

EMSOL UPDATE JULY 2020



Emsol's July 2020 Update:

1. **Emsol carbon savings**
2. **New Zealand Aluminium Smelter - Tiwai Point**
3. **Otamatea High School upgrades and savings**
4. **Update on Erin's Te Araroa Trail Walk**

1. Emsol Carbon Savings

Emsol joined New Zealand's Climate Leaders Coalition (CLC) in August 2019 and set itself a 20% carbon reduction target by end of 2021. CLC promotes business leadership and collective action on the issue of climate change. Emsol is also a member of the Carbon and Energy Professionals New Zealand (CEP), formerly known as EMANZ. CEP is dedicated to developing the capacity of businesses to improve efficiency, productivity and reduce carbon emissions.

Emsol emitted 21,438 kg of CO₂ equivalent in Financial Year Apr 2018 - Mar 2019. When we analysed our emissions, we found most were travel related: Scope 1 (vehicle use) at 55% and Scope 3 (air travel) at 41%. We took action and in 2020 have reduced our air travel by using video conferencing in place of some in-person meetings. We reduced staff travel between Emsol offices and hold most internal meetings using Zoom. Additionally, staff members with company vehicles are often walking or jogging to and from work instead of driving. This is typically five kilometres each way and helps them keep fit and healthy.

Since our base year, we have reduced our emissions by 25%. Our challenge is now to maintain or exceed these savings. As the ETS Carbon price inevitably rises, reducing carbon emissions will have a greater economic impact on businesses: In the past year, the ETS Carbon price has risen approx. 30%. Get in contact to see how Emsol can help you achieve savings through carbon reductions.



2. New Zealand Aluminium Smelter - Tiwai Point

Rio Tinto announced early in July 2020 it will wind down operations at Tiwai Point and close its aluminium smelter in August 2021. This will have a significant impact on New Zealand's energy industry because Tiwai Point uses up to 13% of our country's electricity.

We have already seen 30% reductions in the futures price of electricity in the South Island. During the next 18 months the prices offered for fixed price electricity contracts will vary widely at various times throughout this period. When purchasing electricity, a wide range of options should be considered.

3. Otamatea High School Upgrades and Savings

Otamatea High School (OHS), located in Northland, achieved 44% energy saving as of March 2020 compared with 2017. This was following an energy audit and an energy upgrades project assisted by Emsol.

OHS's carbon reduction, associated with these energy savings, is 66%.

In 2017, OHS' Property Maintenance Manager attended an energy saving workshop held in Auckland. Following this the board decided to commission a Type 2 energy audit to investigate electricity and heating energy reduction opportunities. Based on the audit findings, Rachel Clothier-Simmonds, the principal of OHS, commissioned an energy upgrades project, which began in 2018. This involved replacing their diesel boiler with heat pumps, and lighting upgrades. In addition to reducing energy use for heating, the heat pumps provide much needed cooling in summer months. Most lighting was changed from fluorescent tube fittings to LED, which ensured their electricity peak load was kept less than their supply transformer capacity. Solar PV panels have also contributed 4% of the savings.

Otamatea High School no longer uses any diesel for heating and has reduced its electricity use at the same time. We call that a win-win.



4. Update on Erin's Te Araroa Trail Walk

Erin was thrilled he could get back to Southland to finish his Te Araroa walk during May 2020. He was accompanied by his wife Sue as support crew. He resumed near Te Anau, 250 km from Bluff and was fortunate the weather was fine most days. He started early in the mornings, due to short days, and was using his head torch until around 7:45am.

On 1 June; a beautiful, calm winter day, Erin made it to Stirling Point in Bluff. Sue brought champagne to celebrate, and presented Erin with the Te Araroa finisher's medal. He says the 3,000 km walk was both mentally and physically challenging. It has made him appreciate even more the outstanding scenery and natural landscapes of Aotearoa New Zealand.

Find Out More

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