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Dispatch- Day 2

Fig1: Waikato River and its dams

On the second day in New Zealand, we had a breakfast in Raglan then we drove to Arapuni. Once we arrived, I talked about the hydropower stations in Waikato River. Hydropower plays a very important role in renewable electricity generation in New Zealand. Waikato River is the most important and longest river in New Zealand. It is running for 425 km in the North Island. The Waikato River Scheme, operated by Mercury Energy, has 8 dams and 9 hydropower stations that have been built in early 20th century to generate electricity for the national grid. The power scheme starts at Lake Taupo that has control gates to regulate the water flow into the river. It takes around 18 hours for the water to reach Karapiro, the last power station. The flow of water passes though power stations at Aratiatia (84 MW), Ohakuri (112 MW), Atiamuri (84 MW), Whakamaru (100 MW), Maraetai (360 MW), Waipapa (51 MW), Arapuni (171 MW) and Karapiro (90 MW) as it's shown in the map (Fig1). The scheme generates almost 13% of the total annual electrical capacity in New Zealand. The beauty of hydropower generation is that the quick adaptation to meet the demands and to cover the drawbacks of wind farms uncertain power generation. The hydropower generation system in Waikato River is the largest peaker in North Island and close to Auckland, the largest city in the country. There is no potential to build new hydropower plants in North Island since most of the potential was tapped. In Arapuni, we met Heather's ice cream and had delicious ice cream and ice coffee. We hanged out there for a couple hours then we drove to Taupo to stay in the hostel during the second night.