

Fukushima prefecture turns toward photovoltaic, Japan

Landsat-8 OLCI acquired on 19 September 2013

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Sentinel-2 MSI acquired on 05 August 2020

Sentinel-1 CSAR IW acquired on 05 March 2021

Sentinel-2 MSI acquired on 03 March 2021

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Fig. 1 - S1 (28.01.2021 -> 05.03.2021) - Fukushima prefecture has installed most photovoltaic panels near the coast.

[2D View](#)

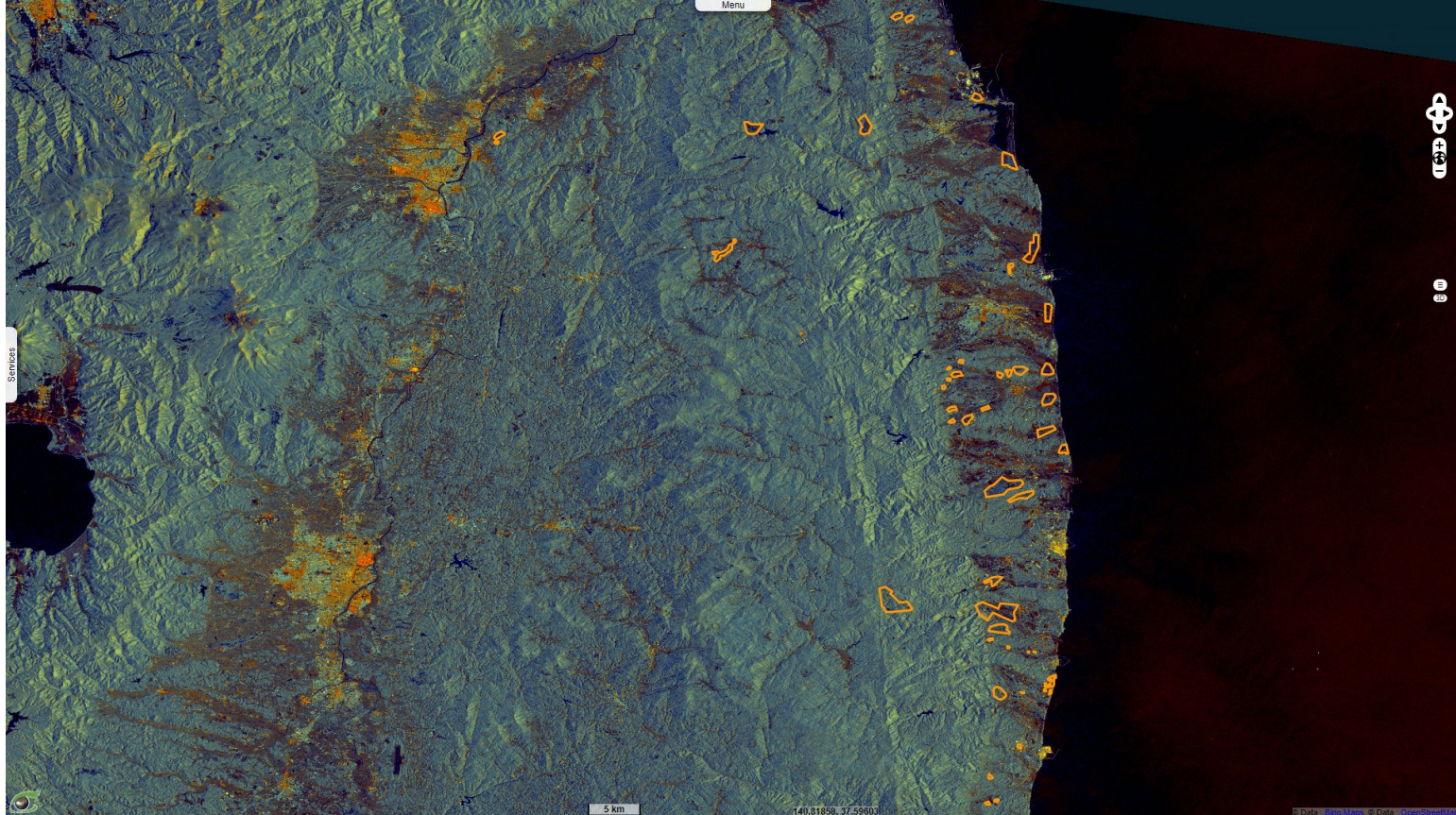
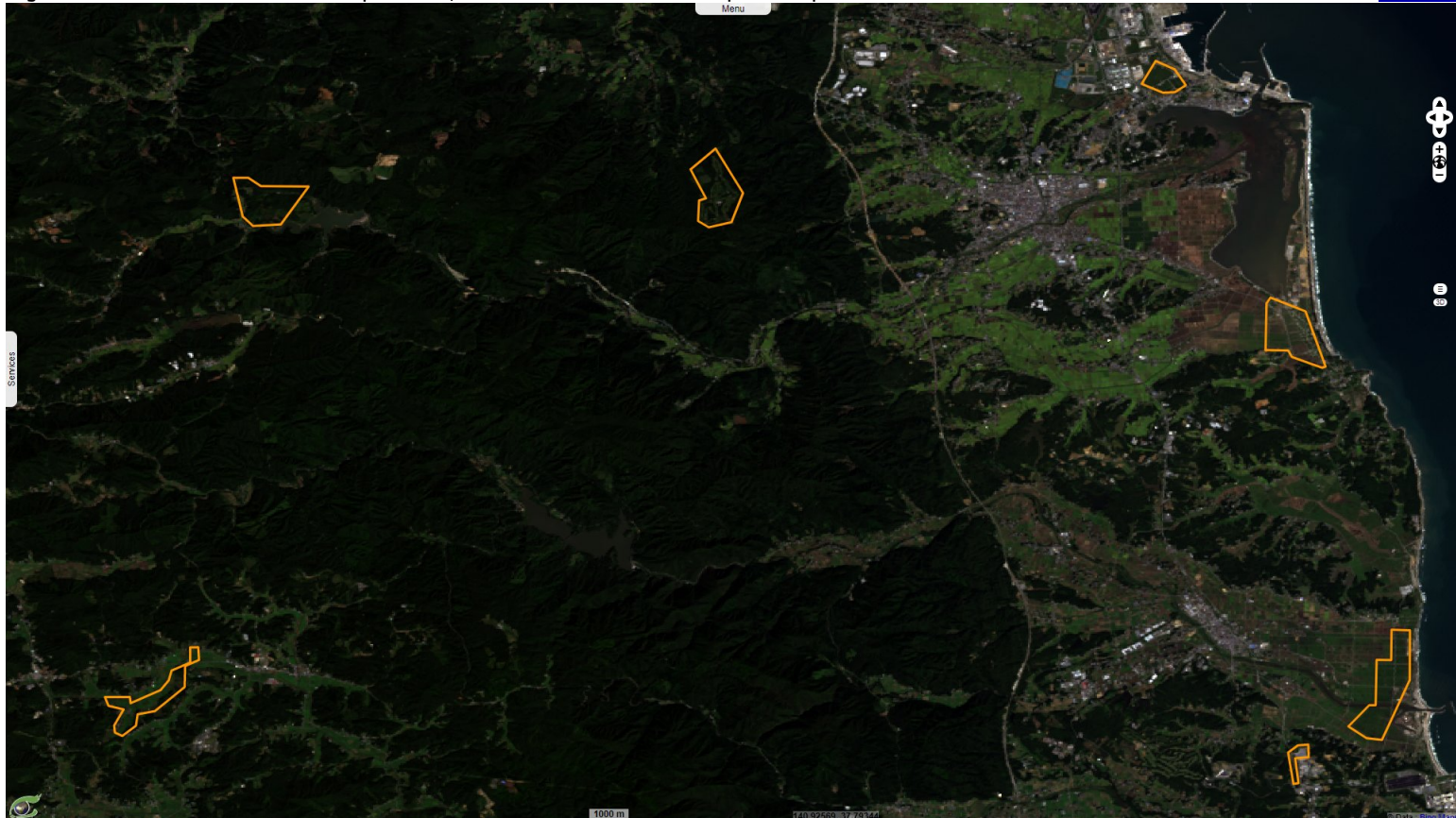


Fig. 2 - Landsat-8 (17.09.2013) - In particular, it has been focused on the plain strip.

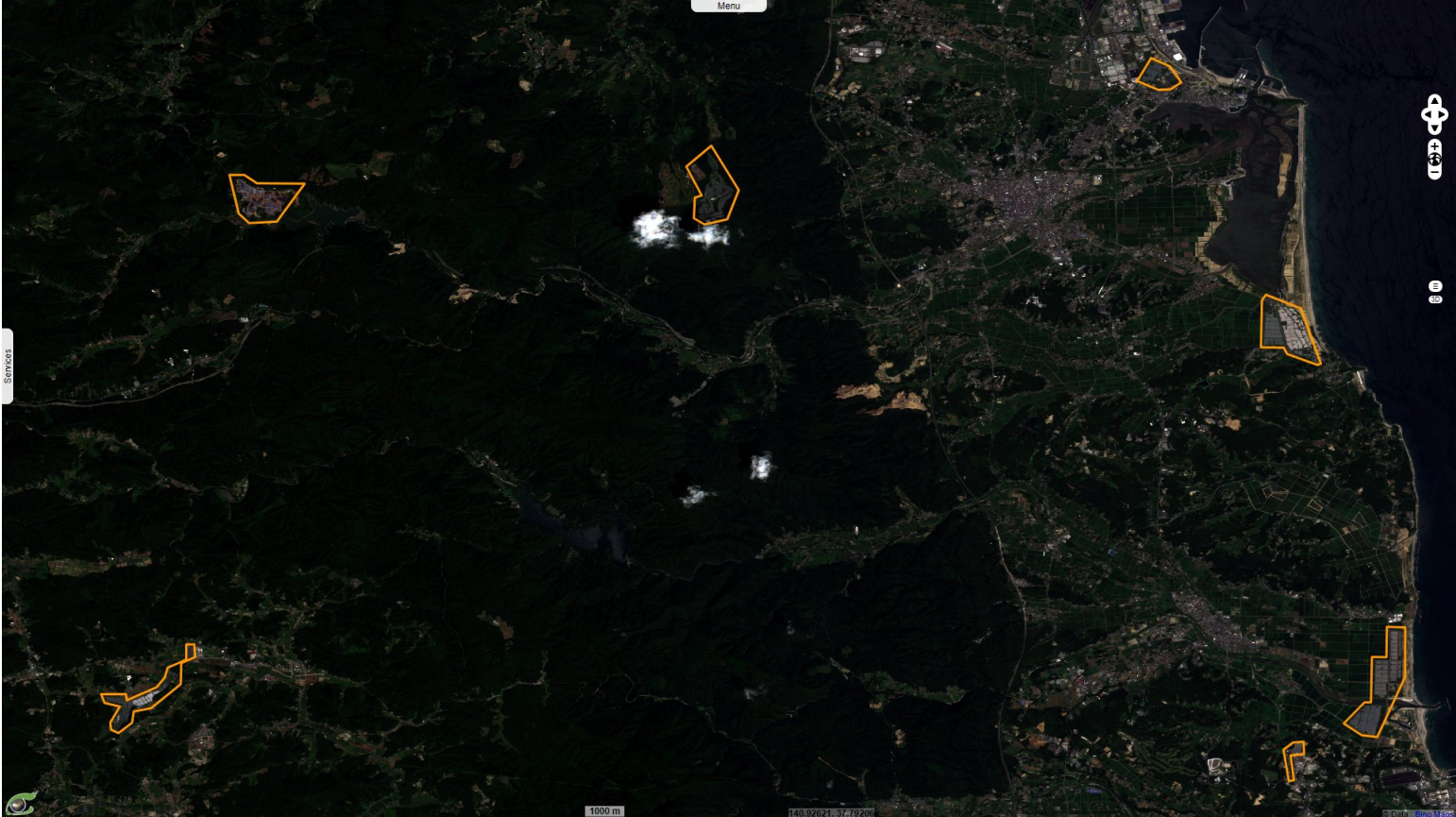
[2D View](#)



Yuka Obayashi [reminds](#) for Reuters: "The March 11, 2011 earthquake and tsunami ravaged northeast Japan and crippled the Dai-ichi nuclear plant. It also triggered widespread opposition to nuclear power, complicating energy policy for resource-poor Japan."

Fig. 3 - S2 (20.08.2020) - Here, several larger plants at north-east of the Fukushima region.

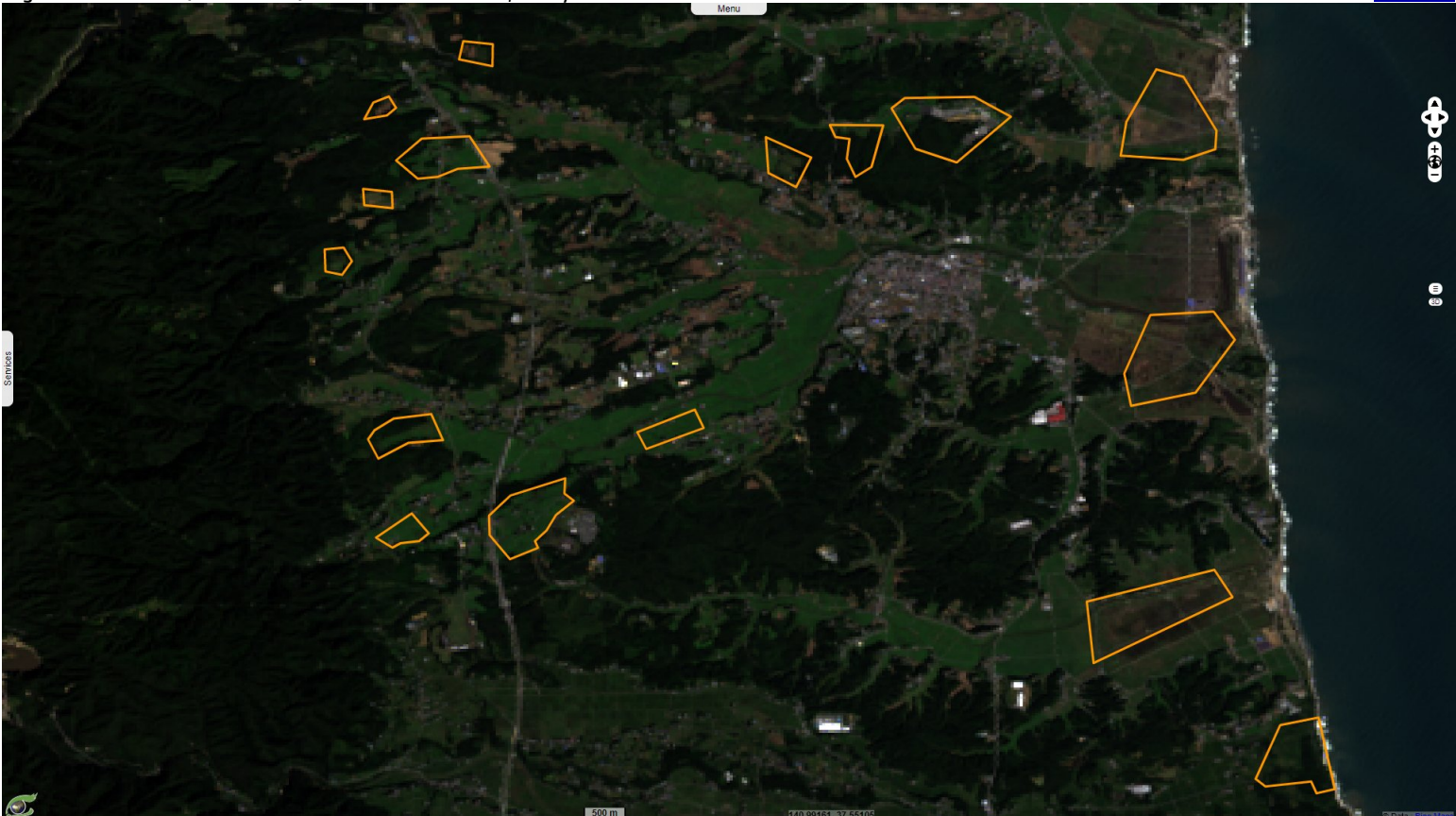
[2D Animation](#) [2D View](#)



The Japanese government [completes](#): "A decade after Japan's devastating nuclear meltdown, the governor of Fukushima hopes the prefecture can step out of the shadow of disaster and become a symbol for green energy, although some residents are sceptical."

Fig. 4 - Landsat-8 (17.09.2013) - A bit further south, many small installations on the shore.

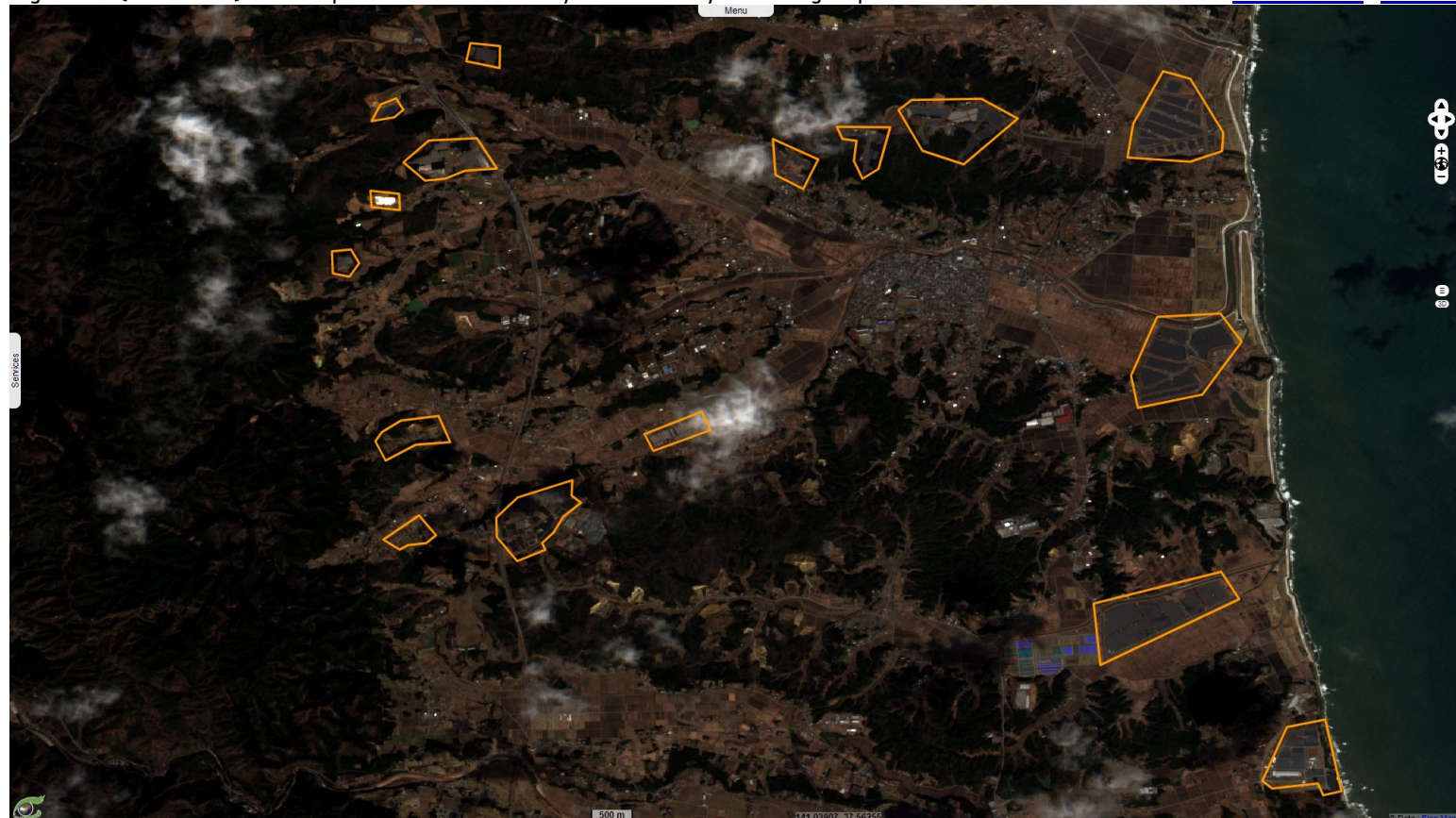
[2D View](#)



"A decade on from the disaster, the people of the region have made great strides in rebuilding their lives and, with the assistance and support of the government and from Japan's friends abroad, towns and livelihoods are steadily being restored. Some particularly forward-looking municipalities have chosen to look at the tragedy that befell them as an opportunity and have radically rethought the very foundations of their communities. For many, the key to a prosperous and resilient future is energy that is locally produced and locally consumed – and can therefore be relied on even in the event of another major disaster."

Fig. 5 - S2 (03.03.2021) - The required surface has mostly been found by converting cropland.

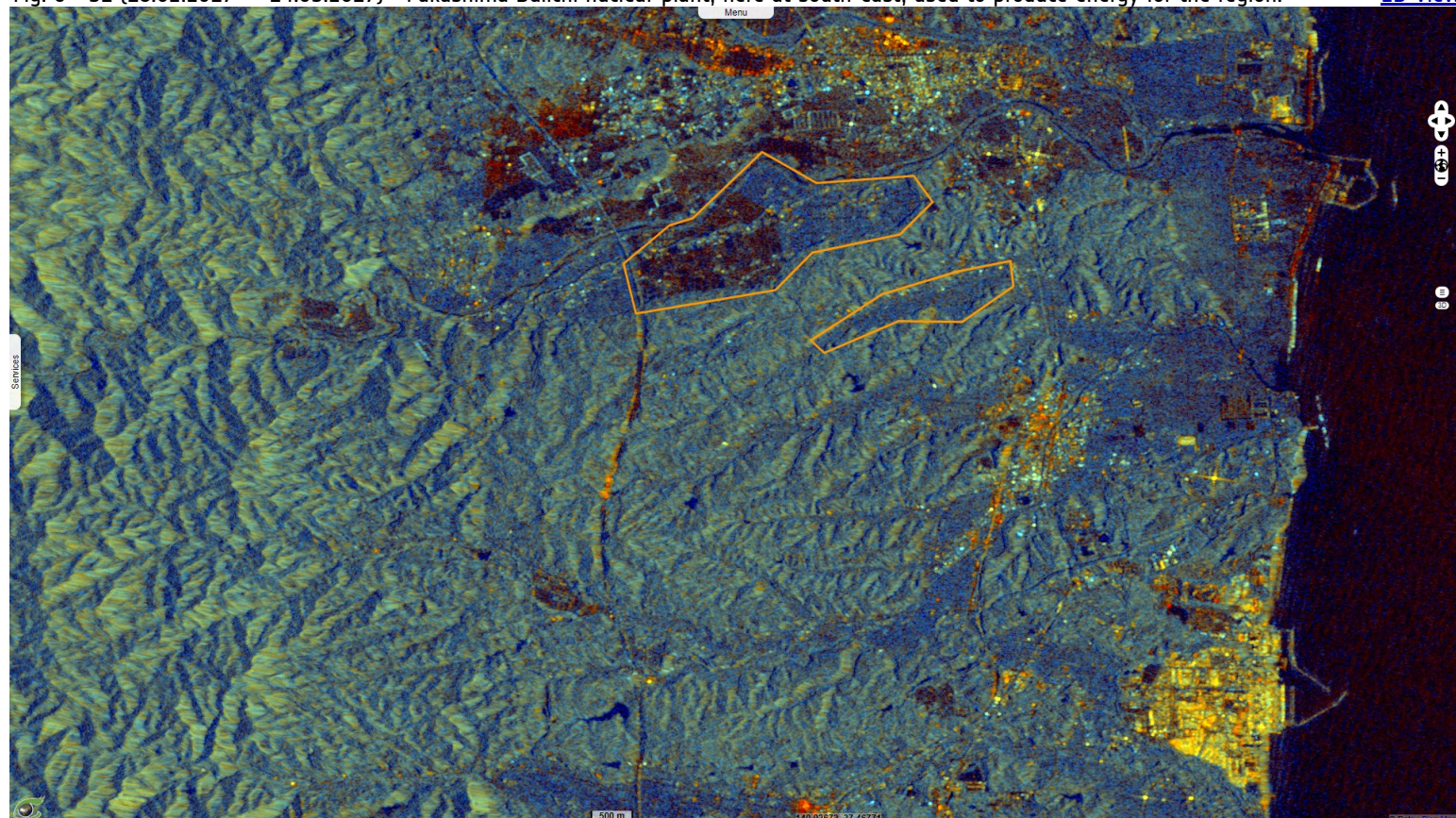
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"Thirteen residents of the coastal town of Naraha died when the 10-meter wave hit, with around 125 homes and other buildings destroyed. Inhabitants were also forced to leave their homes due to the danger of radiation released by the accident of TEPCO Fukushima Daiichi Nuclear Power Plants, which is 20km away from the town."

Fig. 6 - S1 (18.02.2017 -> 14.03.2017) - Fukushima Daiichi nuclear plant, here at south-east, used to produce energy for the region.

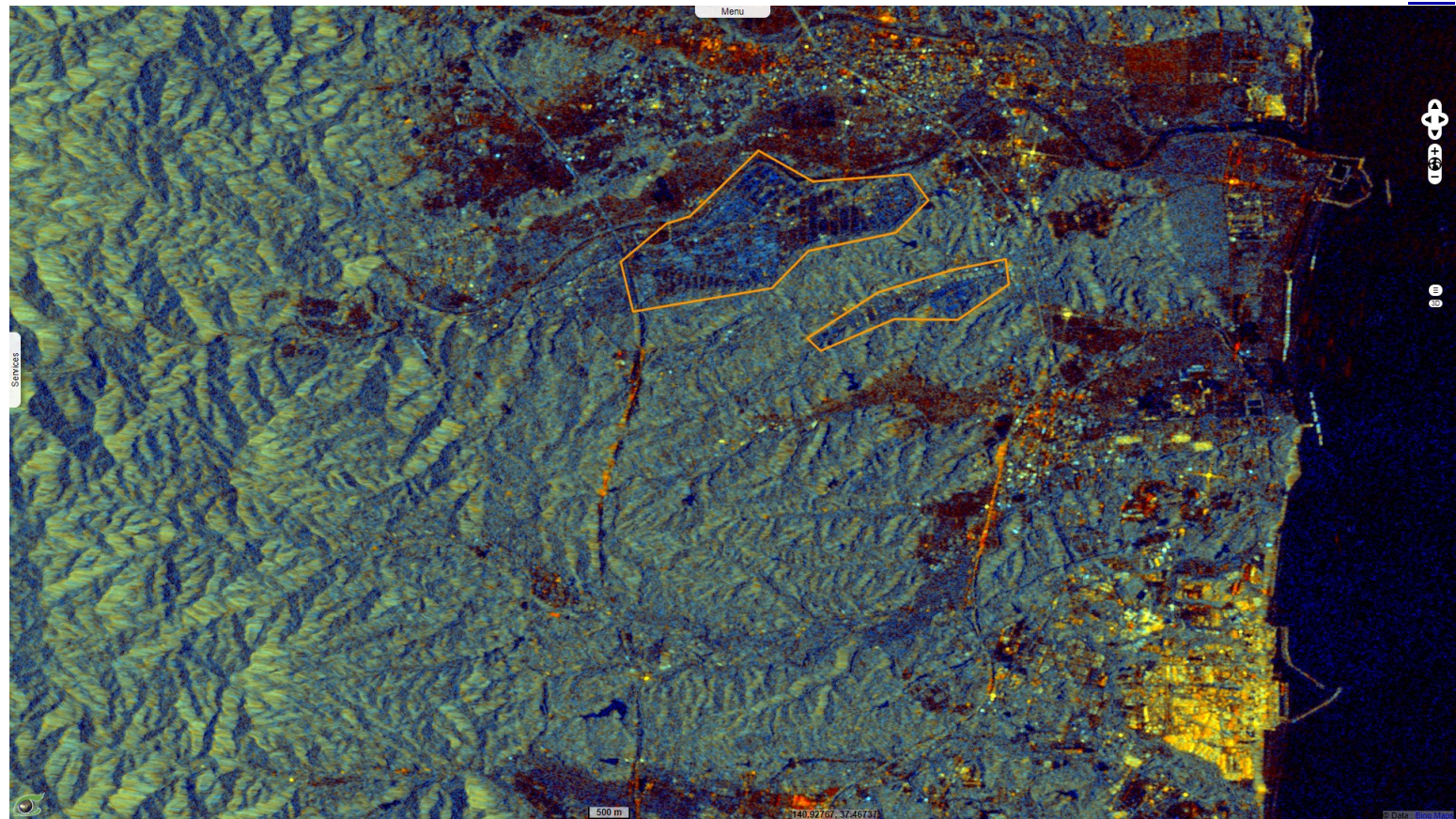
[2D View](#)



"The people love their town and even though we had to evacuate, virtually everyone always said they wanted to come back again. The town was entirely evacuated after the disaster, but as of January 2021, it was once again home to 4,030 people, which is more than 60 percent of the population before the disaster."

Fig. 7 - S1 (28.01.2021 -> 05.03.2021) - It has been stopped after the disaster, two new solar farms have been settled nearby.

[2D Animation](#) [2D View](#)



"Guaranteeing a reliable supply of energy to help keep residents warm, fed and sheltered in the event of another disaster was also recognized as a critical requirement of the resurgent town. A key part of that, says SAKAMOTO Hiroshi, Manager of Naraha Town Reconstruction Promotion Division, Town Promotion Unit, is adopting renewable energy."

Fig. 8 - Landsat-8 (17.09.2013) - Fukushima Daini was another major energy producer, unlike Daiichi it reached cold shutdown after the 2011 tsunami.

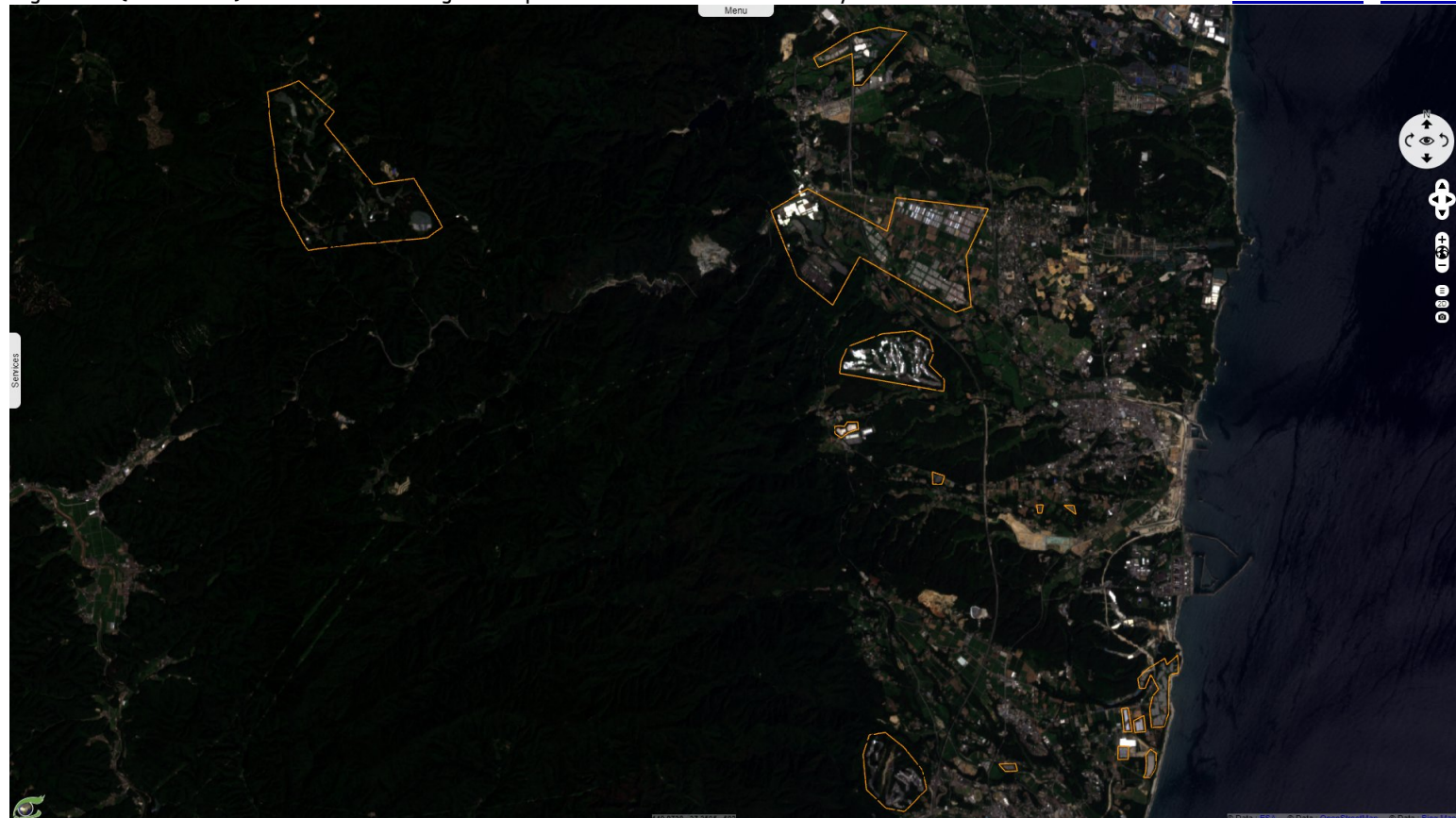
[3D View](#)



"'Because of our experiences from the Great East Japan Earthquake and the nuclear disaster, people decided that they wanted the town to consider alternative energy sources that would withstand a disaster better,' he said. 'And I think that is the same across Japan as people realize that they should not rely on one source, but diversify and disperse their supplies of power and create interconnected and resilient communities.'"

Fig. 9 - S2 (20.08.2020) - Both small and large solar plants have been installed nearby.

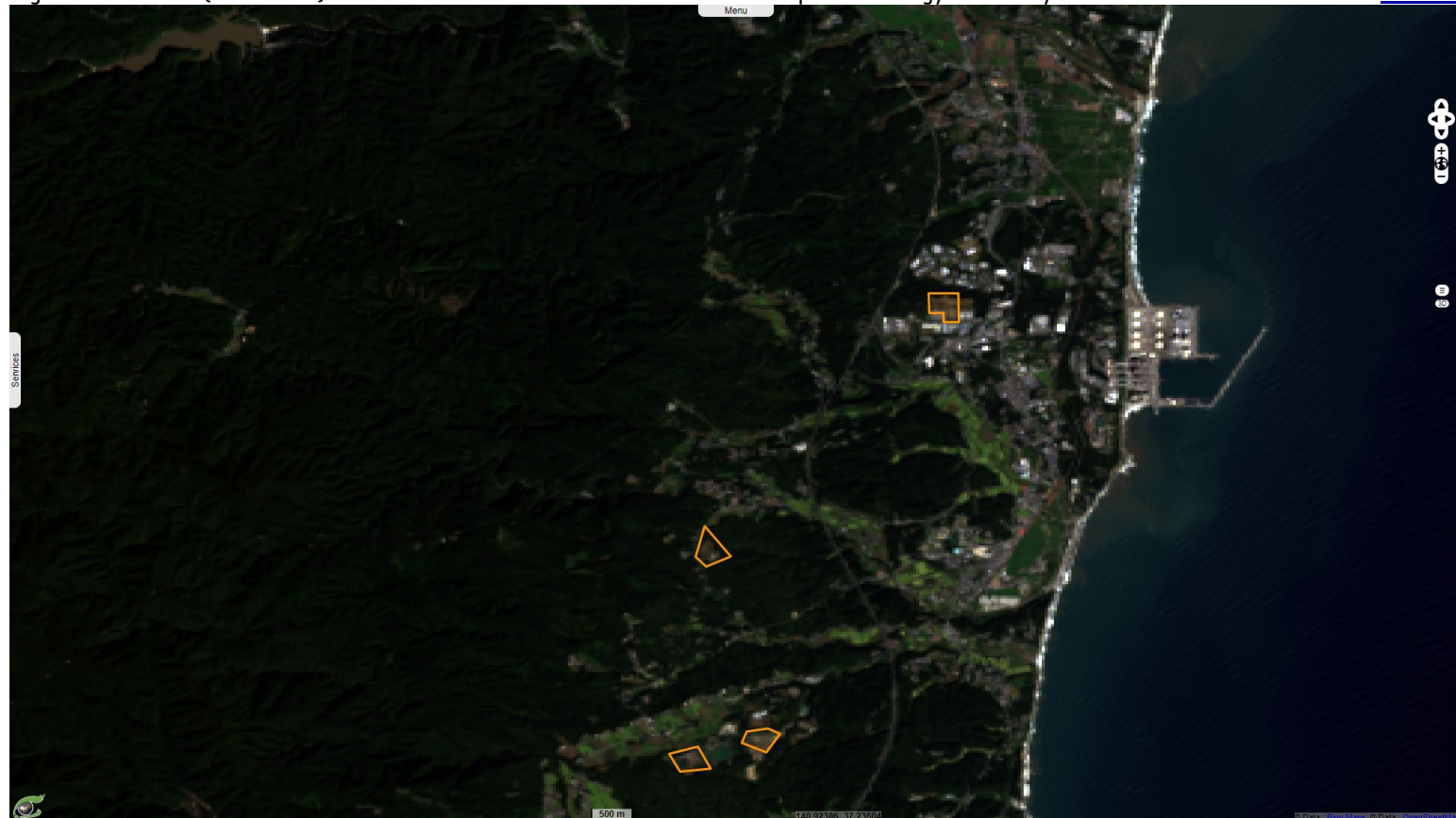
[3D Animation](#) [3D View](#)



"In the aftermath of the 2011 tragedy, the national government teamed up with experts, local communities, and private companies to draw up a future vision of Fukushima. A number of these initiatives coalesced with the signing in August 2020 of an agreement between the Ministry of the Environment (MOE) and the prefecture on forward-looking environmental measures to help rebuild Fukushima. According to MOE, the wide-ranging agreement covers the reconstruction of the prefecture and its communities by encouraging independent renewable energy systems and promoting decarbonized towns and villages."

Fig. 10 - Landsat-8 (17.09.2013) - Hirono Thermal Power Station at east used to produce energy exclusively from oil.

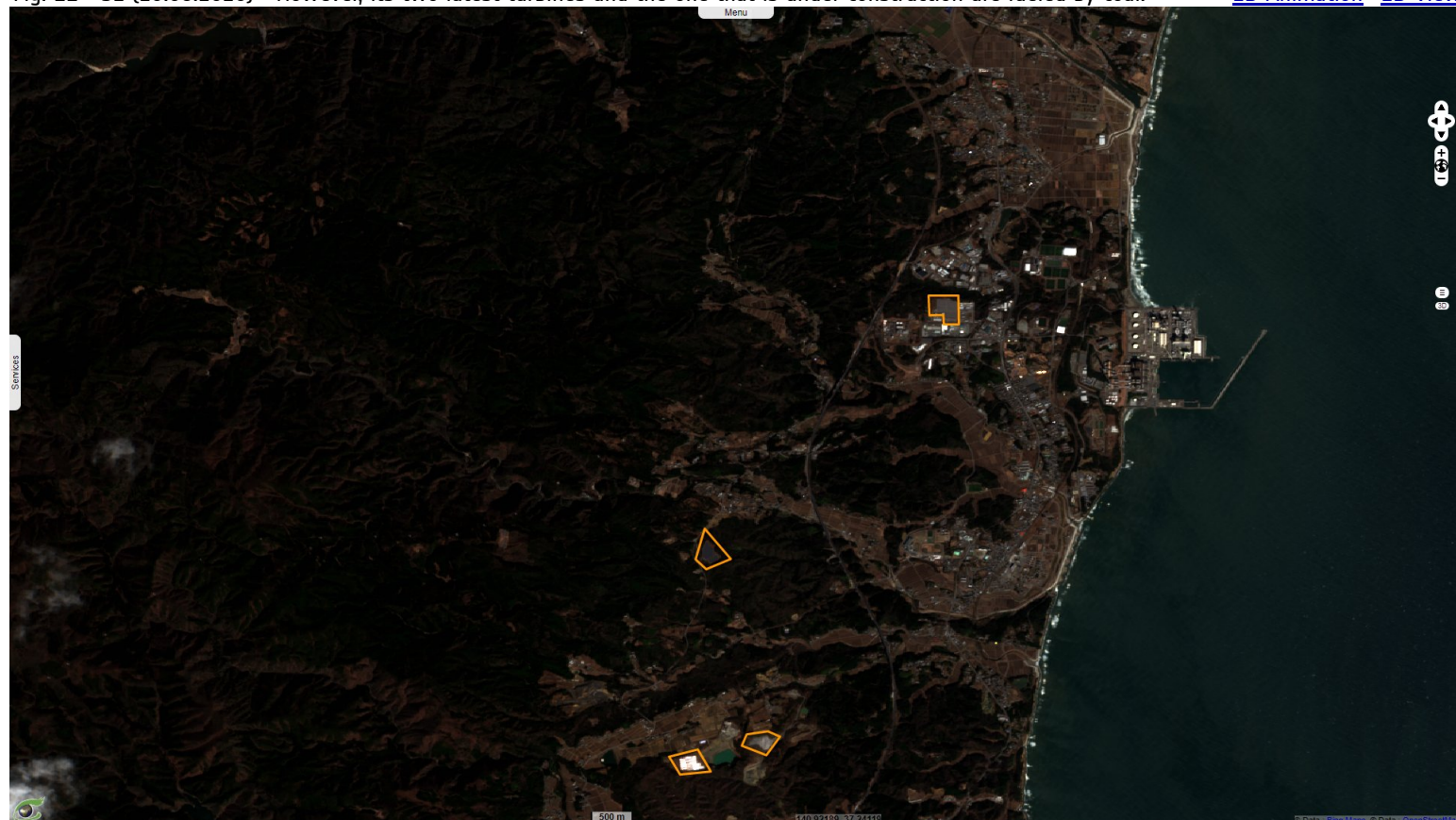
[2D View](#)



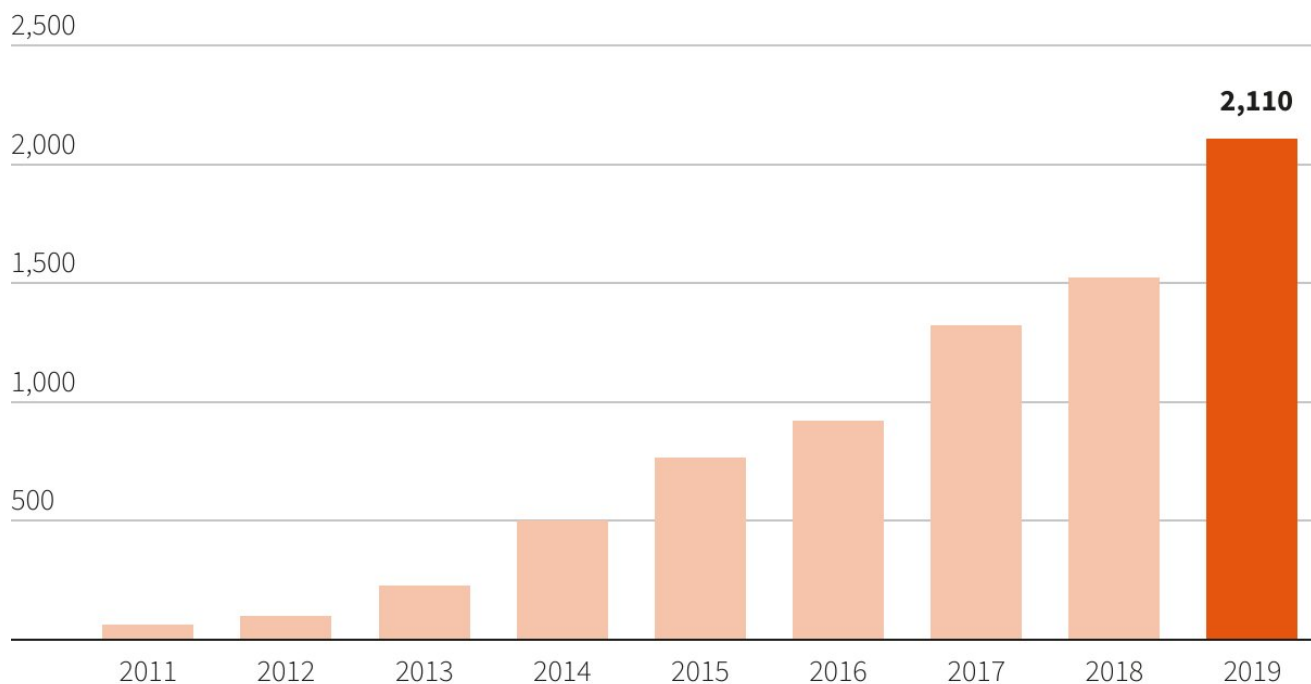
"In March 2012, exactly one year after the disaster, the local government set itself a target of generating more than 100 percent of the prefecture's power from renewable sources by around 2040. In fiscal 2019, that figure had already reached 34.7 percent. The national and local governments also anticipate that the collaboration will contribute positively to a post-coronavirus society that is interconnected and resilient to natural disasters and health challenges."

Fig. 11 - S2 (20.08.2020) - However, its two latest turbines and the one that is under construction are fueled by coal.

[2D Animation](#) [2D View](#)



"Almost 10 years after the most destructive earthquake in Japan's history, the government of Japan announced that it would prioritize new forms of environment-friendly energy and realize a carbon-neutral, decarbonized society by 2050. As it rebuilds from the past, Fukushima Prefecture is in the forefront of the nation's ambitious campaign to reach that target."



Fukushima renewable energy capacity in MW using Japanese financial year from April to March, "Fukushima has expanded its renewable energy capacity, mainly solar power, since the nuclear disaster in 2011." - Source: [Fukushima Prefecture](#)

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