

Low Emission Submission

Composed by Jeanette Thorne

1. Cities

All buildings should have solar panels or wind vanes to take the pressure off our water systems, as water is now the new shortage in the world. Also all new buildings must have their own composting system for sewage, which is readily available now. And water tanks for at least the toilet. All buildings need to be insulated with thickened or double glazed glass.

Cities need to have transport systems that allow minimum emissions. Electric heavy rail for passengers and freight, light rail in the central city and less frequently used routes, solar powered electric charge stations or electric charged roads and rail (similar to Denmark). Before new building estates are built, the transport systems have to be in place – safe cycle tracks and separate walking tracks to nearest train stations and nearby shopping and business centres. Likewise the transport systems have to be implemented into the already built houses and businesses and shopping centres areas retaining existing green spaces or adding more green spaces.

Logistics must use heavy trains for 80% of their loads, to minimise trucks on the roads, which cause wear and tear on the roads and terrible air pollution. Only electric trucks should be used in the central city areas, likewise all other electric vehicles. Imagine walking and cycling without the stink (and smell-less noxious fumes of diesel and petrol driven vehicles). When cigarette smoking is banned too (2025), the cities and towns will have such clean air and cleaner water-ways – visible on

a wet day, how the by-products of vehicles gleam with their oil on the water which gets washed down into the drainages system.

Cities and towns need to have green spaces maintained and increased to help clean up the air.

City businesses need to all have solar power on their roof spaces, as do houses and apartments, so their needs to be some government financial support for a specific period, to encourage take-up of the systems.

2. Farms

Agricultural and animal husbandry need to exist in places only suitable for self-sustaining businesses. Water relief must only be in exceptional and rare circumstances, and not a constant reliance on a different water sources other than the rain. The cow epidemic that has infected many of our farms in the last year, are due to over-crowding, imported crops – palm kernel (at the expense of rain-forests) and untracked movement of cows in sales. Once, there used to be 1 cow per acre in Waikato and Taranaki – the ideal dairy farming areas. There were no dairy cows to be seen south of Christchurch. There needs to be a grand plan of NZ and work out the best areas for crops and animals to be reared. Also, we must not exploit arable or Maori Tapu land with houses eg. Pukekohe. Also, a recommended number of crops or animals, to optimise reusable land space, rather than deplete it. Farmers and growers need to be consulted to see the overall plan of desirable agricultural and horticultural land in NZ.

Dairy processing plants need to decide whether fresh milk is healthier for the public, rather than the cost and polluting ways of drying and reconstituting milk. If

drying milk is still required, emission free ways of drying milk will need to be implemented.

3. Water

There needs to be a specialist water/waste National Board (including Maori representatives) that sets the standards for water use, water safety, water security, aquifer, lake, river, sea use and protection, waste products and sewage systems. Then there should be regional Water Authorities that manage water, waste and sewage.

4. Hospitals

The Government has a responsibility to ensure the public are receiving the safest standard of care, which ranges from the health of the building to the services required to restore the patient to their optimal functioning. This means some hospitals may need to be completely or partly rebuilt/renovated. There have to be enough staff to provide care for each patient (including mental, disability and Hau-Ora health), and technology, medical supplies that are proven to optimise the patient's outcomes. Major Government Funding will be required here which flows from Public Hospitals to Community Providers.

The Ministry of Health must look at what hospital, health services and health community based programmes will be needed for the next 50 years, and while we have rotting hospitals. It may be the time to rethink and rebuild hospitals that will be resilient for the next 100 years, and because predicted increased population, the appropriate places where future hospitals should be built. The Ministry of Health needs to also sets standards for the prevention of many health problems, including mental and physical problems addressing diets, food and drink safety guidelines, drug education, safety and usage standards.

Hospitals should be encouraged to use solar panels and batteries to supplement their electricity usage, which also will help to diminish the need on coal burning.

5. Processing Plants

Tiwai Smelter, NZ Steel, Fonterra, Hardies etc need to examine how they can minimise their footprint on using finite carbon usage supplies and carbon emissions and strive to be the cleanest processor compared to their peer competitors overseas. They need to set goals to diminish 50% of their emission and usage of non-reusable carbon supplies in 10 years – ie. Every 2 years diminish their carbon emissions by 10%. This also includes how and where they put their waste product and the waste can be reused or if toxic, how best to ensure it is safe and not damaging waterways &/or the sea flora, fauna and human health.

6. Education

The Ministry of Education needs to set standards that encompass the following:

All levels of Education Universities, Technology Institutes, Schools and Preschool need to have solar panels on their roofs, storage of water from their roofs for toilets, and a system for storage for processing of waste and using for gardens. There needs to be safe cycle ways and walkways on the roads leading to and from their institutions, including secure storage for cycles. If using buses for transport, they must be electric buses, and all non- electric vehicles must park at least 100 m away, to ensure clean air is kept in and around the institutions. This will also include no smoking (which is meant to be a national standard by 2025). Schools and Institutions should also have efficient and clean energy heating and cooling when required with weather variations. Adequate shade and

covered walkways must be provided for outside play in wet and hot weather and going between classes and toilets and halls.

7. Power – Electricity.

There needs to be a National Electricity Board, which sets the standard for producing electricity. This is with the focus of renewable sources of energy for producing power, with minimal carbon emissions. NZ is very fortunate – we have wind, geothermal, sun, tides, lakes and rivers and dams – all of which we can utilise to make plenty of energy for NZ. Power Providers need to use their clean energy existing systems maximally, which may require building extra reservoirs to store the water for power, upping the use of all the other renewable resources with no carbon emissions.

Steps to Take:

2019

Set up the require National Boards and Government Bodies:

- a) to Grand Plan the overall use of land and water and sea for housing, agriculture, businesses, horticulture, mining, wind vanes, fishing and conservation of our Taonga. They need to provide a full plan by December 2019.
- b) Government needs to subsidise solar panels to December 2021, to get people and businesses to implement the use of them.
- c) Government needs to subsidise electric vehicle purchase till December 2020 to get buy in from people and businesses.
- d) Government needs to encourage NZ Oil and Gas to change their business to wind vanes production and looking at ways of harnessing turbines in the sea for

energy and move to renewable resource production for electricity.

- e) Government needs to encourage Gas stations, Pak n Save, New World and Countdown to put in Fast chargers and cafes in remote places eg. Mokau to encourage more people to buy electric vehicles for business and pleasure.
- f) Government needs to set a target for all new buses purchased must be electric, and change fleet by 25% each year for 4 years till all fleets are electric.
- g) Government to Subsidise KiwiRail to put in more tracks for freight cartage by rail, and all passenger electric rail from city to city to towns to encourage low emission travel.
- h) Government to give subsidies to farms that have to shift to an area where there is more natural grass production without irrigation (in line with the Grand Plan of NZ), or convert 30% of their land to horticulture/trees, and have waterways and lakes well protected from runoff from cow manure and nitrates in the grass, when it rains.
- i) Government to put in National Electricity Board for minimising/eliminating carbon emitting and usage to produce electricity ; and a National Water Management Board that sets the standards for waste, sewage and water supply service that addresses the future needs for at least the next 50 years.
- j) The Government needs to give businesses and Processing plants a bonus for reducing their carbon emissions and usage if they reduce their carbon usage and emissions by 25% for 4 years.
- k) The Ministry of Education needs to write the standards for Point 6.
- l) The Ministry of Health needs to plan for the future and start the process of point 4 by December 2018. This will require increased Government

expenditure, but there is a risk if we only fix up the present damage and in 10 years the demand hospitals has increased for a larger population, there will either need be more hospitals or increased sizes of hospitals that could be implemented now.