

# Tabled at Hearing 28/10/2015

Notes for ECan presentation; Molly Melhuish, Oct 23 2015

Environment Canterbury's proposed Air Plan is 'Oh, so yesterday!' My submission is about tomorrow. Tomorrow requires a new resilience, especially against the storms and floods brought about by climate change. And tomorrow's technologies will empower consumers to meet their needs, individually or in their communities, breaking their captivity to global businesses.

The proposal enforces 'yesterday', with its rules about technology and standards for air quality. Both of these suppress 'tomorrow's solutions'.

Firewood wood merchants and wood burner manufacturers are going out of business as heat pumps swamp the home heating market. The all-electric house is becoming the usual – and its alternatives are becoming uneconomic. This is making Canterbury less resilient, and costing its citizens a lot of money.

This is not "sustainable management of natural and physical resources", a concept which is described broadly in Section 5 of the Resource Management Act. Rather it reflects Government's strategy of promoting electricity and water infrastructure and resource development to stimulate economic growth.

The electricity industry is staring "tomorrow" in the face, as rooftop solar electricity approaches the cost of purchased electricity. The electricity corporates recognize solar as a "disruptive technology", and their two regulators – the Electricity Authority and the Commerce Commission - are moving fast to protect the corporate profits and risk profiles against small-scale competitors.

In fact wood burning threatens electricity profits far more than solar electricity ever will. Home heating with wood cuts winter peaks, which under Government's "low carbon" scenario would require no less than nine gas turbine stations to be installed before 2050! You can be sure Government is hard at work behind the scenes to protect their dividends and tax take from erosion by untaxed self-gathered wood, and from small businesses that offer alternatives to purchased electricity. But it's heresy to put it in those terms.

When things change, when "tomorrow" is on the brink of overtaking "yesterday", the law requires ECan to return to the purpose of the law that underlies this hearing. Your decisions must guard against proposals that seek commercial gain under the guise of complaints of environmental impact. The classic examples are petrol stations and supermarkets objecting to competitors' proposals. But wood burning competes with electricity – and electricity regulation now protects the current business models. ECan must not reinforce that

The law requires you to focus on the overall environmental and health consequences of your air quality regulations, not just one narrow indicator, PM10. It requires you to listen to the cultural and social preferences of your constituents as well as "calculating" the health consequences through a technocratic and tendentious model of air quality impacts – including a "box model" of a huge airshed with a mere two sampling points.

I believe tomorrow's home heating strategies can offer your constituents choices between the convenience of heat pumps and the very low running cost of wood burning. ECan's Plan should allow householders to retain their wood burners for occasional use, on the coldest days or during power shortages. Remember the health impacts of particulates are mainly cumulative, not immediate.

The Plan should encourage innovation, including development of advanced gasifier burners and emissions control technologies for existing wood burning. This, and only this, meets the RMA's purpose of sustainable management of natural and physical resources.

I often return to the legal concept of "proportionate" – a legal remedy must be proportionate to the degree and scale of the insult being remedied.

Here I summarise recommendations to ECan from my submission.

1. ECan's Air Plan should focus on the broad purpose of the RMA's section 5, rather than regulation a particular technology, wood burners.
2. ECan should not mandate removal of wood burners aged 15 or more, only those which are persistently smoky.
3. ECan should continue with the "Good Wood" programme to maintain the ability to buy dry firewood and obtain affordable kindling.
4. ECan should accept an internationally accepted standard or standards for measuring pollution output from wood burners.
5. The Section 32 cost-benefit analysis should quantify health impacts resulting from both air pollution and cold damp houses. It should address both the effectiveness (number of cases of poor health) and efficiency (cost of the proposed measure).
6. The cost-benefit analysis should compare a strategy of removing only wood burners which are persistently smoky, with the present strategy of removing log burners after 15 years. Note that the former strategy will be more effective in the short term, as it addresses pollution as it happens.

Ulrich Uhrner, ~~Public Health~~ Seminar 07.11.2014 (check Sustainable Cities web site)

Air Quality Assessment in Pinter

Bridging the Gaps - A New Integrated Approach

## Summary & General Conclusions

- Air pollution maps provide important information for health assessment & urban planning (validation is important!)
- Air pollution maps should indicate where local emissions are high and dispersion conditions poor
- Air pollution maps may be used to further improve the monitoring network → emissions/flow/dispersion modelling can be improved further
- Combination of several measures is important to improve significantly air quality or reduce GHG

**PMinter**

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Particles transported from the wider

## Regional/Transport or Local in Origin?

