

# Bełchatów lignite-fired power station, Europe's largest CO<sub>2</sub> emitter, Poland

Sentinel-2 MSI acquired on 20 September 2018 at 09:50:21 UTC  
Sentinel-1 CSAR IW acquired on 06 August 2021 at 16:26:38 UTC  
Sentinel-1 CSAR IW acquired on 18 August 2021 at 16:26:39 UTC

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Keyword(s): Climate change, infrastructure, non-renewable energy, open pit mine, coal, greenhouse gas emissions, Poland

[2D Layerstack](#)

Fig. 1 - S2 (20.09.2018) - Lying 150 km west of the Polish capital, Warsaw, Bełchatów coal-fired power station was built in 1982.

[3D view](#)

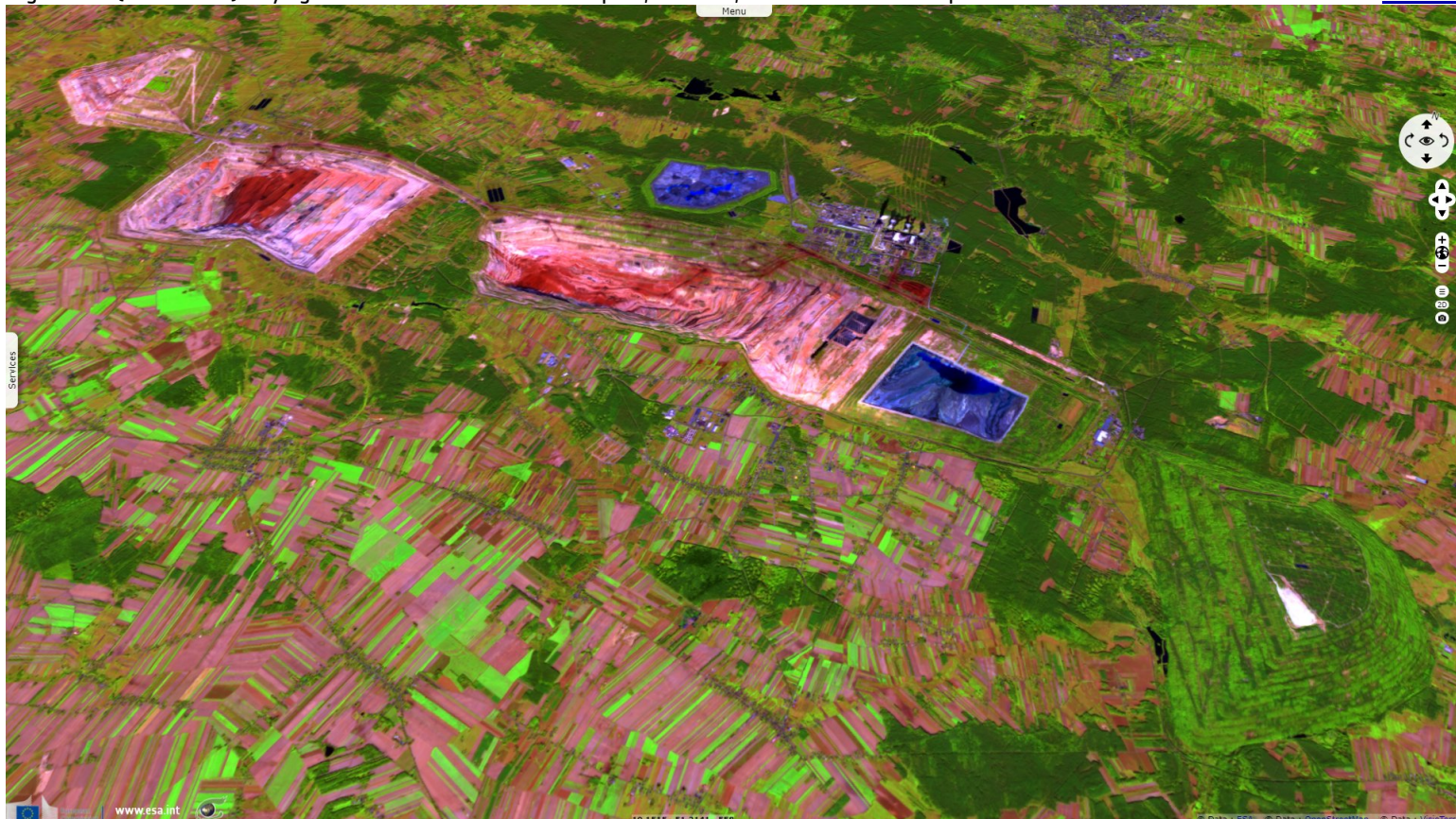


Fig. 2 - S1 (06, 12 & 18.08.2021) - Europe's largest thermal power station, it has a capacity of 5100 MW, as much as 4-5 nuclear reactors.

[3D view](#)

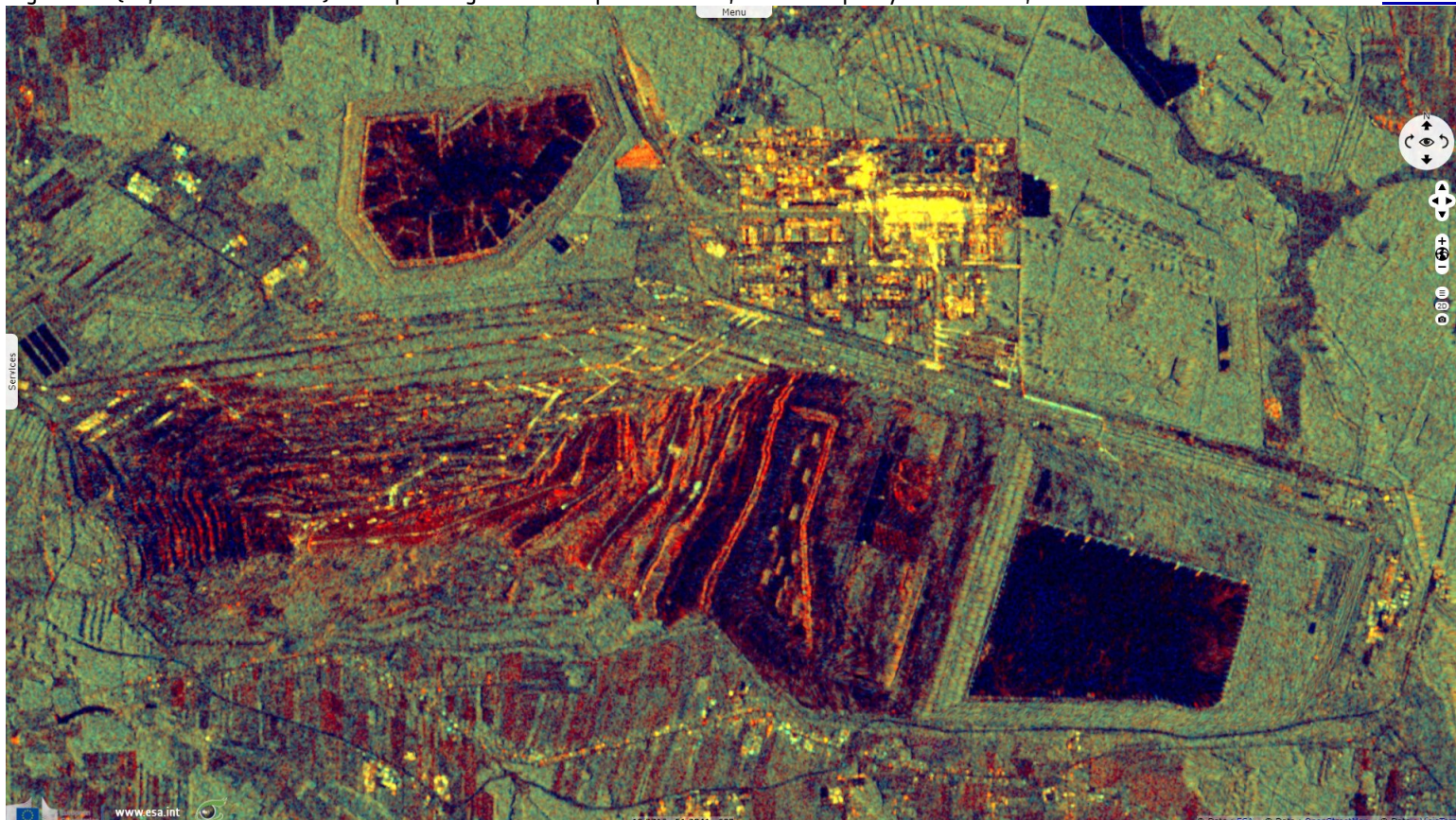
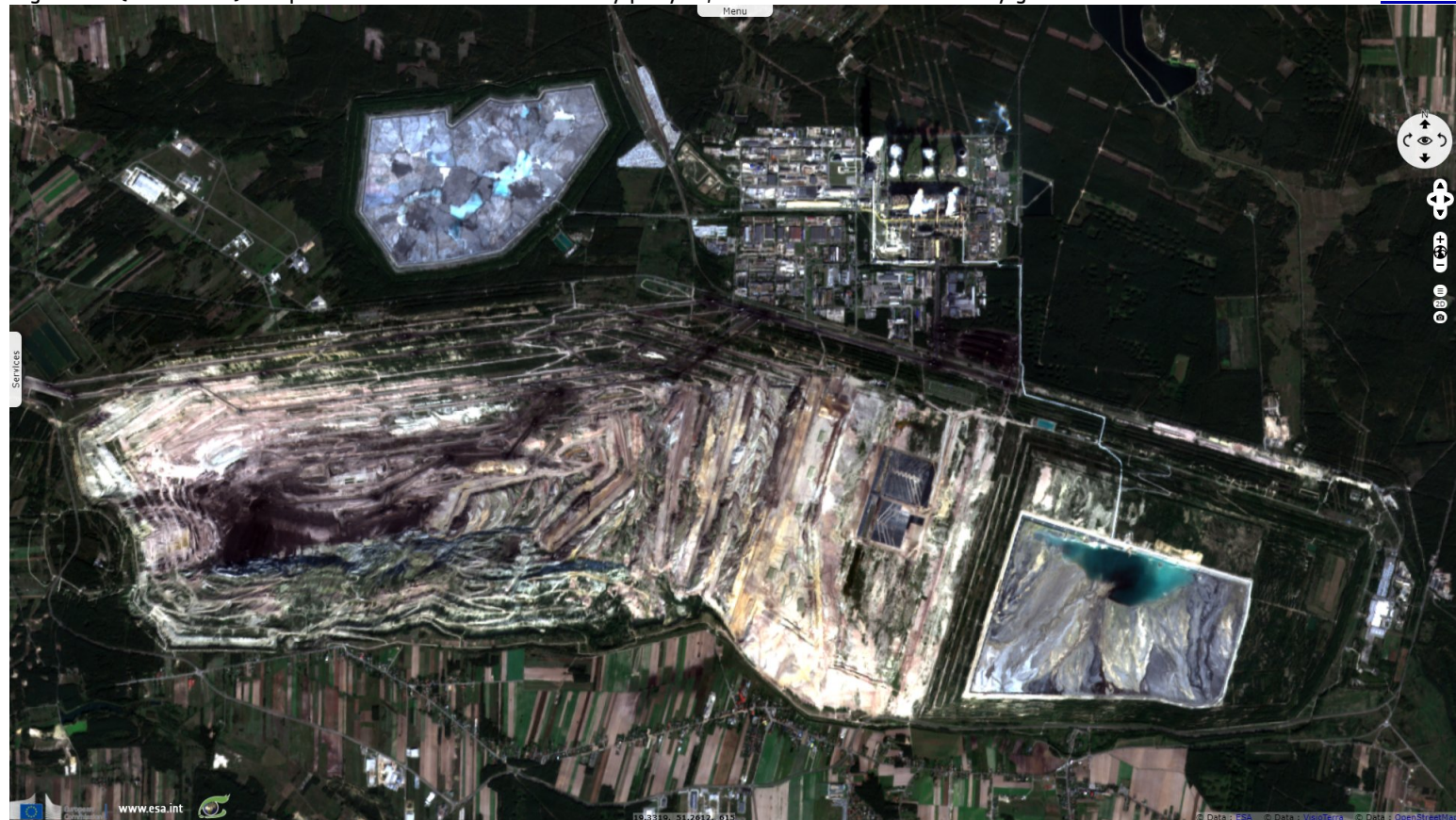




Fig. 3 - S2 (20.09.2018) - It produces 27–28 TWh of electricity per year, or 20% of the total electricity generation in Poland.

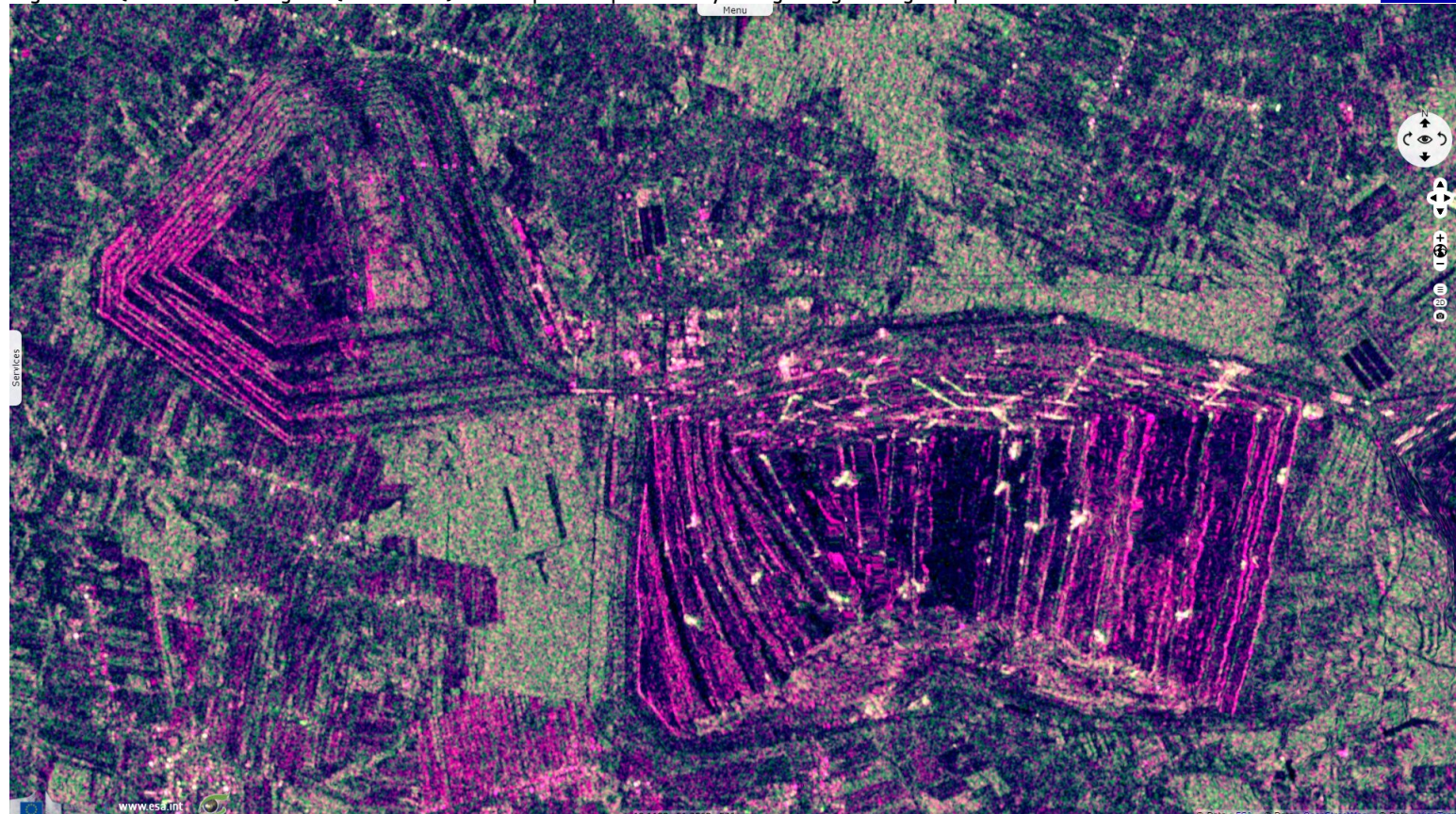
[3D view](#)



The plant is estimated to have been the coal-fired power plant which emitted the most carbon dioxide in the World in 2018 at 37,6 million tons; 1.5 millions tons more than the entire 8 millions inhabitants of Switzerland including carbon generated by their electric and non-electric power consumption. Its relative emissions are estimated at 1.756 kg per kWh, the 11th worst in Europe.

Fig. 4 - S1 (18.08.2021) - Lignite (brown coal) for the plant is provided by a large neighboring strip mine Bełchatów coal mine.

[3D view](#)



It of the largest coal reserve in Poland having estimated reserves of 1930 million tonnes of lignite coal. In 2015, the mine produced 42.1 million tonnes of lignite (66.7% of Poland's total lignite production).















Fig. 5 - S2 (20.09.2018) - In June 2021 local authorities published a plan that may see the plant decommissioned by 2036.

[3D view](#)



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