

WIND POWER COULD BE A BREEZE
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PAUL EASTON

THINKING small rather than big could be the best way to harness New Zealand's wind energy, according to a Victoria University student.

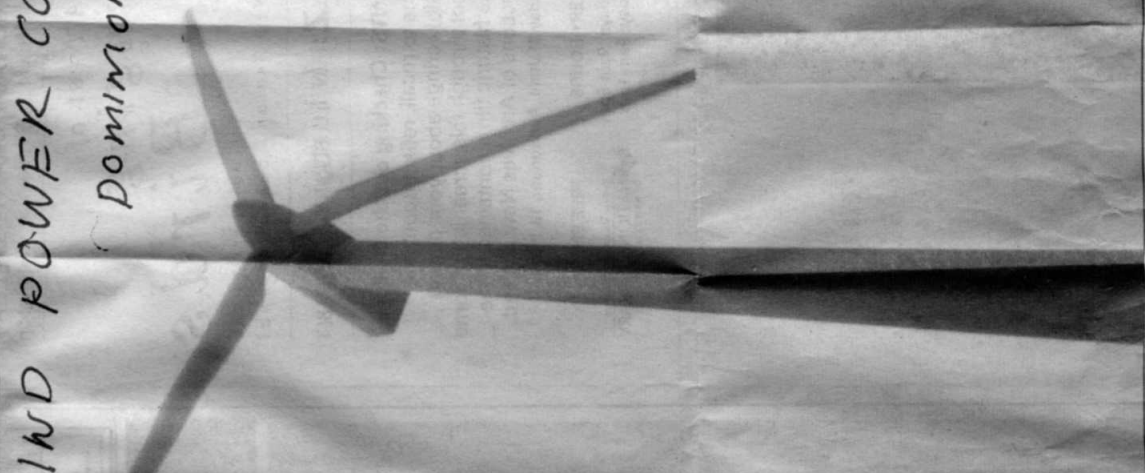
Martin Barry has completed his masters thesis on the viability of developing small-scale wind farms, of up to three turbines, in New Zealand. Such developments were common overseas in countries such as Denmark but had not been explored properly in New Zealand, said Mr Barry. Instead, a trend toward developing large-scale wind farms has kicked up public opposition.

At Makara on Wellington's south coast, a 66-turbine wind farm recently got the green light despite opposition from nearby residents concerned about noise and visual pollution. Meridian Energy's Project Hayes is upsetting people with its plan for 176 wind turbines on the remote Lammermoor mountain range in Central Otago — Grahame Sydney country.

Mr Barry has a vision of small clusters of turbines feeding into the local lines network and part-owned by the community. New Zealand had wind in abundance, he said. Wellington's little Brooklyn turbine, erected in 1993, was one of the world's best-performing turbines of its class. But New Zealand had been slow to use the resource, he said.

Wind turbines in New Zealand produce about 170 megawatts of energy a year, enough for 75,000 households. Germany, the world's biggest wind producer, turns out 22,600MW. "We have a world-leading wind resource, but not a world-leading uptake," said New Zealand Wind Energy Association chief executive Fraser Clark. He said the association was interested in research into wind farms "across the spectrum" and agreed it was not an area New Zealand had explored.

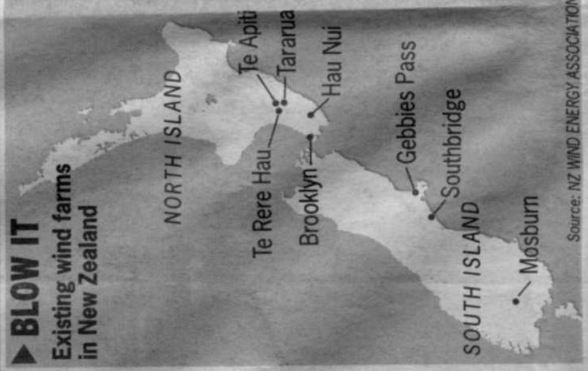
But he said there would always be a need for large-scale wind farms, which enjoyed economies of scale compared with smaller developments. Mr Barry said people were more



Balance of power: Victoria University student Martin Barry has done a masters thesis on the viability of small-scale wind farms. Picture: CRAIG SIMCOX

finding people "significantly more positive" about small-scale wind farms than large-scale developments. Community ownership would mean more people would have a stake in the industry, and the electricity system could integrate more wind capacity if there was a greater geographic spread.

A small-scale wind industry would also support the economy, providing work for blade and turbine manufacturers. As a result of the steady as she goes development of the Danish wind energy sector, she goes development of the Danish wind energy sector.



willing to adopt small-scale wind projects. He sent questionnaires to every rural landowner in the Masterton and New Plymouth regions.