## Roth: World energy outlook

By <u>Jim Roth</u>, Director and Chair of the Firm's Clean Energy Practice Group. This column was <u>originally published in The Journal Record</u> on September 18, 2017.



Jim Roth is a Director and Chair of the firm's Clean Energy Practice.

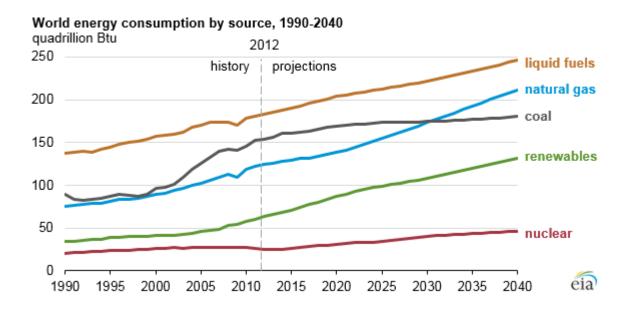
## World energy outlook

The U.S. Energy Information Administration publishes the International Energy Outlook Report, as well as heaps of other important energy data.

An agency of the U.S. Federal Statistical System, the EIA is responsible for collecting, analyzing, and disseminating independent and impartial energy information. Also a part of the U.S. Department of Energy, the EIA strives to promote sound policymaking, efficient markets, public understanding of energy and its interaction with the economy and the environment. And its prognostications are just, well, cool.

The EIA projects a 48 percent increase in world energy consumption by 2040, which is good for an energy state like ours. But the type(s) of energy is what should draw our attention.

Check out this chart to see the projects, where the greatest percentage growth seems to be in natural gas, renewables and liquid fuels <u>(source)</u>:



The international report analyzed energy consumption for years 1990-2040. The EIA also publishes an annual Energy Outlook Report for the U.S. with the 2017 iteration projecting data through 2050. The report's authors aptly warn that the data consist of projections, not predictions.

While the report considers many factors, a few among them technological progress, energy policies and world oil prices, it goes without saying uncertainty exists in every market. The energy industry is no stranger to market fluctuations due to adverse geopolitical events, the advent of new technology, changes at the impetus of the industry, and many other considerations. A current example to watch is the tariff petition solar manufacturers Suniva and SolarWorld brought before the International Trade Commission. ITC is expected to vote at the end of the month. Stay tuned for how that decision, and subsequent action by the president, will affect

the solar industry in the U.S. and beyond.

Promisingly, the report revealed renewables are growing faster than any other energy source for the period analyzed, with nuclear tracking closely behind. The projected growth of renewables is attributed to a desire for energy security, the negative effects of emissions on the environment, and long-term high oil prices. Some of the aforementioned rationales support natural gas is the fastest-growing of the fossil fuels.

Despite a projected increase in renewables, world-consumption of fossil fuels will still sit at the three-quarter mark of all energy consumed through 2040. Coal is growing the slowest, but will still rise slightly, in part due to China's vast consumption — it consumes half the world's coal, add to that India's consumption, and the number becomes 70 percent. Unlike much of Europe, the U.S., and others, Asia is not a member of the Organization for Economic Cooperation and Development, and, not surprisingly, China and India, are projected to make up more than half of the world's total energy consumption.

Both countries are working on plans to reduce emissions, although since those country's demand is tied to economic growth, the mitigation policies being considered will not make a huge difference. If the U.S. and other OECD members can remain focused on encouraging safe, clean, renewable, costeffective energy sources, perhaps we can force the world consumption trajectory in a sound direction.

But then again, as those who toil in energy know, sometimes we can cause the ripple, but most often we are forced to ride the wave. Be aware of the projections and decide where your efforts lie in the probable path forward in America and the world.

Jim Roth, a former Oklahoma corporation commissioner, is an attorney with <a href="Phillips Murrah P.C.">Phillips Murrah P.C.</a> in Oklahoma City, where his

practice focuses on clean, green energy for Oklahoma.