

Calling for an Energy Strategy for a Carbon-Neutral Japan

The Japanese government submitted its long-term strategy on climate change¹ to the United Nations on June 26. As the first such strategy formulated by an advanced country since the Special Report on Global Warming of 1.5°C was published by the Intergovernmental Panel on Climate Change (IPCC), it needed to set a clear goal of net zero CO₂ emissions by 2050 and present a clear energy policy toward a decarbonized society centering on energy efficiency and renewable energy.

The long-term strategy submitted by the government proclaims "a decarbonized society as the ultimate goal" and aims to accomplish it as early as possible in the second half of this century but the strategy does not alter the 2050 target of an 80% reduction. It also fails to even mention the 45% reduction by 2030 from 2010 levels called for by the Special Report on Global Warming of 1.5°C.

The government's energy policy follows a low renewable energy target for 2030 of 22-24% while continuing to adhere to the dated technologies of coal-fired power and nuclear power generation. For coal-fired power in particular, the policy is to continue to develop CCS technology as a means to reduce emissions from thermal power generation, despite the technology's lack of practical or economic viability, and to export it to other countries.

The government's strategy lists CCU and the carbon cycle, small modular reactors and even nuclear fusion as "disruptive innovation" and repeatedly emphasizes the importance of technological innovation in general. Efforts toward innovation is itself important, but a strategy that adheres to coal-fired power while maintaining a low target for renewable energy is absolutely not one that will be regarded as seriously addressing the climate crisis even if it proclaims its dream of future technologies like the hydrogen society.

The 211 companies, local governments, and NGOs participating in the Japan Climate Initiative, a network of non-governmental actors in Japan, are calling for extensive energy efficiency and a higher target for renewable energy to be put at the center of the country's long-term strategy². Progressive companies participating in RE100 are proposing 50% renewable energy electricity by 2030. As is made clear in Renewable Energy Institute's policy proposal³, if the introduction of renewable energy is accelerated, centering on solar and wind power, and energy efficiency gains are made, it would be possible to achieve by 2030 the goal of 50% renewable energy electricity.

Japan is rich in renewable energy sources, from solar and wind to hydro, geothermal, and biomass, but it imports fossil fuels which total costs amounting to approximately 16 trillion yen per year. Japan has virtually no fossil fuel resources of its own, is beset by earthquakes, and has experienced a major nuclear disaster, so even compared to other countries, it would be highly rational for Japan to free itself from fossil fuels and nuclear power generation.

To accelerate carbon reductions by 2030 and make assured progress toward carbon neutrality by 2050, Japan needs to reform its power system, which is indispensable to the large-scale adoption of renewable energy—this should be its highest priority—and also institute regulatory innovations, including carbon pricing as soon as possible. It is essential that Japan break from dated technologies like coal-fired power, increase energy efficiency everywhere possible, and establish a decarbonization strategy that fully leverages the potential of renewable energy.

¹ The Long-term Strategy under the Paris Agreement (Cabinet decision on June 11, 2019), The Government of Japan http://www.env.go.jp/press/111913.pdf

² Japan Climate Initiative "JCI's statement in response to the Japanese government's draft long-term strategy," 16 May 2019 https://japanclimate.org/english/news-topics/messageonlongtermstrategy_en/

³ Renewable Energy Institute, "Proposal for Energy Strategy Toward a Decarbonized Society," April 2019 https://www.renewable-ei.org/en/activities/reports/20190416.php