

Sustainable Energy in New Zealand

EGEE 497 – Sp 2020



What: This course will examine methods of energy recovery and conversion from conventional fossil fuels through renewables. Students will investigate the political, economic, scientific and technological factors driving the recovery and utilization of energy using New Zealand as an archetypical example – one where unusually 40% of primary energy is supplied by renewables. This compares with approximately 6% in the United States and an average of 8% in OECD countries.

When: Spring semester with a field trip to New Zealand during spring break.

How: This course will use occasional guest lectures, instructor-guided discussions, student presentations, and research to address the important contemporary issues of energy supply and use, and the environmental consequences of energy choices.

Where: Principally at University Park, but including travel to the North Island of New Zealand during the southern-hemisphere summer.

Cost: Students will be responsible to book their round-trip airfare to New Zealand (~\$1800) with an additional lab fee (\$2280) to cover ground transportation and dormitory style accommodation while in New Zealand. Students will be responsible for their meals and miscellaneous personal expenses while traveling.

Who: The course is open to all Juniors and Seniors but will be capped at 16 students.

What Can It Count For: 3 credits. Depending on the student's major, this course is appropriate as a general or technical elective.

Contact: Derek Elsworth elsworth@psu.edu

