



## SHELL VICE PRESIDENT OF EXTERNAL RELATIONS, INTEGRATED GAS AND NEW ENERGIES OF SHELL - NEBAHAT ALBAYRAK

In the second of the WEC Talks, held in cooperation with Shell, Nebahat ALBAYRAK, Vice President of External Relations, Integrated Gas and New Energies of Shell, was our speaker.

The event set off with opening addresses from WEC – TNC Chair Alparslan ALBAYRAK, Shell Turkey Country Chairman Ahmet ERDEM and Undersecretary to the Ministry of Energy and Natural Resources Fatih DÖNMEZ respectively.

Following BAYRAKTAR's speech on our committee's activities, ERDEM took the stage to talk about the transition period that the energy market is going through. He pointed out the advantages that cooperation could bring and remarked the importance of the platform that WEC Talks offers. Mentioning Shell's "New Energies", operating in 70 countries for more than a century, with a production of 3.7 million barrels a day, ERDEM also pointed out the role that falls to natural gas in elevating dependency on foreign import, which was set as one of the targets in National Energy and Mining Policy strategy.



DÖNMEZ, on the other hand, talked about Turkey's energy market, highlighting LNG as one of the commodities that best reflect the developing technology in energy. Stressing supply security's role in the National Energy and Mining Policy put forward by the Ministry, DÖNMEZ mentioned how the introduction of new floating storage and regasification units (FSRUs) has increased Turkey's capacity and has made it possible for the demand to be met fully. With the possible increase in the number of terminals next year, an increase in capacity is possible for LNG, which delivers around 20% of the total gas demand, including increasing demand for CNG from public transportation in the cities. Lauded as a central tool for source diversification, LNG also has numerous researches being conducted to introduce it to shipping and railroad transportation and is likely to aid a green and a fiscally sound transition.



Some notes from ALBAYRAK's presentation on Shell LNG Outlook 2018 are as follows:

- Hydrocarbons will hoard majority of its share in global energy. Rapid growth in demand will help hydrocarbons preserve their sizeable share.
- Currently, 1.1 billion people have no access to energy, with 1 billion more whose access is not reliable. The global energy demand is expected to double by 2070.
- Energy efficiency is central to our efforts to meet the growing energy demand with more generation but less emissions.
- Shale gas and new technologies rise as opportunities for the future.
- Shell has set a target to cut its emissions by half by 2050. It is critical to be in cooperation with all shareholders within this framework. New energies are not sufficient for achieving a decarbonised future, and that takes gas one step forward.
- Shell's investments to oil and gas will continue, but the company has also reserved 2 billion \$ for new energies. Examples of carbon capture and storage projects also exist in Australia.
- We believe on a source base, natural gas will lead the global energy demand growth with a 46% increase. From a sectoral point of view, 45% of the increase in demand for gas comes from electricity. Regionally, 38% of growth in natural gas demand comes from Asia, followed by North America at 33%.
- OECD countries lead both in energy demand and transition to natural gas and renewable energy. This increase in gas is reflected negatively in coal. While the opposite currently stands true in non-OECD countries, the trend is expected to reverse with China taking the initiative.
- Shell anticipates a boom in LNG demand and foresees the bulk of it coming from Asia. The demand in this region will double by 2035.





- While the uncertainty remains in the market, LNG possesses enough strength to withstand it.
- An unprecedented growth in capacity was achieved in 2017 – 45% of which has already been realized. This increase in capacity was foremost from Australia and America, other countries have also imported above estimates. Northern Asia leads in imports.
- LNG import has increased 29 million tonnes in 2017, with China as the leading importer. 15% increase in natural gas demand in the country was reflected in LNG as 50%. With more than 70.000 vehicles operating with LNG, the investments are made to all available fields and bears rapid fruits.
- South Korea follows China in LNG imports, with Turkey remaining third.
- FSRU offers a competitive setting with suitable units and contributes to supply demand.
- The demand for LNG will also increase in the transportation sector. Heavy vehicles will outdo in the short run.
- The lagging investment for the supply side threatens the future growth of LNG markets. Shell, therefore, expects the market to shrink towards the end of the 2020s. While no big impact is expected on pricing, investments are required to meet long term increases in demand.
- Transportation is the fastest growing field for LNG usage.
- Shell has purchased a start-up with around 40.000 - 45.000 charge stations.
- Smart charging is critical for its ability to balance the load in the energy system. There is technology available that cuts the charging period to just 5 – 6 minutes. Substantial advancements are being achieved through the ongoing dialogue with Toyota.
- Digital products and services are also available in the meantime. “Wonder Bill” collects all household bills and offers support in choosing the right supplier.