ON/OFF GRID Spatial and experiential implications of the large-scale transition to renewable energy

This studio will explore the physical and behavioural opportunities and issues arising from the ambitious 'Rewiring the Nation' program in Victoria, the general transition to renewable energy networks, and the rapidly accelerating uptake of electric vehicles around the world. We will be focusing on possibilities and sites within regional Victoria, particularly in the Gippsland/ Latrobe Valley area. The studio is run in collaboration with a parallel Landscape Architecture studio at the University of Melbourne. Regular exchange of information and joint presentations will occur across the semester.

Studio aims

- To visualise and spatialise large-scale systems, data and economic forces that can inform and positively influence regional Victoria.
- To visualise and spatialise new typologies of building and landscape that both react to and predict new ways of living, travelling and community organisation

Studio questions

- What are the spatial, environmental and economic implications of the large-scale transition of Victoria's energy grid to renewable sources, and its associated redistribution of supply?
- What opportunities does this transition present for regional communities?
- What behavioural changes might we expect and explore in parallel with this transition?
- What experiential, landscape and lifestyle opportunities are presented by the shift from petroleum storage and distribution to EV charging infrastructures?
- What opportunities does this transition present for new forms of co-operation, organisation and self-sufficiency?

Studio approach

We will work across multiple scales, from national and state-wide infrastructural and landscape systems to local issues 'on the ground' at key sites. We will seek out difficult sites with conflicts to resolve, as well as nocal possibilities for regeneration and repair. Students will work iteratively and collaboratively through design, drawing and mixed-mode research, both individually and in groups. A joint research report will be produced at the end of the semester suitable for discussions with government agencies and community groups.

Studio outputs

- State-scale mapping of infrastructural system qualities
- Identification of key sites for design: conflicts and opportunities
- Design of mixed-use medium-scale buildings incorporating electric vehicle charging stations and associated public commercial and/or residential facilities
- Preparation of group research report aboration with University of Melbourne Landscape Architecture students

Site visit

Friday 10th March (full day): Morwell Trace of surrounding region

<u>References</u>

Totally Renewable Yackandandah: totallyrenewableyack.org.au

A New Normal: normalise.it

New SEC Vic: www.vic.gov.au/state-electricity-commission-victoria

Rewiring the Nation: www.energy.gov.au

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In collaboration with A/Prof Andrew Saniga, University of

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Wednesdays 9:30am

