Dispatch: 5/10/2013

note that a brief outline of the day will be included in this dispatch with pictures illustrating most of today's activities

Spending time around Taupo learning about a local wind farm and geothermal power plants was interesting, but now the class was heading out this morning to the massive Tararua wind farm. Making a few stops for bathroom, breakfast, and scenic view breaks; we got to the wind farm in about 4 and a half hours at 1:00 P.M.

We drove up about 5 kilometers on a very scenic hill on a gorgeous day to the top of a hill in order to gain access to the wind farm operating station. Once there, the class met with Mike Hewett from Vestas, the biggest international turbine producer in the world. There, he gave us a presentation of the farm and a short tour of a turbine and the station.

The farm itself was composed of two different types of turbines; 47 meter and 90 meter diameter turbines. There were 103 V-47s and 31 V-90's giving us a total of 134 turbines in this farm. V-47's have a 660 KW output while the V-90s have a 3 MW output The larger turbines were located at the top of the hill, which had an astonishing 55% capacity factor compared to an international average of around 30% while the relatively smaller turbines were towards the bottom of the hill where the capacity factor was at 39%. Half of the electricity produced at this farm powers the city of Palmerton North while the other half is used to power the national grid. The first 50 were constructed in this field in 1998 while the rest of the farm's turbines were constructed in 2004.

Thanking Mike for his time, we made our way to Palmerston North, the city that has its electricity supplied by the very wind farm we had just visited, to grab some lunch before heading to Whangenui and check into our hostel.

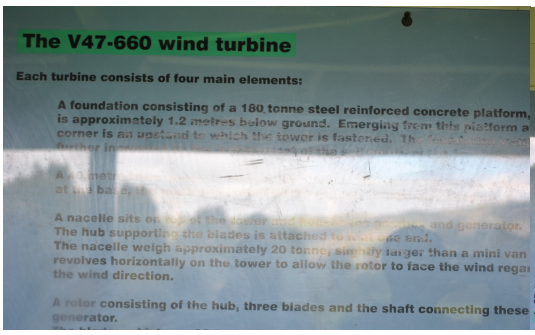
Leaving Taupo after spending a couple of days there

passing by a beautiful snow snow capped mountain on our drive

We had a chance to stop by a beautiful scenic view point called “Stormy Point”




Here we are about to access the wind farm access road; there was some info graphics as well giving us some background on the farm.



Jake was obviously very excited to check out this windfarm

What the windfarm looked like before heading up the access hill.

Heading up to the wind farm

Above you can find images taken from the windfarm. As you can see, the farm is located on private land with livestock grazing in the background while receiving royalties to have their land used.

The inside of a turbine as one would see if looking up.