder with the rights to conduct activities such as exploring, searching, improving the areas in which petroleum is found and producing petroleum from the areas that the licence covers. To obtain an exploration licence, first an application must be made for an area that needs to be announced in the Official Gazette. Following this announcement, additional applications can be made before GDMPA. The business and investment plans of the applicants (including the first applicant) must be submitted to GDMPA within 90 days following the announcement. The applications shall be assessed by GDMPA in accordance with the criteria provided under the implementation regulation. The exploration licence shall be announced in the Official Gazette, and within 30 days following this announcement, the exploration licence holder shall deposit another guarantee, namely an investment guarantee, in the amount of 2% of the investment amount for onshore activities and 1% of the investment amount for offshore activities. In the case that the said guarantee amount is not duly deposited, the licence shall be cancelled by GDMPA. Exploration licences shall be initially issued for a period of five (5) years for onshore and eight years for offshore, with a possibility of extension up to nine years for onshore and fourteen (14) years for offshore exploration activities.

**Operation Licences**: In order to obtain an operation licence, an application must be made to GDMPA. If the application is accepted, the applicant shall further deposit a guarantee in the amount of 0.5% of the operation licence charge per hectare to GDMPA within 15 business days following notification of the decision. If the said amount is not deposited in due time, the applicant will be deemed to have withdrawn its application. Exploration and operation licences can also be issued by an auction by GDMPA. The relinquished areas can also be licensed with the auction method upon the consent of MENR. The maximum term of operation licences that can be granted by GDMPA is 20 years.

3. **What are the key features of the licence/production sharing**
Exploration and exploitation of oil and gas are regulated by TPA 6491 and Regulation on Implementation of Turkish Petroleum Act. According to TPA 6491, petroleum reserves in Turkey are under the state’s control and disposition. The state may, under the terms and conditions of TPA 6491, issue licenses with respect to exploration and exploitation of petroleum resources. The law describes the maximum coverage for licensed areas in terms of map sizes. In this respect, licenses can be, at most 1/50,000 scaled sheet and at least 1/25,000. In terms of exclusive economic zones (off-shore) these are extended for 10. License for exploration may be granted for the land or for the sea. License terms are 5 years for the land and 8 years for the sea. The license term may be extended. If the license holder actually finds petroleum (crude oil or natural gas), then it shall notify this to the GDMPA. GDMPA will carry out designated tests and inspections to see if it is possible to commercially operate the well. If the General Directorate’s opinion is affirmative, then it will register the exploration and it will be possible to issue an exploitation license. Upon registration of the exploration, the entity explored the reserve is required to develop the site and sell the petroleum that it produces. Exploitation licenses can be granted for up to 20 years. Save for force majeure situations, the entity holding an exploitation license is required to carry out exploitation activities without any interruption.

4. Are there any unconventional hydrocarbon resources (such as shale gas) being exploited and is there a separate regulatory regime for unconventionals?

TPA 6491 does not include a specific definition for unconventional gas or oil resources but the definition of “petroleum” covers unconventional gas and oil resources as well as the conventional ones. Incentives and measures regulated with respect to petroleum are also applicable to the activities related to unconventional energy resources unless expressly stated otherwise by laws.

MENR and TPAO have been conducting researches for unconventional gas and oil resources across Turkey in order to promote domestic and renewable sources, decrease the dependency of Turkey on external suppliers in terms of gas and oil and prevent the future risks arising from diminishing potential of conventional resources in the world.

Approximately 679 billion cubic meters of shale gas reserves have been explored which are generally located in the south-eastern Anatolia and Thrace. Although these reserves are low when compared to other countries, works on exploring new reserve areas in various regions across Turkey by MENR and TPAO have been continuing especially in the Central and Eastern Anatolia regions which are predicted to have high shale gas potential.

MENR and TPAO aim to address the demand for increasing energy consumption across the country and reduce the dependency on import of energy from other countries by conducting exploration activities involving unconventional energy resources as well as conventional
energy resources which will result in a considerable growth in the domestic energy resources.

5. **Who are the key regulators for the upstream oil and gas industry?**

Regulation of upstream oil and gas industry is vested to the Ministry of Energy and Natural Resources and its General Directorate of Petroleum and Mining Affairs. The General Directorate handles the exploration and exploitation licenses and, generally speaking, monitors the activities of those who operate in the upstream oil & gas market.

6. **Is the government directly involved in the upstream oil and gas industry? Is there a government-owned oil and gas company?**

Upstream oil and gas industry in Turkey is dominated by TPAO which is a state-owned entity. However, Turkey’s main and principal policy is the liberalisation of the oil and gas industries which aims to increase competition and encourage both local and foreign investors to enter and operate in the oil and gas markets. In line with this policy and liberalisation process, TPA 6491, enacted in 2013, introduced several incentives for oil and gas exploration and promoted liberalisation of upstream activities by limiting the dominant market position of the TPAO and allowing the activities of private legal entities in the relevant markets. Despite the liberalisation reforms, currently TPAO is still leading upstream oil and gas activities in Turkey, which directly competes with the private sector entities in these sectors. However the proportion of private entities are believed to increase in the near future in both sectors as the Turkish Government aims to gradually liberalise the oil and gas markets and reduce the dominance of state-owned entities.

7. **Are there any special requirements for or restrictions on participation in the upstream oil and gas industry by foreign oil and gas companies?**

According to TPA 6491 s.22(1) foreign oil and gas companies, provided that they are equity companies according to the law applying to them, can be granted exploration and exploitation rights. However, when applying for petroleum rights, the applicant is required to declare an address in Turkey. Furthermore, according to the Regulation on Implementation of Petroleum Act s.6(2), foreign applicants need to hand over the documents and information confirming that they are registered in Turkey.

8. **What are the key features of the environmental and health and safety regime that applies to upstream oil and gas activities?**

License holders with respect to upstream oil and gas activities are required to perform their activities without (i) obstructing the life of residents living within the vicinity of the relevant facility, (ii) endangering human life and (iii) causing any damage to the environment and to cultural property under the Petroleum Law and its secondary legislation.
Entities performing upstream oil and gas activities are also required to obtain an environment licence and environment permit from the Ministry of Environment and Urban Planning ("MEUP") as they fall in the scope of the list of entities in the annex to the Environmental Permit and Licence Regulation published in the Official Gazette dated 10 September 2014, No. 29115. In general, these permits and licences are granted for the following issues: (i) Emissions (ii) Discharges (iii) Dangerous material discharges (iv) Waste collection (v) Recycling matters. It should be noted that these environment permits and licences must be obtained before commencing the activities.

In line with the Environmental Permit and License Regulation mentioned above, Regulation on Handling of Waste Oils and Regulation on Handling of Dangerous Waste requires producers of waste to take the necessary measures to prevent wastes to cause harm to the environment and minimise waste production in the oil and gas industry. A positive duty imposed on the entities is to report to MEUP on an annual basis regarding the waste produced from extraction and processing of oil and gas.

With respect to the health and safety of the employees of the entities in oil and gas industry, employers must take all necessary measures and provide all necessary equipment to ensure safety at their workplaces subject to Labour Act No. 4857 published in the Official Gazette No. 25134, dated 10 June 2003 ("LA 4857"). Employers operating oil and gas activities are also obliged to (i) provide health and safety related services and training to their employees (ii) establish a workplace health and safety department. Employers are always required to ensure the safety of their employees and take the required measures to protect the environment according to the Occupational Health and Safety Act No. 6331 and its secondary legislation on occupational health and safety.

9. **How does the government derive value from oil and gas resources (royalties/production sharing/taxes)? Are there any special tax deductions or incentives offered?**

The government collects taxes from those companies generating revenues from oil and gas resources. In addition to this, government also receives royalties from extraction of crude oil and natural gas. The amount of the royalty is 1/8 of the value of the extracted natural gas or crude oil as per s.9(1) of TPA 6491.

There are several tax incentives for companies operating in the upstream oil and gas market. As per TPA 6491 s.13(1), Import or local purchase materials, equipment (such as oil rigs), fuel oil, transportation vehicles (whether land, air or sea), subject to General Directorate’s approval, are exempt from customs tax, duties and documents drawn up in this respect are exempt from stamp tax. Furthermore, there is a cap on the total taxes payable by petroleum right holders. According to TPA 6491 s.12(1) the taxes that they are required to pay over their net revenues and income tax withholdings cannot exceed %55.
10. **Are there any restrictions on export, local content obligations or domestic supply obligations?**

Turkey demonstrates lower figures in export of oil and gas when compared to import of oil and gas due to lack of domestic production. In 2018, 673,28 million Sm3 of natural gas was exported by BOTAŞ which was the only active licence holder among licensed 8 export companies and the amount of exported natural gas decreased by 6,76 % compared to 2017. The scenario does not differ in export of petroleum which decreased by 12,04 % to 8,875,016,246 tonnes by the end of 2018 compared to the figures in 2017.

Petroleum right holders are entitled to export a certain amount of the petroleum and natural gas which is 35% for onshore and 45% for offshore that they produce in fields discovered after 1 January 1980. However, the remaining part and the whole petroleum and natural gas produced in the fields discovered before 1 January 1980 must be reserved for domestic use by the petroleum right holders. The authority to regulate the procedures and principles on the redetermination and implementation of these ratios has been granted to the Council of Ministers by law.

Legal entities that wish to export the natural gas imported or generated within the country abroad must obtain an export licence from the EMRA subject to the Natural Gas Market Act No. 4646 dated April 4, 2001 (“Natural Gas Market Law”). The applicant company must prove and fulfil certain conditions listed below in order to be granted with the export license:

(I) Technical and economical capability of the company,

(II) Information on which country and by which transportation vehicles it shall export the natural gas,

(III) Guarantee to the effect that the export process will not intervene in operation of the system nor satisfaction of the natural gas demand of the country and towards recovery of any loss or damage which may occur if the system security is violated by the company, and

(IV) Insurance coverage as compulsory for the loss and damage.

11. **Does the regulatory regime include any specific decommissioning obligations?**

As per TPA 6491 s.11(3), when the term of an upstream license ends, the rightholder requires to bring the premises where the petroleum activities were being conducted to its previous physical conditions. Moreover, the rightholder needs to clear all movable property from the site when its petroleum license expires. If it fails the do so within six months as from the date of expiry of its license, the ownership of such property will pass to the landowner. Moreover, general legislation regarding protection of environment applies to decommissioning of wells.
12. **What is the regulatory regime that applies to the construction and operation of offshore and onshore oil and gas pipelines?**

Construction and operation activities involving oil and gas pipelines require following licence, certification and permits:

(I) A transmission licence from EMRA,

(II) Certificates required by natural gas market laws,

(III) Permits required by petroleum laws,

(IV) An environmental impact assessment report ("EIA") (for the construction),

(V) An EIA approval certificate from MEUP (for the construction).

***Some other additional requirements may be imposed depending on the particulars of the pipeline construction project in question such as specific approvals from BOTAŞ.***

Initially, transmission licence must be obtained by legal entities that wish to transport petroleum or natural gas through pipelines and operate transmission facilities from EMRA.

In terms of natural gas activities, Natural Gas Market Law requires all construction works and services in relation to natural gas market activities to be performed by certain certificate holders. Certificates concerning internal installations and service lines are granted by public or private companies authorized by EMRA and local distribution companies. Companies intending to conduct feasibility, project, surveying, consultancy, control and audit studies and construction, service, maintenance and repair works must also obtain a certificate from EMRA. In accordance with the Regulation on Certification in Natural Gas Market dated September 25, 2002 and numbered 24887, which sets forth the principles and procedures regarding the certificates to be granted to individuals or legal entities, there are two types of certifications for natural gas; Construction And Service Certificate, Domestic Installation And Service Certificate. It should be noted that such certificates are granted for a minimum period of 10 years and a maximum period of 30 years in gas market.

With respect to petroleum activities, TPA 6491 and its secondary legislation Turkish Petroleum Law Implementation Regulation dated January 22, 2014 and numbered 28890 requires petroleum right holders to apply to GDPA in order to receive the necessary permits for the construction of pipelines.

Article 7 and Annex I, Environmental Impact Assessment Regulation ("EIA Regulation") published in the Official Gazette No. 26939, dated 17 July 2008 requires an EIA for extraction
of crude oil of 500 tonnes per day and extraction of natural gas of 500,000 cubic metres per day and for transportation of oil or gas with 600 millimetre calibre pipes that are longer than 40 kilometres.

An entity holding rights with respect to oil or natural gas can obtain the usage right over the relevant land by any of the following:

(I) Expropriation (where the expropriation amount is calculated by the court based on the market value of the property).

(II) A written purchase or lease contract with the owner of the land (where the purchase price or rent is negotiated freely by the parties).

(III) Having the owner of the land establishing a usufruct right over the land (where the usufruct arrears are negotiated freely by the parties).

Third parties wishing to obtain access to pipelines and other infrastructure must apply to relevant pipeline/infrastructure operator to be allocated capacity. The pipeline operator and the third party usually enter in a standard transportation agreement regulates access to the pipeline and transportation of oil and gas.

13. What is the regulatory regime that applies to LNG liquefaction and LNG receiving terminals? Are there any such terminals in your jurisdiction?

Natural Gas Market Law and LNG Market License Regulation are the main pieces of legislation that applies to market activities relating to LNG activities. Furthermore, Regulation on the Technical Rules Applicable to the LNG Market and the Regulation on the Principles and procedures for the Use of LNG Storage Facilities also applies to LNG terminals. For being able to conduct LNG activities, a license allowing to do so needs to be acquired from EMRA.

There are on-shore and off-shore LNG receiving terminals in Turkey which are being operated under a license to store LNG.

One of the onshore LNG terminal in Marmara Ereğlisi, currently operates with a capacity of 5.9 million tons, being able to provide 8 billion cubic meters of gas annually. The other onshore terminal is located at Aliaga district (in İzmir) and is operated by Egegaz with a capacity of 4.4 million tons of LNG, and a compression capacity of 6 billion cubic meters annually.

When it comes to the offshore terminals, the first FSRU which had been run by Etki Liman İşletmeleri in Turkey had a storage capacity of 139,000 cubic meters and was able to provide
14 million cubic meters of gas to the Turkish network per day. The relatively new one (constructed in 2019), with a capacity of 170,000 cubic meters, is able to compress 28 million cubic meters of natural gas to the network on a daily basis. In addition to that, BOTAS has an FSRU in Hatay’s Dörtyol district, with a storage capacity of 263,000 cubic meters (claimed to be the largest in the World), and with a compressing capacity of 20 million cubic meters of gas per day.

Absence of LNG liquefaction terminals in Turkey can be highlighted as a market gap and opportunity particularly for Eastern and Southeastern Regions of Turkey where it would be efficient to install and operate small / micro scale (up to 100 million m3) LNG Liquefaction terminals depending on the transportation costs of the natural gas to those regions and the difference in between the price of LNG and the natural gas.

14. **What is the regulatory regime that applies to gas storage (not LNG)? Are there any gas storage facilities in your jurisdiction?**

Natural Gas Market Law regulates gas storage and defines storage activity as storage of natural gas as LNG or gas, in order to meet the daily and seasonal changes and the deficit arising from lessening or stoppage of natural gas supply. According to Natural Gas Market Law, storage activities shall be conducted in storage facilities located underground.

Storage activities are subject to licences that must be obtained from EMRA which is the responsible authority for issuing licences with respect to downstream activities including storage, distribution and transmission. EMRA is also granted with the authority to set storage obligations for natural gas importers, provided that it does not exceed 20% of the gas they import annually.

In order to engage with natural gas storage activities, storage licence applicants must (i) have technical and economic sufficiency; (ii) undertake to operate its storage facility to ensure that the system is operated in a coordinated and secure manner; and (iii) undertake to provide neutral and equal storage services provided that the system is suitable.

Turkey has been aiming to prevent the effects of a possible interruption in natural gas supply from external resources by enlarging natural gas storage facilities and increasing the storage capacities so that daily natural gas demand across the country can be covered from storage capacity. Turkey aims to have sufficient storage capacity to meet at least 20 percent of its gas demand. In this context, as a result of investments in natural gas storage facilities in the last decade, a significant growth in underground storage capacity has been achieved. By the end of 2018 total capacity of underground natural gas storage facilities has reached to 3.236 million Sm3 whereas it was less than half of this capacity at the beginning of 2014 according to EMRA Natural Gas Market Report 2018.

There are two main storage facilities which contribute to domestic natural gas storage across
Turkey:

1. BOTAŞ Lake Tuz underground gas storage facility, located in the Aksaray province, 40km south of Lake Tuz in the Sultanhanı district of Turkey, has a storage capacity of 600 million cubic meters currently. To this end, the Lake Tuz facility will have enough capacity to meet almost 10 percent of Turkey’s current natural gas consumption of around 50 billion cubic meters per year. With the project expansion, the natural gas storage capacity at Lake Tuz underground natural gas storage facility will be increased to 5.4 billion cubic meters by 2023.

2. BOTAŞ Silivri, Kuzey Marmara, Değirmenköy underground gas storage facility, located in the İstanbul province, has a working gas capacity of 2,84 bcm. Within the scope of Kuzey Marmara Natural Gas Storage Expansion Project, developed by the reason of increasing the capacity of related facility, it’s planned to increase total storage capacity to 4,6 bcm and withdrawal capacity to 75 mcm/day by 2021.

15. **Is there a gas transmission and distribution system in your jurisdiction? How is gas distribution and transmission infrastructure owned and regulated? Is there a third party access regime?**

Transmission and distribution of natural gas is regulated by Natural Gas Market Law. According to the said law, distribution of natural gas means carriage of natural gas via local pipeline grid and selling it to the end-consumers. Transmission means carriage of natural gas via pipelines other than distribution grids and collection lines which are exclusive for production. Transmission and distribution activities can be carried out by third parties after acquiring the relevant licenses for these activities. It needs to be noted, however, that national transmission grid is the property of Boru Hatları ile Petrol Taşıma Anonim Şirketi’s (BOTAŞ) - a state owned company. Third persons having transmission license may install their own pipelines which are connected to the national pipeline grid.

16. **Is there a competitive and privatised downstream gas market or is gas supplied to end-customers by one or more incumbent/government-owned suppliers? Can customers choose their supplier?**

Before the enactment of Natural Gas Market Law in 2001, BOTAŞ, a state-owned energy company, had been the sole dominant organisation in natural gas market activities in Turkey for decades. Main purposes behind the reforms were to establish a more liberalized and transparent natural gas market framework by terminating most of the monopoly rights of BOTAŞ, to create a competitive market and to harmonize the domestic legal framework with that of the European Union. In this context, a new licensing regime for each of the import, export, transmission, storage, wholesale and distribution activities in the natural gas market was introduced which enables the private investors to engage in natural gas market activities.

However, major dominance of BOTAŞ in natural gas activities remained as before the Natural Gas Market Law until 2003 when EMRA started to launch tenders to open the distribution
segment of Turkey to local entities other than BOTAŞ. With the tenders conducted by EMRA from 2003 until 2017 the number of distribution companies increased from 6 to 72. With regards to wholesale market, liberalisation has started only in 2007 where private natural gas importing companies entered in the market. Following contract release of BOTAŞ by the government in 2011, private companies commenced engaging in import activities. Currently companies other than BOTAŞ hold 17 import and 54 wholesale licences in total (EMRA Natural Gas Market Report 2018). It should also be noted that import licensees can carry out wholesale activity without getting a wholesale license.

Despite the liberalisation and privatisation efforts and reforms in natural gas market, natural gas supply of Turkey in 2018 was realized as 50,788,75 million Sm3 and 84,12 % of this amount was met by BOTAŞ. With implementation and development of government’s liberalisation policies, the proportion of entities other than BOTAŞ in the natural gas market is believed to grow in the following years.

Within the natural gas market, consumers are free to choose their suppliers provided that they fulfil the conditions of being an eligible consumer for which the criteria is determined by EMRA each year. The number of eligible consumers has reached to 601,348 by the end of 2018 which will increase in parallel with the number of private institutions commencing natural gas activities in the following years.

A legal entity may freely engage in natural gas market activities on the condition that it fulfils the conditions set forth under the applicable legislation and obtain the relevant licence or certification from EMRA. Foreign investors can freely access the natural gas market and obtain a relevant licence and/or certification as well, provided that they establish a legal entity in Turkey. There is no restriction on the ownership of shares and a foreign investor may hold up to 100% of the shares of the licence holder. If the foreign investor will acquire the shares of a licence holder entity, the transfer of shares will be subject to prior approval of EMRA. However transfer of shares listed below will not be subject to EMRA approval in which case the licence holder is required to notify the EMRA within 60 (sixty) days after the transfer of shares:

I. Except for share transfers when a shareholder leaves the company, transfer of shares by a person or legal entity who own direct privileged shares to a person or a legal entity that own direct privileged shares within the licence holder company regardless from the share proportion; and

II. Transfer of privileged shares within the legal entity that owns direct/indirect shares within the licence holder company except for share transfers that result in

i. acquisition of 10% (5% in public companies) or more of the capital of the licence holder company directly or indirectly by a person or a legal entity
ii. acquisition of more than 10% of the capital of licence holder company

iii. lower proportion of shares owned by a shareholder compared to the proportions stated above.

Market participants at all levels of the value chain in the Turkish natural gas market can expect to be subject to an antitrust analysis by the Competition Authority in connection with their contractual arrangements and activities. To conduct such antitrust analysis in this highly regulated market, the Competition Authority relies on its Natural Gas Market Study, which was published in 2012 and which provides a thorough analysis of the market, the phases of the liberalisation process, a diagnosis of sector-specific issues and suggestions to address them.

17. **How is the downstream gas market regulated?**

The main piece of legislation regulating Turkey’s downstream gas market is Natural Gas Market Law. The said act includes provisions regarding import, transmission, storage, wholesale, distribution of natural gas and obligations of those companies that are carrying out these activities, pursuant to their licenses, in the downstream market. Energy Market Regulatory Authority is the supervisory authority which is responsible to oversee whether the license holders’ natural gas market activities comply with Natural Gas Market Law.

**Import of Natural Gas:** Import of natural gas to Turkey is subject to import license. In order to obtain an import license, the entity applying for the license shall have sufficient technical and financial power, provide precise information regarding the sources, reserves, production facilities and transmission system of the natural gas to be imported. Furthermore, relevant guarantees must be secured for underground storage of natural gas for a percentage determined by EMRA. Finally, the applicant shall have the required sufficiency for contributing the development and security of national transmission system. Import companies are required to obtain separate licenses for each import connections that they are going to make. Natural Gas Market Law also puts a ceiling on the amount of the gas which can be imported by a single importer, which is 20% of the consumption of natural gas of that year. Natural Gas Market Law includes an ongoing obligation to notify all the details and documents with respect to all the contracts entered into by the importer company.

**Transmission:** Transmission of natural gas is another market activity requiring a license in the downstream gas market. Under NGMA, companies holding a transmission license are subject to certain obligations. In this vein, when a system user applies to the transmission company for connecting to the transmission system, provided that the system is available, the transmission company is required to connect the applicant to the most appropriate grid within 12 months. If the transmission company rejects this request, the applicant may inform EMRA which will examine whether the rejection was legitimate. Transmission companies are also under an ongoing obligation to provide all technical information which can be requested by EMRA. Transmission companies are obliged to take all measures to provide that the gas is
transferred in a safe and efficient manner.

**Storage**: Only companies holding a license enabling them to store natural gas are allowed to do so. License applicants must have the required technical and financial sufficiency for natural gas storage, they must undertake that they are going to operate all of their storage capacity in a manner which is fostering co-operative and safe operation of the entire system and they must also undertake that they are going to provide their services impartially and equally provided that their storage capacities are available. Similar to transmission companies, when a request made to a storage company is rejected, EMRA has the authority to adjudicate whether the rejection was lawful.

**Wholesale**: Wholesale of natural gas refers to selling of natural gas to distribution companies and to eligible consumers. This is also a natural gas market activity requiring a license. However, import companies are allowed to conduct wholesale activities without being required to obtain a separate wholesale license. On the other hand, a wholesale license does not give an automatic right to import natural gas. Companies conducting wholesale activities are required to ensure sufficient gas storage facilities to ensure sustainability of gas supply. To that end, they are required to disclose their lease agreements with storage companies to EMRA. According to Natural Gas Market Law, contract price regarding the supply of natural gas can be determined freely. Information which is deemed as commercial secret (including contract prices) cannot be disclosed to third persons other than EMRA.

**Export**: Similar to other market activities, export of natural gas is also subject to a license. The applicants must have sufficient technical and financial sufficiency, must inform where and how it is going to export natural gas and guarantee that export of natural gas is not going to be detrimental for Turkey’s need of natural gas and endanger the system security. Applicants are also required to take out insurances covering the abovementioned risks.

**Distribution**: Distribution licenses are granted to the winners of the tenders opened by EMRA for a time period which is to be determined by EMRA. Tenders are announced in the Official Journal in advance. The bids to be made by the participants will be evaluated by the criteria set out in the relevant regulation and the winner will be awarded with the authority to distribute natural gas in the relevant area for which the tender was opened. Similar to other market activities, distribution companies are obliged to connect the consumers residing in their responsibility area to the system as long as the system is available and the consumer fulfils the actions needs to be made on its part for making the connection. When the request is rejected EMRA has the authority to adjudicate whether such rejection was lawful. In addition to this, distribution companies are subject to comply with the detailed requirements of Natural Gas Market Law and its secondary legislation.

18. **Have there been any significant recent changes in government policy and regulation in relation to the oil and gas industry?**

As a part of liberalisation and privatisation of oil and gas industry in Turkey Natural Gas
Market Law and its secondary legislation was enacted in 2001 in order to liberalise and regulate natural gas market activities in Turkey. With regards to petroleum market activities, the TPA 6491 redefined the petroleum market with similar purposes and established a bipolar structure in which the upstream activities, i.e. the exploration and production of petroleum (including oil and gas), are governed by TPA while the downstream activities are governed by the Petroleum Market Act. In this context oil and gas activities are governed mainly by TPA, Petroleum Market Act and Natural Gas Market Law. Liberalisation and development of energy market in Turkey are ongoing processes which remain as the most cared policies of MENR. MENR attaches importance on improving domestic oil and gas capacity and storage in order to reduce the dependency on imported gas across the country. With this respect, great number of projects both in oil and gas market are being carried out across the country. Turkish government has also taken crucial steps for supply diversity and security. LNG imports were made from 11 countries through 4 LNG terminals this year. These are steps in achieving Turkey’s long-standing ambition of becoming an energy trading hub in the region in the early future by developing the geo-strategic position of the country.

Another recent development was the launch of the Organized Wholesale Natural Gas Sales Market, Turkey’s natural gas spot trading platform, on September 1, 2018. The platform enables spot market transactions in natural gas, balancing transactions and reconciling of imbalances which is of great importance in line with country’s ambition of becoming an energy trade centre in the region and will enable the country to have a strong and effective role in the pricing of natural gas. Turkey contributes to the region significantly by enabling natural gas trading activities to be performed in an equal and transparent manner.

Rules and Procedures of Export Quantity and Methods of Operation of Spot Pipeline Gas was published on the Official Gazzette dated 19 September 2019 and numbered 30893. With this regulation, it is aimed by EMRA to enable the market players to procure natural gas at a better price under short-term contracts by allocating a certain part of transmission capacity of cross-border natural gas pipelines. In this way, spot pipeline gas export licence holder companies may purchase gas subject to contracts executed on monthly or annual basis which will result in cheaper gas procurement to the national gas market. Licence holder companies may inform EMRA in relation to their capacity request subject to a certain fee. EMRA will conduct a competition on the electronic platform if there are requests exceeding the capacity. As a result of this regulation, price of natural gas is expected to drop in the short term and it is aimed to strengthen Turkey’s position in negotiating natural gas export contracts to be executed in the long term.

While Turkish Natural Gas Market legislation enables third parties to access to the network by carrying their natural gas via transmission networks although they are not the owners or the operators of the network, a tariff in relation thereto has not been published yet. Such tariff is expected to be published soon. Third parties’ access to the market would result in a more competitive market which contributes to long-standing ambitions of Turkey. In this vein, third party access to transmission network is regulated and rules of refusal to third party access to network are determined in line with the respective EU Directives and
19. **What key challenges have been identified by the government and/or industry in relation to your jurisdiction’s oil and gas industry?**

One of the biggest challenges that Turkey is facing in terms of oil and gas industry is dependency to foreign sources. Therefore, the Ministry of Energy and Natural Resources’ main objective is to reduce this dependency. To that end, Turkey is participated in several international pipeline projects which will make Turkey a conduit between big natural gas and oil export. Furthermore, Turkey has been in an endeavor to create a more competitive and open market environment for securing new entrants. Although the legal framework for such an open market is in place, the dominance of state-owned companies has not been eliminated yet. In any event, Turkey’s oil and gas reserves are relatively limited forcing Turkey to seek for alternative primary energy sources. By its nature, it is possible to reduce consumption of natural gas by using other energy sources (coal and renewables) for electricity generation. This has been the tendency in the last couple of years. As a result, many natural gas power plant owners stopped their operations due to the fact that their operating costs are significantly increased and operation of their plants is no more feasible. It is a challenge posed by the natural gas industry on Turkish electricity market.

Furthermore, although there has been regulatory attempts to create a competitive market in the gas industry, BOTAŞ (which is a state owned company) continues to maintain its monopoly. That being said, there has not been a meaningful unbundling in the gas sector since BOTAŞ functions as system operator, importer, and wholesaler in the market. In order to have a competitive gas market, a transparent and logical formula for determining the gas prices must also be in place. Although the regulations include such a mechanism, since BOTAŞ is the prominent powerhouse of the industry, it has a considerable impact on the gas prices which hampers the operation of the said rules-based mechanism for transparently determining the gas prices. Therefore, BOTAŞ’s influence needs to be reduced and measures needs to be taken for ensuring that price formation in the natural gas market is done transparently and logically, which would eliminate the uncertainty in the market.

20. **Are there any policies or regulatory requirements relating to the oil and gas industry which reflect/implement the global trend towards the low-carbon energy transition?**

Although there are not regulatory requirements with respect to low-carbon energy transition within the current laws, there are projects conducted by the government and international obligations of Turkey arising from international with respect to reaching low-carbon environment in the long term.

EU has adopted an ambitious agenda for climate action and has complied by the 2012 deadline with its commitment under the Kyoto protocol to reduce its Greenhouse gas (“GHG”) emissions by 8% as compared with their 1990 levels. In 2007 the EU adopted a climate and
energy package with the goal to reduce its GHG emissions by 20% by 2020 (against 1990 levels), and further targets have been set for 20% of EU energy consumption to come from renewable resources, and 20% reduction in primary energy use compared with projected levels to be achieved by improving energy efficiency. The EU Intended Nationally Determined Contribution (INDC) to the United Nations Framework Convention on Climate Change (UNFCC) formally put forward a binding, economy-wide target of at least 40% domestic GHG emissions reductions below 1990 levels by 2030 which is corresponding to the long-term vision towards a low-carbon economy in the EU as described in the 2050 Roadmap.

In the Instrument for Pre-Accession Assistance (IPA) Planning Document, it is stated that “The objective in this sector is for Turkey to fully comply with EU environmental and climate change legislation upon accession requiring adoption of all relevant Directives and legislation, including the necessary investments.” One of the indicators to measure developments towards this objective is “Development of measures to mitigate and adapt to climate change, with convergence towards EU requirements and mainstreaming of climate change considerations into other sector policies.”

The proposed project is intended to be a motivation for taking into account climate change issues into buildings, transport, waste and agriculture sectors by determination of costs and emission mitigation potentials and development of analytical basis for a long term low carbon development strategy, to reconcile climate, growth and energy security, and eventually to contribute to sustainability of these sectors. Review of existing strategies, legislative gap analysis and preparation of regulatory and sectoral impact assessment for EU climate acquis will be an important initial step to comply with EU legislation and the goals and intentions of the Paris Agreement.

Turkey does not have emission reduction targets under Kyoto Protocol, but national communication documents have been prepared and submitted by the government since becoming a party to the convention. Among Organization for Economic Co-operation and Development (OECD) and UNFCCC Annex 1 countries, Turkey’s GHG emissions per capita are the lowest in terms of historical responsibility and primary energy consumption per capita. Energy sector is the major source of Turkish anthropogenic GHG emissions with the largest portion with 72.8% according to the Turkey’s Seventh National Communication on Climate Change under the UNFCCC.

Turkey has developed the “National Climate Change Strategy” (NCCS) with the purpose to contribute to global efforts to reduce the impacts of climate change, considering its own particular circumstances and capacity. Two of the main actors in the project are Ministry of Environment and Urban Planning and Ministry of Energy and Natural Resources. A National Climate Change Action Plan (NCCAP) was published in July 2011, including strategic principles and goals on GHG emission control and adaptation to climate change to be implemented until 2023. The objectives of the NCCAP include the reduction of primary energy intensity by 20% compared to 2008 by 2023, and an increase of the share of renewable energy in electricity production is to be ensured.
The overall objective of the project is to reduce anthropogenic GHG emissions to contribute to the global efforts to reduce negative effects of climate change. In line with the overall objective, the main purpose of the project is to increase national and local capacity to prepare for medium and long term climate action towards climate resilient low-carbon development, which will gradually align with the EU climate policy and legislation by providing an analytical basis to support realization of low-carbon in the long-term.

The expected overall results are stated as following:

- Review of existing strategies in relation to Climate Change
- Preparation of regulatory and sectoral impact assessments for EU climate acquis
- Determination of the costs and emission mitigation potentials of the actions specified within the buildings, waste, transportation and agriculture sectors of the NCCAP
- Developing analytical basis for possible strategies and actions ensuring low carbon development in the long term

With these kinds of projects, the necessity to mitigate climate change and the danger ever increasing GHG emission poses to the environment will be acknowledged across the country and by the relevant authorities. In this context, Turkey can be considered as in a transaction period in adopting environmental rules and regulation; it is expected that legislative authorities are likely to fill the gaps in relevant legislation relating to oil and gas industry with respect to low-carbon energy transition in the following years.