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Coal Isn't Dead. China Proves It.



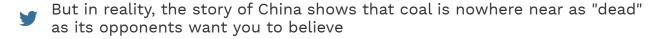
Jude Clemente Contributor (i)

Energy

I cover oil, gas, power, LNG markets, linking to human development.

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A man tends to vegetables growing in a field as emissions rise from cooling towers at a coal-fired power station in Tongling, Anhui province, China, on Wednesday, Jan. 16, 2019. China's economy expanded at its weakest pace since 2009, according to figures Monday, with gross domestic product rising 6.4 percent in the

fourth quarter from a year earlier. Photographer: Qilai Shen/Bloomberg © 2019 BLOOMBERG FINANCE LP

Responsible for 46% of global production and 51% of global demand, China's coal reliance is not falling nearly as fast as some like to claim

For demand, too many confuse the crucial difference between "growing less slowly" or remaining "buoyantly very high" versus "shrinking" or "declining." Similar to U.S. oil demand, China's coal consumption aligns with the first two. While it could indeed be said that Chinese coal demand has been relatively flat for a few years now, importantly, it hasn't been falling in the absolute sense.

For production, China's December coal output was 2.1% higher than it was in 2017, hitting the highest level in over three years. The country started up new mines last year and then ramped up production to meet high winter demand. Due to domestic gas supply shortages in recent years, China has been softening its stance to displace coal heating with natural gas.

China approved nearly \$6.7 billion worth of new coal mining projects in 2018, and production increased 5.2% to 3.55 billion tonnes.

For imports, now a much larger portion of the supply mix, coal imports in China were up 9% last year.

This year, China's plan to kick start its economy with new stimulus measures could also lead to another uptick for coal. Remember that in China coal is about 60% of all energy supply and generates 65% of total electricity, so economic growth can easily translate into more coal usage.

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Looking forward, surely not to grow like the boom years of 2000-2010, there is still pretty solid potential for more coal in China.

For example, Carbon Brief reported last summer that China quietly has 210,000 MW of new coal capacity in the works, or nearly a 25% expansion.

The good news is that these plants will be supercritical or even ultrasuperciticial, deploying higher efficiency to generate more power using less coal.

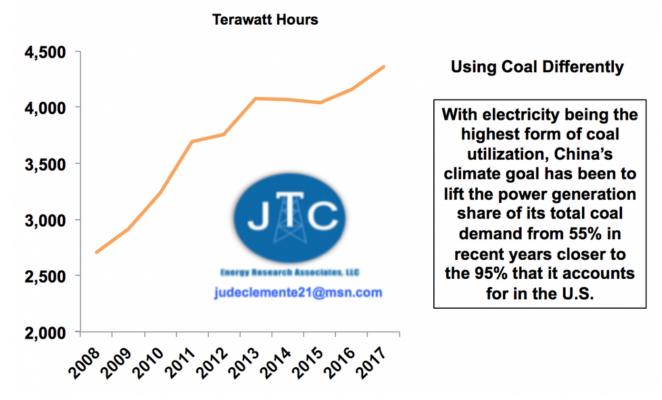
Ultimately, the list of proven false predictions of "peak coal" for China reads like a collection of who's who in news sites (both conservative and liberal), research organizations, leading universities, and environmental groups.

But as I documented in *Forbes* back in November 2014, China's designed transformation for coal is NOT necessarily about using much less as it is about using coal differently. In particular, wanting to use coal less directly, China seeks to lift power generation's share of its total coal consumption.

As such, seen below, although China's coal demand has been pretty flat in recent years, coal power generation has been rising at 6% per year - a very high increase for a nation where 100% of the population has access to electricity and per capita wise consumes nearly as much electricity as members of the European Union.

Indeed, China actually now accounts for 45% of the coal-based electricity generated in the world, compared to 37% back in 2010.

China's Coal-Based Electricity Generation



China's goal is to increase the share of electricity generation in its total coal usage. DATA SOURCE: BP; JTC

In addition, China is at the heart of another issue that is quietly emerging for those wanting to "wish the world away from coal."

The Institute for Energy Economics and Financial Analysis reports that China's financial institutions are providing \$36 billion in funding to build coal power plants outside the country.

China has committed or offered funding for 102,000 MW of coal-based electricity, mostly in Pakistan, South Africa, Bangladesh, and Vietnam.

So yes, while China's coal demand will remain very high, there is no question that the country seeks to lower an over reliance on the fuel, aimed at diversifying with more natural gas, nuclear, and renewables. This has given Chinese companies more incentive to seek projects in foreign nations.

This is all part of China's Belt and Road Initiative that will use its own development model to help "finance and build roads, railways, bridges, ports, and industrial parks abroad." An immense infrastructure build-out that will not just require thermal coal for electricity but also metallurgical coal for steel making. "The One Market That's Sure To Help Coal."

And almost a quarter of the coal plants China is funding in other countries would be less efficient, higher emission subcritical units that are no longer allowed to be used in China. These nations have less environmental standards and are desperate for investment of any kind. I do find this a bit contradictory though given that one of China's major climate plans has been to replace inefficient, older coal plants with state-of-the-art coal plants.

The goal of many poorer nations to install any type of power generation is easy enough to understand.

The depressing amount of global energy poverty, particularly electricity deprivation, is largely forgotten here in the rich West, where we have all the energy that we need at our fingertips. For example, as measured by per capita per year, over 3,500,000,000 humans - nearly half of the world - use less than 10% of the electricity that we privileged Americans do.

With electricity the foundation of modern life, living with such low access to power is a worsening calamity that is simply unacceptable for leaders in the still developing world. Regardless of what they might say publicly, all energy sources are on the table: the destructiveness of the growing digital divide is incalculable.

Coal often makes sense for them: coal leads and supplies 40% of the world's electricity, is reliable and cost effective, and is widely available.

I'm surely not saying, however, that coal's upside is unlimited.

After all, the International Energy Agency is now projecting that global coal demand will remain pretty stable through 2023 at least, which is actually a victory for coal given that the 2015 Paris climate accords signed by almost 200 countries had coal reduction at its core.

But in reality, the story of China shows that coal is nowhere near as "dead" as its opponents want you to believe



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I am Principal at JTC Energy Research Associates, LLC. I hold a B.A. in International Relations from Penn State University, with a minor in Statistical Analysis. I got my M.S. in Homeland Security from San Diego State University, with a focus on Energy Security, and an MBA ... **Read More**

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UNICEF Is Working To Protect Children From Brutal Winter Storms



Sarah Ferguson Brand Contributor
UNICEF USA BRANDVOICE

For over 70 years, UNICEF has been putting children first, working to protect their rights and provide the assistance and services they need to survive and thrive all over the world.



On 10 January 2019 in Baalbeck, Lebanon, Syrian refugees living in informal tented settlements in Arsal struggle with dire conditions that have worsened after a strong storm hit Lebanon on 6 January. © UNICEF/UN0272704/HAIDAR

For families that have already lost almost everything, bad weather can be catastrophic. Thousands of Syrian refugees living in more than 570 informal tented settlements across Lebanon were hit particularly hard in early January when a major storm system hit, bringing torrential rain, strong winds, snow and bitter cold temperatures. Tents were flooded, food stocks and furnishings destroyed.

Working with Lebanese authorities, UNICEF and other humanitarian agencies responded immediately, pumping water out of inundated sites and distributing winter clothes to children, blankets, mattresses, hygiene kits and other supplies. "If the pajamas are not the right size, I'll exchange them with my neighbor," said 11-year-old Taslim. "In winter, it is pouring and very cold," said Islam, 8. "It is

very difficult for people to stay warm."



A young Syrian refugee stands in a flooded tent settlement in the Bekaa Valley, Lebanon. Many families had to evacuate their tents, sloshing through sleet and sewage water in search of shelter. ©

So far, 10,000 refugees have received urgent distributions, and aid agencies are working around the clock to reach all those in need after the recent storms. Approximately 850 informal settlements in Lebanon, hosting more than 70,000 refugees, are at risk of being affected by further severe weather.

"Years of conflict, displacement and unemployment have reduced families' financial resources to almost nothing," said Geert Cappelaere, UNICEF Regional Director for the Middle East and North Africa. "Staying warm has simply become unaffordable."



Preparing for bad weather ahead, young Syrian refugees in a camp in the town of Ersal, East Lebanon, near the Syrian border, carry boxes of warm winter clothes in December 2018. © UNICEF/UN0264878/AL MUSSAWIR-RAMZI HAIDAR

Cold, wet weather can prove fatal for children already weakened by lack of proper nutrition and health care. To keep children warm and safe, UNICEF procures and delivers winter gear, including jackets, gloves, hats, scarves, socks, shoes, thermal blankets and other cold-weather supplies where they are needed most.

No child should face debilitating cold without help. This winter, UNICEF aims to reach 1.3 million children in Syria, Iraq, Jordan, Lebanon, the State of Palestine, Turkey and Egypt with winter kits, safe drinking water, sanitation, health and hygiene support, and cash assistance to help families cover the cost of heating fuel and other necessities.

You can help some of the world's most vulnerable children stay warm this winter.

PLEASE DONATE

UNICEF and partners are working tirelessly in Lebanon, Syria, Yemen, South Sudan, Bangladesh and around the world to save and protect children. With a presence in more than 190 countries and territories, UNICEF has helped save more children's lives than any other humanitarian organization in the world.



Sarah Ferguson Brand Contributor

Sarah Ferguson is a writer and critic whose work has appeared in The Guardian, Elle, Vogue, New York Magazine, Mother Jones and The New York Times Book Review, among other publications.

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