

At G-7, Japan's energy plan is not all that green

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In this April 21, 2014 file photo, Liberian LNG, or Liquefied Natural Gas, tanker Al Hamra arrives at a port in Yokohama, southwest of Tokyo. Japan may find itself the odd man out when Prime Minister Shinzo Abe presents his government's blueprint for combating climate change at a summit of the world's leading industrialized democracies Sunday and Monday, June 7-8, 2015. The Group of Seven host, German Chancellor Angela Merkel, has indicated she supports a pledge of eventual zero carbon emissions. Japan favors the use of coal, gas and nuclear power over green energy despite rapid growth of investment in renewables since all its nuclear reactors were taken offline following the 2011 disaster in Fukushima. (AP Photo/Koji Sasahara, File)

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presents his government's blueprint for combating climate change at this weekend's summit of the world's leading industrialized democracies.

The Group of Seven host, German Chancellor Angela Merkel, has indicated she supports a pledge of eventual zero carbon emissions. Japan favors coal, gas and [nuclear power](#) over [green energy](#) despite rapid growth of investment in renewables since all its nuclear reactors were taken offline following the 2011 disaster in Fukushima.

Curbing [global warming](#) will be among many items on the agenda when G-7 leaders meet Sunday and Monday at Schloss Elmau, about 100 kilometers (60 miles) south of Munich.

Japan is the world's No. 3 economy and its fifth-largest emitter of greenhouse gases that contribute to global warming. Abe plans to explain to fellow leaders its target of a 26 percent reduction from 2013 levels of [carbon emissions](#) by 2030.

That compares with an intended 26-28 percent cut by 2025 from 2005 levels for the U.S., and the European Union's target of a 40 percent reduction from 1990 levels, or 35 percent from 2005.

Japanese officials defend their plan as comparable to or even exceeding the goals set by other major economies.

"Some committee members said it was too ambitious and they said it could not be done, but it was decided to set this target," said Masakazu Toyoda, a [government](#) adviser and chairman of the Institute of Energy Economics, Japan.

Solar and [wind power generation](#) are too unstable and costly to provide more than marginal [power](#) generation capacity, especially given the need to extend power grids from major cities like Tokyo to more remote areas

considered most suitable for wind power, he says.

As for zero emissions, the world's carbon dioxide pollution level hit a record 396 parts per million in 2014, way above the 350 ppm level of heat-trapping gases in the atmosphere seen by some scientists and environmental groups as a safe level.

In Toyoda's view, limiting emissions to 450 ppm by 2050, would be "very difficult to achieve."

"With additional effort to introduce advanced technology, the realistic target should be 550 ppm," he said in a briefing Thursday.

Japan's long-term energy plan is evolving and actual trends will depend on various factors, including nuclear plant restarts, the pace of decline in the population, changes in technology and expanded use of solar panels and other [renewable energy](#) by households and businesses.

The country does face unique challenges, as an island nation with scant conventional energy resources. Unlike European countries, it cannot draw from and feed into regional electricity grids.

Abe's government is seeking restarts of reactors that meet upgraded safety standards, and in the meantime fossil fuels remain the preferred option for bridging energy supply gaps.

Japan could do far better, given the trend toward wider, ad-hoc adoption of renewable energy in the private sector, said Tomas Kaberger, chairman of the Japan Renewable Energy Foundation and a former head of Sweden's energy agency.

"It's just a matter of very costly delays to an industrial development that will be inevitable for global competition reasons. Japan cannot be the last

fossil country in the world," he said.

During [climate change](#) talks in Bonn, Germany, this week, the NGO Climate Action Network announced Japan as the winner of its "Fossil of the Day" award for "doing the most to block progress on climate action."

At a time when many countries, including China, are reducing reliance on cheap, plentiful but heavily polluting coal, Japan is viewing it with newfound enthusiasm.

Its current plan calls for coal to account for about 26 percent of total power generation in 2030; natural gas for 27 percent and oil for about 3 percent. Renewable energy would provide up to 24 percent of power and nuclear up to 22 percent, according to a document from the government's Advisory Committee for Natural Resources and Energy.

That plan would raise Japan's total energy self-sufficiency rate to about 24 percent from the current 6 percent, it says.

More than 40 coal-fired power plants are planned or under construction in Japan. Abe's government is also promoting financing of such plants in its infrastructure development aid.

Critics contend the latest "energy mix" strategy is delaying an inevitable shift to [renewable sources](#), while creating a raft of potentially obsolete, or "stranded" assets.

"These guys are risking a whole lot of public finance on something that may be overtaken by the accelerating cheapening of renewables," said Andrew DeWit, a professor at Tokyo's Rikkyo University.

Japanese local governments increasingly are investing in smart-city technologies such as high-tech electricity meters, heat recycling and

other clean and renewable energy options, encouraged by efforts to decentralize power production to help boost sagging local economies.

Generating capacity from renewable energy, including solar, wind, hydroelectric and geothermal power was rising at an average annual rate of about 9 percent before 2012, and then jumped 32 percent in 2013 with the introduction of higher feed-in tariffs, mostly due to a boom in installation of solar panels.

But In October, major power companies suspended access to their electricity grids for renewable energy, saying further increases would make them too unstable.

And moves to reduce higher feed-in tariffs for solar and [wind power](#), introduced after the Fukushima disaster, are deterring investors who need greater certainty over potential returns on projects, said Yasuyo Yamazaki, president of Kuni Umi Asset Management, a company that invests in solar and biomass energy projects.

Like many in Japan, he believes that reforms that eventually will separate [power generation](#) from transmission will help.

"Japan should be able to rely entirely on renewable energy for all of its needs," he said. "But there is a certain pathway we have to get through to get to our goal."

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