

Coal not going away anytime soon despite renewables push

November 16 2015, by Louise Watt



In this Tuesday, Nov. 3, 2015 photo, steam and smoke rises from the smokestack of a coal-fired power plant near Ordos in northern China's Inner Mongolia Autonomous Region. Demand for coal is leveling off, but it will remain a key energy source for decades, and its future is closely tied to China, the world's biggest coal user, producer and importer. It burns 4 billion tons of coal a year, four times as much as the United States. (AP Photo/Mark Schiefelbein)

Coal: Can't live with it and can't live without it—at least not yet.

It is the biggest source of heat-trapping greenhouse gases that negotiators around the world hope to limit in an agreement to be thrashed out in Paris next month.

Demand for [coal](#) is leveling off, but it will remain a key [energy](#) source for decades, no matter how many billions of dollars of investment go into cleaner energy like wind and solar. Too much of the world depends on it now for heating and power generation for us to suddenly live without it.

There are vast parts of the developing world that will continue to see growth in demand for electricity as incomes increase, driving sales of televisions, refrigerators and the construction of highways and malls, said Xizhou Zhou, the China chief for energy consultants IHS Energy.

"The cheapest way to provide electricity in many of these places is still coal-based," Zhou said.

This underlines the challenge facing negotiators who will convene in Paris Nov. 30 to agree on how to limit emissions of fossil fuels. Scientists say coal, oil and gas emissions, including carbon dioxide and methane, are key drivers of rising temperatures that could lead to intense droughts or flooding of island nations.

Abundant and cheap, coal emits not only soot but double the greenhouse gas emissions per unit of energy of natural gas.

In recent years, slowing economic growth, gains in energy efficiency and advances in renewable-energy production have dampened demand for coal in key markets. Stricter air emissions regulations in Europe, the production of shale gas in the U.S. and the restructuring of the Chinese economy away from heavily polluting industries are all weighing down on demand.

An analysis released Monday by the Institute for Energy Economics and Financial Analysis suggests coal consumption peaked globally in 2013 and is set to decline a further 2 to 4 percent in 2015 because of declining consumption by China and other big coal consumers.



In this Wednesday, Nov. 4, 2015 photo, a worker watches as a conveyor loads coal onto a trailer truck at a coal mine near Ordos in northern China's Inner Mongolia Autonomous Region. Demand for coal is leveling off, but it will remain a key energy source for decades, and its future is closely tied to China, the world's biggest coal user, producer and importer. It burns 4 billion tons of coal a year, four times as much as the United States. (AP Photo/Mark Schiefelbein)

The institute said China's coal consumption had fallen 5.7 percent from January to September. In the U.S., domestic consumption was down 11 percent and coal's share of the electricity market has fallen to 35

percent, from 50 percent a decade ago. Record-low U.S. gas prices, record expansion of renewable energy and a decoupling of electricity demand from economic growth are "permanently eroding" coal demand in the U.S., the Cleveland, Ohio-based IEEFA said.

Still, coal provides more than 40 percent of the world's electricity and 29 percent of its energy supply, second only to oil at 31 percent, according to the Paris-based International Energy Agency. The agency projects coal consumption to continue growing somewhat in coming years, largely owing to increased coal demand in India and Southeast Asia.

Coal's future is closely tied to China, the world's biggest coal user, producer and importer. It burns 4 billion tons of coal a year, four times as much as the United States.

Coal accounts for nearly two-thirds of China's energy, but in 2014 its coal consumption fell 2.9 percent year-on-year according to official statistics, or 2.6 percent according to the IEEFA report—the first annual decrease in 15 years. A revision to official Chinese data released earlier this year showed the country had greatly underestimated its coal consumption from 2000 to 2013, but still showed a dip last year.

Beijing is trying to reduce dependency on coal to ease air pollution by switching to natural gas in major cities.

China also has become a leader in clean energy. Last year, it invested more in renewable power and fuels and had more hydropower and wind capacity than any other country, and was second to Germany in solar capacity, according to a report earlier this year by REN21, a Paris-based nonprofit group that promotes renewable energy.

The cost of renewable energy is becoming more competitive every year, while coal-fired power plants are increasingly expensive as air pollution

controls grow more stringent.



In this Wednesday, Nov. 4, 2015 photo, a loader scrapes coal at an open-pit coal mine near Ordos in northern China's Inner Mongolia Autonomous Region. Demand for coal is leveling off, but it will remain a key energy source for decades, and its future is closely tied to China, the world's biggest coal user, producer and importer. It burns 4 billion tons of coal a year, four times as much as the United States. (AP Photo/Mark Schiefelbein)

"You have got a wave of new technologies and investments coming where historically power grids were heavily reliant on coal," said Tim Buckley, a Sydney-based energy analyst with the Institute for Energy Economics and Financial Analysis.

The continued development of wind, solar and hydropower is good for combatting global warming, "but that's almost an ancillary benefit—the

key drivers are economics, technology, leadership and energy security and air and water pollution," Buckley said.

India, the nation with the third-highest carbon emissions after China and the U.S., is at a point where both clean and dirty energy are being scaled up. About a fifth of its more than 1.2 billion people still lack electricity.

India plans a fivefold boost in [renewable energy](#) capacity in the next five years to 175 gigawatts, yet it is also planning to expand [coal power](#). Coal-fired plants account for about 60 percent of India's installed power capacity.



In this Wednesday, Nov. 4, 2015 photo, vehicles work at an open-pit coal mine near Ordos in northern China's Inner Mongolia Autonomous Region. Demand for coal is leveling off, but it will remain a key energy source for decades, and its future is closely tied to China, the world's biggest coal user, producer and importer. It burns 4 billion tons of coal a year, four times as much as the United States. (AP Photo/Mark Schiefelbein)

Zhou, of IHS, said the [coal industry](#) is waiting to see if a Paris agreement would spur new laws requiring [coal plants](#) to limit carbon emissions, in the way they have been required to limit particulate matter in the past. This would mean they either find technology to reduce plant emissions or switch to [natural gas](#) or other energy sources.

Ultimately, the world needs to decide how much energy from fossil fuels is "reasonable" considering the consumption patterns and development stages of different countries, he said.

"But that's a very controversial task because politicians in developed countries may have to bring a plan back to their respective countries and say, 'We have to change our lifestyle. We cannot consume nearly as much as energy as we consume today.'"



In this Tuesday, Nov. 3, 2015 photo, workers shovel coal atop a trailer truck at a coal mine near Ordos in northern China's Inner Mongolia Autonomous Region. Demand for coal is leveling off, but it will remain a key energy source for decades, and its future is closely tied to China, the world's biggest coal user, producer and importer. It burns 4 billion tons of coal a year, four times as much as the United States. (AP Photo/Mark Schiefelbein)

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