

English Translation of the Interview of IICEC Director Carmine Difiglio in the *Ekonomist*, 31 July, 2017

1. Is Turkey's energy outlook promising?

Turkey's energy strategy to diversify its energy mix, increase renewables, increase energy efficiency and diversify its sources of energy imports point to a promising energy future.

2. Which opportunities do you see in Turkey in terms of energy?

Blessed by its unique geography, Turkey transits hydrocarbons from Russia, the Caspian and the Middle East to Europe. It could become the regional pricing hub for natural gas given sufficient investment in gas storage and related infrastructure. One of the key requirements of a natural gas hub is that it be accessible to many suppliers and consumers, something that Turkey is uniquely qualified to provide. The recent initiatives by Energy Minister Albayrak to secure a pipeline project between Israel and Turkey could add Eastern Mediterranean gas to the several supply routes already moving into Turkey, making the case for a Turkish gas hub even more compelling.

3. Why can't Turkey attract foreign energy investment?

The Central Bank of Turkey's foreign direct investment (FDI) data do show significantly less foreign investment in Turkey after the world-wide financial collapse of 2008 dropping to its lowest level in 2009 and showing a varied trend after that. While there was a fall off of FDI in 2016, there seems to be an upward trend now with \$785 million recorded for April. So, I don't accept the proposition that Turkey can't attract foreign investment. The fundamentals remain strong: a great labor force; excellent infrastructure; an attractive investment climate and a large domestic market.



4. Will the US achieve energy independence one day?

The 1973 and 1979 oil price shocks slashed world-wide economic growth and put the OECD economies into recession. In the U.S., gasoline shortages made the energy crisis a top political priority. The response was to strive for "U.S. energy independence," essentially meaning that the U.S. would no longer import oil, especially from the Middle East. Forty years later, with shale-oil production, the U.S. is now an oil exporter and mostly imports oil from Canada and Latin America. While the U.S. still requires net oil imports, for all practical purposes, it is already energy independent, especially when you take into consideration its natural gas and biofuels production. Nonetheless, the U.S. economy would still greatly suffer, along with the world-wide economy, if there were another oil price shock. I've published **a recent journal article** showing

why the U.S. economy would remain vulnerable to an oil price spike, despite sharply declining oil imports. So, I do not believe that the United States, or any other industrialized country, will ever become “energy independent.” Oil prices are set in global markets. Oil price spikes would disrupt any industrialized economy, even if it is a major oil producer. Therefore, keeping sufficient emergency oil reserves is the best way for the industrial economies to achieve oil security.

Energy security is no longer just an oil supply problem. National electricity grids are vulnerable to cyber-attacks and natural disasters. An extended loss of electric power would cause an energy security crisis much more severe than from lost oil supplies. Our economies are also much more dependent on natural gas. While the United States does not have the natural gas security risks that many other countries have, it, like every other country, has not done enough to make its electricity supply system more secure against cyber-attacks and other threats.

5. According to you, why does Trump want to withdraw from Paris Accord? What is the real background?

First of all, I do not represent the U.S. Administration. I can only speculate about the factors that may have been behind the decision. However, there are certain considerations that stand out. Withdrawing from the Paris Accord was a Trump campaign promise. There may have also been concerns about future law suits against the Environmental Protection Agency (EPA) if it failed to issue regulations necessary to meet the U.S. emission-reduction commitments agreed to in the Paris Accord. Lawsuits against the EPA to enforce the Clean Air Act are commonplace and often successful. It is a matter of speculation whether the courts would have regarded the Paris Accord as a legal obligation on the EPA, but this possibility may have been a concern to the Administration. I do not believe the U.S. withdrawal from the Paris Accord will reverse the downward trend in U.S. greenhouse gas emissions. For example, most of the U.S. states have strong requirements to

increase renewable energy in their power sectors. Renewable energy is also becoming more competitive with each passing year making it the smart power-sector investment. Looking at transportation, the U.S. auto manufacturers have already said that they will not change their plans to make their new cars more fuel efficient. They are part of a competitive global market and have no intention to fall behind in fuel economy or any other emerging automotive technology.

While government regulations and incentives are important, reducing the cost of clean energy technology is the best strategy for avoiding catastrophic climate change, especially in the power and industrial sectors. Cost-effectiveness is also important for consumers, but we will likely need continuing government intervention to achieve the most energy-efficient end-use economy.



6. What are you aiming to do at your new position in IICEC? What are your plans?

As I said, increased collaboration with the Sabancı University faculty has been a top priority for me. Besides bringing on academic staff to do research at the IICEC office in

Karaköy, I am also pursuing joint projects at the Sabancı University campus. One promising project with the Faculty of Engineering and Natural Sciences is an in-depth policy paper on solid-oxide fuel cells (SOFC), a technology for converting natural gas into electricity. With some technological progress, SOFCs could give us competitive electricity plus near-zero CO₂ emissions. Sabancı University's research on high-temperature materials will already help produce a less expensive SOFC. Our study will explain why this technology could be an important element in a clean energy future and what should be done to bring it about. In addition to special studies, we publish an *IICEC Energy Market Newsletter* providing our insights on natural gas, petroleum and renewable market developments.