

Thank you for inviting submissions; I appreciate you.

My submission is as follows.

1. **Add induction cooktops:** The base load and operating loads of induction cooktops are presently outside the standards and that's a major gap which I suggest your review close;
2. In particular, some induction cooktops may:
  - a. use over 5 to 10 or more kW at once. Thus, either alone or with other household appliances the cooktops may cause a household electrical circuit(s) to overload;
  - b. overload a household solar and / or battery system because the inverter may only be capable of handling, say, a maximum load of 4 to 12 kW at once.
3. **Difficult to use website:** The energy efficiency website has been made difficult to use and 'dumbed down' so that it is significantly less useful because it's now harder to compare products on it; in particular:
  - a. the site assumes the reader is searching knowing what product they want to look for, instead of allowing the reader to first compare the appliances according to their efficiency, ten year operating cost or other criteria and then proceed to choose a product(s); see, <http://www.sustainablehouse.com.au/michaels-blog/2016/6/20/e1d5cv1jtqfh8ecke1sargl6kfjyb9>
4. **Misleading website:** The underlying assumption of the rating scheme is false: a reader or user or consumer may be forgiven for assuming the most efficient appliances listed on it are the 'best' available and that by choosing the most efficient they are 'doing their best'. In this sense the scheme is potentially false or misleading. The fact is some companies, in particular, those whose major business operations are centred elsewhere will not – have in some instances refused requests by willing purchasers – bring their most efficient appliances here to Australia, and some retailers who focus on volume sales in priority to offering the most efficient appliances choose not to source or to sell them. Australia is a small market for many of the appliances made in distant countries.
5. **What is the solution to 3 and 4, above?** Three solutions occur to me;
  - a. Make it a mandatory for any company selling products in Australia to offer their most efficient product in Australia as a condition of having any of their products listed on the rating scheme;
  - b. State clearly up front that the scheme does rate the most efficient products in a category, but state simply that it lists those products which makers and sellers choose to bring to Australia and there may be more efficient appliances available overseas, then refer the reader to websites or sources listing more efficient products sold overseas;
  - c. List the (unsold or unavailable) product and note that it is not for sale in Australia.
6. **Total household energy / water potential use:** Add another menu or link to a website which allows the reader to tally up the list of appliances in their household and the total

amount of electricity or water they are capable of using in a day so the citizen may gain what would be for them an empowering picture of the impact on their resource and financial budget of any purchase. The list would include products not within the rating scheme now or in the future. (Data on the use of this menu or link will inform future potential reviews by government of the merits of the rating scheme and the desirability of adding products or ‘tweaking’ the site.)

7. **Ready-to-go comparison of top 3 products: add a ‘Pop up’ menu/screen called, say, ‘Your top 3’:** Add a pop up menu/screen of, say, three to four shortlisted appliances chosen by the reader and allowing the reader to compare the three year water / energy use / cost of each shortlisted appliance (including products that are the most efficient but not for sale in Australia). Allow a readable screenshot or other ‘takeaway’ ‘grab’ of that shortlist to be created so the reader may take it with them or use in the shop at the time of purchase.
8. **Mandate internet sites allowing overseas purchases to alert buyers to the rating scheme and ‘sieve’ choices and purchases via the rating scheme:** With the growth of internet purchases it is possible to buy products not listed or listed on the scheme but not rated by the internet site. That is, it’s possible to ‘side-step’ or ‘side-line’ the rating scheme by offering products for sale on the internet and available overseas.
9. **Tell your – our – story:** Make the website more interesting and engaging. Change it from a mostly static site to a ‘we are telling our story’ site. That is, link data on the sale of appliances and products to the estimated savings in household bills and water and energy resources due to efficiency. This will make the website a source of continuing media which will use the site to run stories and thereby reinforce and promote its existence and promote its potential to serve users and householders. It will maintain pressure on appliance manufacturers and retailers. Live data might be supplemented by a page for users to tell their stories; call it, say, “This month’s bill winners” or some such, where someone puts their story up. An example of a story is in my book, *Sustainable*

House 2Ed, 2010 Choicebooks pp 58, 59

58 Sustainable House

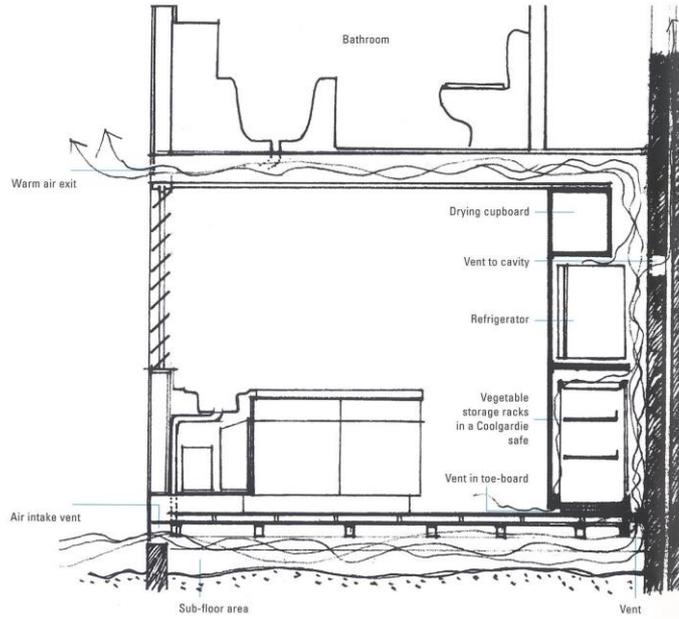
**Learning from the mistake**

Red tape makers have learnt from my mistake, too, and today planning rules (such as BASIX in New South Wales) alert homebuilders to the need to ventilate the fridge.

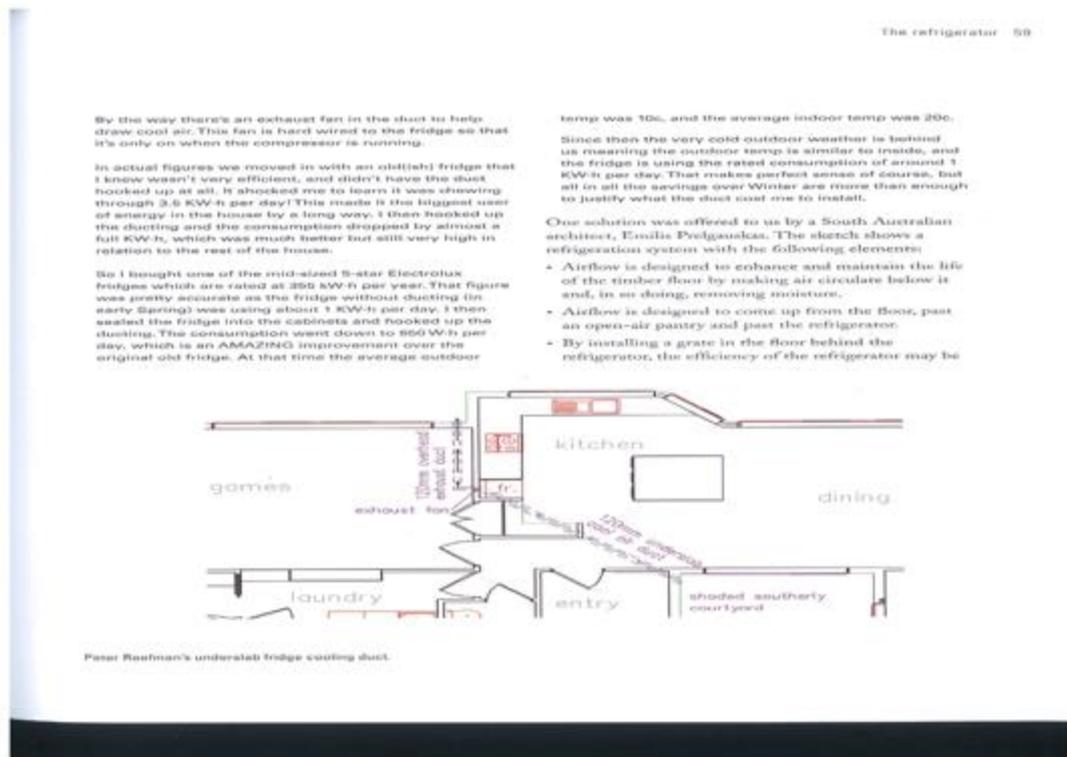
The story of my fridge has spread widely preventing similar mistakes, and spurred many design solutions. For

example, Peter Reefman, a Victorian architect, wrote to me in 2009 providing excellent before and after data on performance:

The fridge duct has been very good. The main thing was it was quite easy to install during construction, and of course would be all but impossible to retrofit for a concrete slab.



Side view of kitchen with bathroom above, showing proposed airflow around refrigerator, food racks and drying cupboard to reduce energy consumption.



(<http://www.sustainablehouse.com.au/products/sustainable-house-book>):

10. **Mandate efficient fridge spaces:** As Chapter Four, *The refrigerator*, in my book in point 9 demonstrates, by using the cold air below the floor it's possible in much of Australia to cool a fridge around 2 degrees, 24/7. If we use a fridge in the Antarctic we don't need a fridge, just a cupboard as the surrounding air is cold enough to preserve food – that is, a fridge works harder or less hard depending on the outside air temperature. By mandating minimum voids for fridges and minimum air changes per hour there it's possible to significantly reduce the individual and cumulative energy demand of what is often the single biggest energy user in a household the fridge. Consider, for example, that Melbourne's Federation Square sits above a passive cooling labyrinth which significantly reduces the air con load on the adjoining buildings and we can see the value in harvesting free cold air as part of the energy management of places. This requirement would benefit both low and more efficient fridges, and save up to a few hundred dollars a year in some households. Yes, this action requires action in another area – the building standards of Australia – but the strategic value of taking that action should prompt government, I suggest, to overcome and solve the disabling impact of what I might call, "regulation by silos". It's time for these two separated parts of government and regulation to talk to each other and focus as their priority on outcomes for households.

**Research and analysis by Alan Pears:** Alan Pears has analysed the potential to save energy in Australia through efficient appliances and products and, with Alan's permission, some of his analysis is part of my submission. I invite you to consider his research which I adopt and provide as part of my submission. I'm copying this submission to Alan. Extract from email to me from Alan Pears: "Also the descriptions of condenser dryers on the website are a problem: they don't distinguish between very efficient (6-8 star) heat pump condenser dryers and very inefficient (2 star) condenser

dryers that use lots of cold water to condense the moisture. This is very confusing for most people, and undermines the ease of messaging about heat pump dryers.

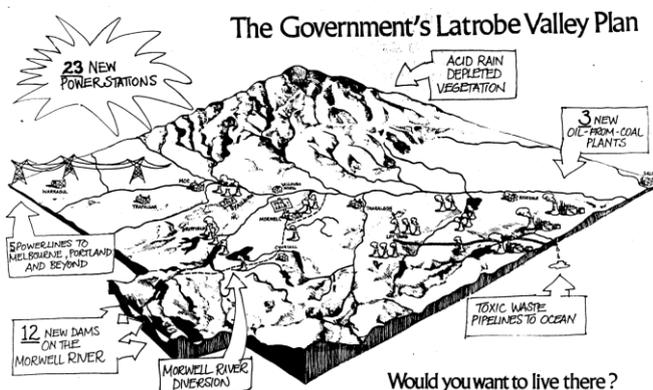
There is also the issue of star ratings for 'best' appliances varying widely and lack of consumer education on this. For example a really good fridge is 4-5 stars but a good TV is 8-10 stars, also clothes dryer. Past market research shows most people think 3-4 stars is a pretty good product, so they don't look beyond that. Also you really need active promotion and education on the detail of using energy labels: most people know 'more stars is better' but that's about all. And very few people realise that ratings for fridges have been upgraded twice – I know people who have the pre-2000 5 star label on their fridges and think they are good – but they are equivalent to about 1.5 stars on today's scale!

By all means pass on my comments and the ppts. I was going to wait until the discussion paper came out but earlier is better!

Also the review should look at the EU topten website ( <http://topten.eu/> ) and compare what's available here with them (keeping in mind that some of the tests are different and you need to adjust for fair comparison). We are missing out on the best products.....”; an extract from a presentation by Alan Pears is below and attached.

### Household energy and carbon reduction action

insulating ourselves from today's energy mess while  
living better and saving our planet



### Alan Pears AM

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Associate Consultant, Buro North  
Healesville Community Renewable Energy  
Group  
Healesville Uniting Church, 2 Nov 2017

1981 Liberal Government vision of  
Victoria's energy future

(Source: Conservation Council of Victoria)

- End of submission -