

Submission on:

Process Heat in New Zealand: Opportunities and barriers to lowering emissions

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- 1. No New Fossil Plant** - This has to be a fundamental leg of the strategy for significantly minimising our emissions from Process Heat. This is important because many process heat plants are long lived and we don't want to enshrine high greenhouse emissions for years to come. This can be an initial early regulation while the complete system change suggested below is put in place.
- 2. No Upgrading of Fossil Plants** - as above this is fundamental
- 3. Emissions Reductions from Product Swapping Ignored.** This document is all about simply dropping in a different way to produce heat rather than standing back and looking at the bigger picture: eg if Milk Powder incorporated the environmental externalities of CO2 emissions then perhaps that would swing the balance to breast feeding rather than formula feeding, from milk powder to soy milk, from animal protein to plant proteins. If steel columns and beams incorporated their carbon cost then a significantly greater proportion of new buildings would incorporate engineered wood columns and beams.
- 4. Lack of Pricing Environmental Costs has Skewed Market** Because we have not had previously, still don't have greenhouse emissions priced according to the damage they are doing to the climate and the costs they are insuring on the rest of society to mitigate those effects, we have a skewed market that means we keep using steel and concrete when we should be using wood and earth, we eat high climate cost dairy products and meat rather than more environmentally benign products. Because out of season vegetables don't include the environmental cost of coal burnt heat greenhouses, people buy out of season vegetables: If these high environmental cost things had full cost attributed to them, the market would change significantly towards low climate impact food, materials and products.
- 5. Price Carbon Significantly, Don't Worry About the Details.** It is better to use the free market to determine the cheapest way to deal with full environmental cost accounting, rather than trying to impose various solutions on various industries. We need to abandon the command economy approach of saying which industries can continue to use which fuel under what conditions. Let the free market be creative about side stepping carbon emissions.
- 6. International Emissions Leakage Dealt with by Border CO2 Taxes** - to avoid people in NZ using imported steel that haven't got carbon emissions included in their price, we should add the equivalent NZ carbon price to the emissions embodied in that product. I acknowledge this would be a significant effort, but better put the effort into this than try and replicate an inefficient command economy and have a whole bureaucracy deciding who can emit what within NZ. A simple and significant Carbon Tax combined with import carbon taxes is a better solution.