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'Peak Fossil Fuels' Is Closer Than You Think: BNEF

By Tom Randall - Apr 24, 2013

Every time an iPhone is charged or an episode of "[Mad Men](#)" plays on a television, puffs of vaporized carbon join the atmosphere, products of power-plant combustion. And every year the world demands more. That era may be nearing an end, as the world approaches "peak fossil fuels," a phrase used by Bloomberg New Energy Finance founder Michael Liebreich at the group's annual conference.

The concept of "peak oil" -- that world oil production will plateau and decline -- was popularized by a Shell Oil geologist named M. King Hubbert, who predicted in 1956 that U.S. oil production would max out in the early 1970s and gradually decline. Globally, the peak oil hypothesis has been consistently undermined by new extraction techniques: deep-water drilling, tar-sands extraction and most recently the fracking boom. The world now has enough of these fuels to last hundreds of years.

Unfortunately, the planet can't take that kind of abuse. About 80 percent of the world's fossil fuels must remain buried in the ground if we have a chance of avoiding catastrophic climate change, according to the International Energy Agency. That's the bad news.

The good news is that advances in fuel-efficient and renewable-energy technologies are curbing demand for fossil fuels. Liebreich projects that 'peak fossil fuels' will occur around 2030, years or decades before most forecasters are planning for. [See chart on left]

"By 2030, the growth in fossil fuel use will almost have stopped," Liebreich told renewable-energy investors yesterday at the BNEF 2013 annual summit in New York. "We're told that it needs to happen by 2020" in order to prevent irreversible climate damage. "That won't happen. But by 2030, it pretty much will."

It's not an easy thing to project. By 2030, the global middle class is expected to grow by two-thirds. That's 3 billion more shoppers who will want access to cars, bigger houses, cloud computing -- more energy. Energy growth will continue, just not fossil fuels' contribution. Investment in new energy capacity will double by 2030. About [73 percent of that investment](#), or \$630 billion annually, will be devoted to renewable energy, according to BNEF. [See chart above]

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In order for 'peak fossil fuels' to occur, the rapid adoption of renewable energy worldwide must be sufficient to supply the rising energy demand, especially in emerging markets like China, India and Brazil. China is now the world's biggest investor in renewable energy, investing \$65.1 billion last year in new capacity, compared with \$35.6 billion in the U.S.

Fuel-efficient technologies are also working to slow demand growth. Advances in energy efficiency have foiled attempts to forecast electricity demand in countries like the U.S. and Australia since 2005, Liebreich said. Every year, the forecast for energy consumption has been reduced, and every year actual electricity demand has come in even lower due to more fuel-efficient cars and power-saving buildings. Liebreich sees energy-efficiency adoption a new normal.

Bill Richardson, former governor of New Mexico, said Liebreich's forecast for peak fossil fuels for 2030 may require more spending than investors are ready for.

"I think his prediction is a little optimistic," Richardson said in an interview after speaking at the BNEF summit. "But he's generally right. I think it won't peak as soon, but I do think it's in the right direction."

See www.bloomberg.com/sustainability for full coverage of the Bloomberg New Energy Finance annual Summit.

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