EPPAM NEWSLETTER

Istanbul Aydin University

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Year 2, Issue 1, January 2017

AMERICA IN TRUMP ERA:

CONFERENCE ON REFLECTIONS OF CHANGING BALANCES ON TURKEY AND THE WORLD

EPPAM organized а conference on "Trump Era in Reflections America: of Changing Balances on Turkey and the World" with Turkey Research Center (TAM) on 21 December 2016.

Prof. Dr. Celal Nazim Irem, Prof. Dr. Nadir Devlet, Prof. Dr. Sedat Aybar, Prof. Dr. Kamil Veli Nerimanoglu, Asst. Prof. Dr. Behlul Ozkan, Selin Nasi and Selim Atalay evaluated the issue.

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) Seçimlerinin Türk Dünyasında Etkileri ve Şanghay Beşlis Dr. Kamil Veli NERİMANOĞLU Intadoğu ve Kafkasya Uygulama ve Araştırma Merkezi Müdürü



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EPPAM AT PRESS

EPPAM DIRECTOR ASSIST. PROF. DR. FILIZ KATMAN

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15:00 NEWS BULLETIN

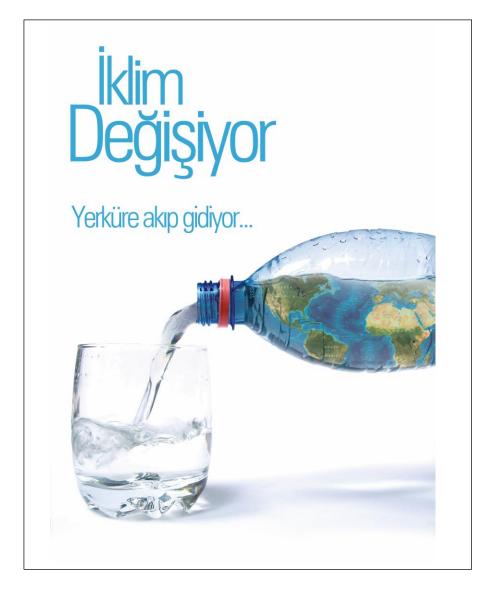
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GEOPOLITICS OF ENERGY SEMINARS

EPPAM organized the 7th Seminars on Geopolitics of Energy targeting students at Faculty of Economics and Administrative Sciences at Istanbul Aydın University. Basic concepts, approaches and regional energy issues were discussed in 14-weeks seminars. Within the seminars, with active participation of the students, presentations are made with info on energy from different parts of the world. In this context, climate change is also documented and discussed within the seminars.





OP-ED: WHAT WILL THE WORLD LOOK LIKE IN 2040?

Lana Alemam, PSIR 3rd Year Student

From the shores of the Caspian Sea to the crowded streets of Tokyo and Beijing, starting with world wars and going through conflicts in the Middle East, energy had been always reshaping the geo-political landscape of today's world. With the drama of energy monopoly and the struggle for its access, massive battles were and is being fought for controlling fields of energy, the insecurity of supply, the consequences of use, its impact on the global economy, and the geopolitics that dominate it continues to profoundly affect our world.

In other words, energy is an engine of global economic and political change, and "the world's appetite for energy in the upcoming years will grow enormously"; International Energy Agency (IEA) argues in its own scenario that the global demand for energy is projected to increase by 30% to 2040; the global quest for energy with the rising demand for oil, gas, coal etc. especially "energy-hungry" by the

developing countries such as India is truly reshaping our world.

There are many complex issues in the energy sector. However my major concern here is whether the world of tomorrow is going to be able to meet the increasing energy demands of 2 billion people soon expected to enter the class and consumer the availability of energy in the not-too-distant future. And to figure that out more statistical data regarding the sources and amounts of energy already exists and will be revealing in the coming decades are used.

1-Oil, the largest energy and the veritable source lifeblood of the major powers and developing ones of today's world; basically oil is expected to remain the world's largest energy resource. According to United States Energy Information Agency (EIA) International Energy Outlook 2016, the global supply of oil is expected to be enough to meet the world's demand which is expected to rise 20% and most likely Asia will remain the major source of oil demand growth through 2040. Moreover oil prices are projected to rise in the long term, the price of crude oil, now around \$45 per barrel, is expected to be back to \$80 by 2020, and just keep going up from there.

2-Coal, currently the world's second-largest fuel behind oil and other liquids playing a vital role in electricity generating worldwide, expected to maintain its position behind oil until 2030; however from 2030 through 2040, it is going to lose its position for natural gas to be the third-largest energy source due to the encouragements for cleaner energy, as well as being the slowest-growing energy source, rising by only 0.6% per through 2040 coal vear consumption will result in reducing to 165 quadrillion Btu in 2020 and to 176 quadrillion Btu in 2040; coal is expected to form 38% of global carbon emissions in 2040, down from 43 percent in 2012. Throughout the projection period, China is by far the leading coal producing country, accounting for over 47% of the world's total coal

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output, followed by the United States and India and together forming 70% of coal consumption. Note that EIA expects the China's coal use to peak by 2025 thanks to the economic slowdown and pledge to cut emissions.

3-Natural gas, now coal was responsible for 38% of global carbon dioxide emissions. Natural gas, by comparison, will account for 26% of global carbon emissions in 2040, up from 20% in 2012. Gas which has lower carbon intensity than coal and petroleum is the fastest-growing fossil fuel in the outlook. The remaining resources of natural gas are abundant and can comfortably meet the projections of global demand growth included in IEA World Energy Outlook scenario to 2040 and well beyond. Proven reserves stood at 216 trillion cubic meters (tcm) at the end of 2014, equal to more than 60 years of production at current rates. Most natural gas production growth is expected to come from shale gas and tight oil through 2040.

Aside from coal and natural gas, wind, solar, hydropower

and other renewable sources of energy will be the world's fastest-growing electricity source through 2040, growing 2.9% per year. This means that by 2040, renewable resources generation of electricity will equal that of coal in 23 years.

EIA argues that renewable energy will be the fastestgrowing energy source in the upcoming years with solar power being the most growing among all the renewables, growing by 2.6% annually and nuclear energy will increase from 4% to 6%. So zeroemission energies will dominate the world's energy supply system because we simply cannot continue to base activities our on the consumption of finite energy resources. Solar will account for 15% of newly-built renewables through 2040, with hydro and wind each accounting for 33%.

Despite the fact that no fossil fuels or renewable sources are expected to grow faster than fossil fuels, but the usage of fossil fuels is not likely to change much in the coming decades and it will still account for more than threequarters of world energy consumption through 2040 moreover gasoline and diesel will still move most of the world's vehicles and machines, and coal will still be the largest single source of carbon emissions.

Energy choices have never been as much diverse as it is now, and it is likely to continue to be as plentiful in the future thanks to the advanced energy technology in today's world, today we have access to shale gas and tight oil from North America, we have liquid natural gas from the Middle East, and oil from deep-water fields off the African coast, besides arrays of wind and solar facilities. Apparently all viable energy sources, both renewable and nonrenewable, will be needed to continue meeting global energy demands and needs because the scale of this demand is increasing.

References:

Daniel Yergin (2011). The quest. United States: Penguin. pp. 633-642.

Daniel Yergin (1990). The Prize: The Epic Quest for Oil, Money, and Power, United

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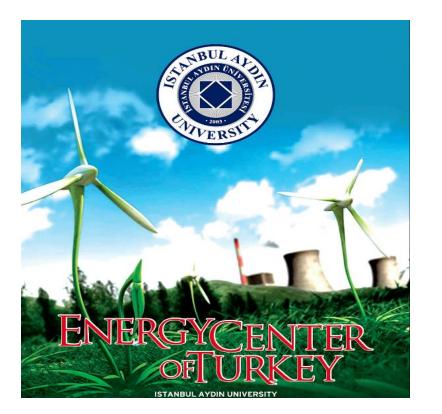
States: Simon & Schuster, pp. 256-312.

United States Department of Energy, International Energy Outlook 2016, Energy Information Administration, DC (2016).

http://news.nationalgeographi c.com/energy/2015/11/151110world-energy-outlook-reportfuture-of-energy/ http://www.eia.gov/forecasts/i eo/pdf/0484(2016).pdf

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"Save Energy for Tomorrow, NOW!"