

Inconvenient Truths

...about the Zero Carbon Bill.
And subsidised tree planting.

The big picture

- The Zero Carbon Bill is idealism. What about realism?
- No other country is shafting its main export industry. Pastoral agriculture earned 49% of merchandise exports in 2017-18.
- No other country is targeting a big reduction in ruminant animals.
- Ruminants evolved 90million years ago. They live in a harmonious cycle with GHG.
- Political egos are driving the campaign to make farming a convenient scapegoat.
- Subsidising tree planting is a short term band aid.
- But it will change the New Zealand landscape and economy forever.
- Do taxpayers want to create social welfare for foreign buyers?

The Paris Accord

- Is different to Kyoto. The goal is to limit further warming.
- Zero warming from 2018 is the desired outcome. Farmers already achieve this.
- Livestock numbers in New Zealand have been reducing for forty years.
- Livestock used to roam 60% of New Zealand, now only 40%.
- Why does government allow population growth and fast increasing air travel?

There is no "95% subsidy" to farmers required. This is politicking to make farmers scapegoats.

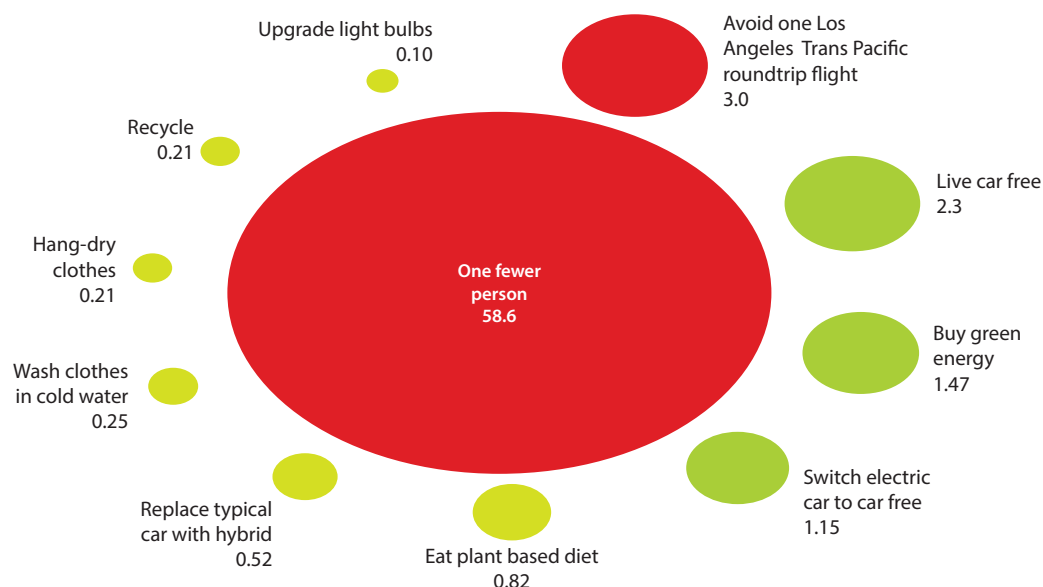
The local picture

- 100,000 stock units sold to forestry in the Wairarapa these last twelve months
- Economic impact on Wairarapa community? Direct spend at \$125/stock unit: \$12.5m. Plus four times multiplier effect.
- 1,000 hectares sheep/beef farm creates seven jobs.
- 1,000 hectares plantation forestry creates one job.
- Tree planting by temporary immigrants... most of the wages are sent home.
- Rural communities will be decimated.
- Farm land prices have been pushed up by these taxpayer subsidies.

You will pay twice

- Export income will go down
- Taxpayer subsidies will go up
- New Zealand will have more dark, sombre, DEAD areas of pine trees
- Last time that the government meddled with the land market (LDEL and SIS) was a disaster.
- Would we be doing this without the Paris Accord?
- **Does New Zealand want to kick an own goal?**

What are the most effective steps that the New Zealand Government can take to tackle climate change?



The New Zealand government speaks with a forked tongue. It has no population policy, with a 45% increase in people since 1990. And current policy promotes long distance tourism for visitors and New Zealanders. Planting trees to offset our extravagant lifestyle is a short term band aid.

Where does NZ's money come from?

TOTAL PASTORAL	49%	Merchandise exports
Total Horticulture & Arable	6.7%	
Wine	3.2%	
Total Forestry	11.8%	
Fish	3%	
	1991	2018
Pastoral % of Total	45.4%	49%
Agriculture % of Total	57%	63.6%
Primary % of Total	72.4%	78%

Sunset Industry?
But 24% less overall pastoral area.

The Con Game

- What is New Zealand's biggest import? Outbound tourism! \$10.5 billion, 2.9 million Kiwis.
- "Invisibles" that politicians don't talk about
- Inbound tourism, \$14.5bn, 3.7 million visitors. NET size of tourism industry \$4bn
- "We want only wealthy tourists". Means test at Auckland airport?
- Tourism creates jobs, but low level: Tourism average value created per job \$84,000. Dairying average value created per job \$360,000.

New Zealand the way we want it ?

New Zealand 18,000 years ago

- More Land
- Ice caps
- No ferry required
- Average temperature 6 degrees lower than today



"Dirty dairying?"

- Really? Dairying was the main engine room of export led growth. 1995 – 2015.
- Gave all New Zealanders a higher standard of living.
- But now one third of dairy farmers have less than 30% equity.
- Dairying occupies 7% of NZ's land area, cities cover 2.35%. How eco-friendly are cities?

"Dirty cities"

- 80% of cities and towns in New Zealand are non-compliant with sewage and stormwater regulations.
- Cities cause problems: Wellington streams are barren. Don't swim in the Waikato downstream from Hamilton.
- "Come to Auckland: swim in your own sewage".
- "Let's plant houses on our best land".

The Haurangi mountains in the background were cleared of bush and farmed with sheep for eighty years.



But farming under attack

- "Dirty dairying".
- Poverty Commission – "Let's plant 1.3 to 2.8 million more hectares in trees".
- Government subsidies? Unintended consequences.
- "We can save the world by becoming vegetarians".
- Tourism is New Zealand's biggest export industry?
- Pastoral farming: a sunset industry?
- **Farming covers only 11% of the world's surface area.** 89% is ocean, ice, forest, desert, lakes, rivers, cities.
- **The main problem?** Too many people. Reduce human population then less farmland will be required.

Assumptions we all make

- We will never be hungry.
- We will always have cheap energy.
- We will continue to export profitably to the other side of the world.
- We don't need a population policy.
- No one will invade New Zealand.
- Sustainability means sustainable for my lifetime.

Where do babies come from?

Where does electricity come from?

- Global electricity: 41% from coal, 24% from natural gas, 14% from nuclear79%. Clean energy ?
- Where do batteries come from? Cobalt? Lithium? "Democratic" Republic of Congo
- Where do solar panels and windmills come from?
- Where do waste batteries, panels and windmills go to ?
- New Zealand now importing coal!

Ban ruminants?

- Sheep numbers are down 63% from the peak, 70m to 26m
- Beef cattle down 42% from the peak, 6.4m to 3.7m
- Deer down 55% from the peak, 1.8m to .8m
- Dairy cattle down 3% from the peak, 6.5m to 6.2m
- But production per head has risen markedly, so GHG down 23% (beef), 30% (sheep) to 43% (dairy) per kg product.

Farmers as scapegoats

- Area farmed with animals down 33% from the peak. 60% land area to 40% land area of NZ.
- Add 7% of land area in plantations, 2% in horticulture, 2.3% urban
- 49% of New Zealand is "natural state".
- Ruminants evolved 90 million years ago. Their emissions have a GHG balance, and should be omitted from Paris Accord.
- But farmers are only half a percent of the population.... Easy target for politicians.

The climate is always changing

The Great Barrier Reef has changed from dry land to under the sea six times over the past 30,000 years, judged by scientific evidence, and Aboriginal folklore.



Our dependence on oil

- Oil is HUGE in our lives: 93 million barrels per day - transport - fibre - plastics - fertiliser - heating/cooling - electricity generation
- Farmers would feed only 3 billion people without nitrogen fertiliser.
- **4.7 billion people would die**
- Norway's sovereign wealth fund, 5 x NZ's GDP. Pragmatic view of oil resource.

NZ's virtuous agriculture

- Pastoral farming builds organic matter in soil. Contrast to monoculture cash cropping, pesticides/herbicides.
- Ballance Farm Environment Awards showcase excellent stewardship.
- QE2 Trust. 180,000 hectares, with 500 more potential covenants.
- Land use change. Planting of Manuka.
- Dairy farmers have spent \$1 billion to date on protecting the environment. Auckland is way behind.

Water Quality

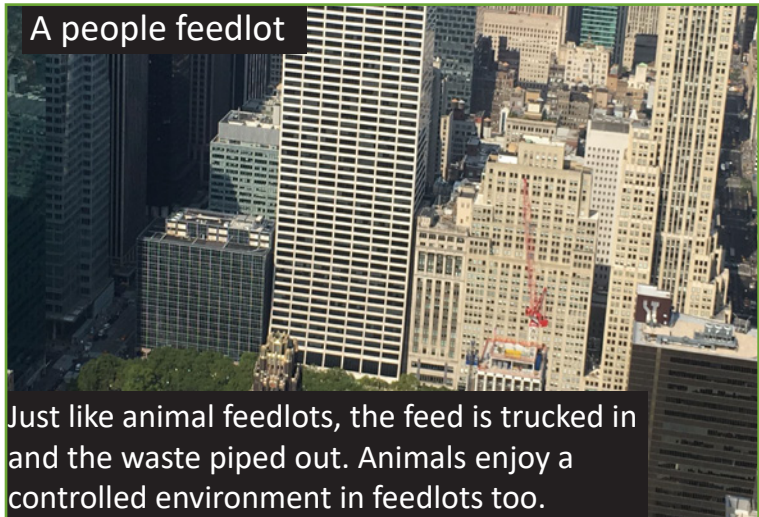


Ten thousand flamingos a beautiful sight, but you wouldn't want to swim there.

Too many people

- NZ population in 2019 is 45% higher than 1990.
- NZ population in 2030 is on track to be 65% higher than 1990.
- Do we want a crowded country?
- How to meet Paris Accord target compared to countries with nil or low population growth?
- Building houses, infrastructure, false GDP, but good for politicians... jobs, "growth".
- Global population growth is the biggest problem, but no one tackles it.

A people feedlot



Just like animal feedlots, the feed is trucked in and the waste piped out. Animals enjoy a controlled environment in feedlots too.

Water Quality



Rivers aren't fenced in Africa

The elephant in the room

Clean streams for Africa? Fence the rivers?

- In 1800 there were 26 million elephants in Africa.
- In 2019 there are 400,000 elephants in Africa.
- In 1800 there were 120 million people in Africa. In 2019 there are 1.25 billion people in Africa. In 2100 there is predicted to be 4 billion people in Africa.
- Which is the ecological disaster, elephants or humans?
- Support the ivory trade?

The wall of wood



Twenty years ago New Zealanders were promised an era of prosperity when the wall of wood was harvested.

Plant more trees?

- You can't eat wood.
- The "wall of wood" provides only 12% of NZ's merchandise export receipts. What will wood be worth in 2050?
- How sustainable is logging over 500 years? Sediment is ruining inshore fishing around Gisborne and the Marlborough Sounds.
- Will carbon credits be worth anything in 30 years time? Political market, not real.
- "The planting should be on steep or unproductive land, and much of it in native trees, including Manuka". Really?
- Reality check needed.
- How can farming compete with a subsidised land use?

Rubbish views about farming

- Let's eat insects.
- Let's grow algae, but where?
- Let's do vertical farming ...
- Let's eat artificial meat from a factory.
- Let's eat "pretend meat" from a factory.
- Need to replace 500 million tonnes of meat/fish.
- Is manufactured food ideal for your health?
- Vegans don't require animals to be killed?

Common sense

- Farming requires compromises: glyphosphate, feedlots (like cities), nitrogen, irrigation, pesticides, herbicides.
- Reduce the world's human population, reduce pressure.
- Rubbish – who knew that New Zealand shipped 110mt plastic to China? Flush the toilet...
- Lessons from nature: Grizzly bears... as supreme predators control their own population.

Sustainability

- The most important sustainability issue? Survival of political parties and lobby groups.
- Farming is a political target. So is oil.
- These theories come from people who have never been hungry for a day in their lives.
- New Zealand has a negative media, and is dominated by "nay sayers".
- Prime Minister's Advisory Council – only one member from pastoral agriculture. And chaired by CEO of Air New Zealand, the worst fossil fuel polluting company in our country.

Are farmers at the party? Or are we on the menu?

- All human settlement requires compromises around water quality.
- Who is dragging the chain?
- Dirty politics: Fish and Game, holier than thou: imported trout, salmon, Canadian geese, Mallard ducks. Opuha river – 12 x fish numbers from irrigation dam, but farmers not given credit.
- Do offsets really count? Just an excuse for "bad behaviour". Temporary effect

Muddled thinking

- Has allowed lobby group, Fish and Game to remain entrenched by legislation, despite its history of destructive environmental impact.
- Irrigation feeds 40% of people in the world. But NZ government has reduced support.
- Government has done nothing about plastic pollution in NZ, or in the Pacific Ocean.
- There is always extra funding to the Ministry of Health. USA now spends 19% of GDP on 'health'.

NZ's productivity crisis

- Endless environmental reports. What % of NZ's 94,000km of roads are an "environmental disaster"?
- 15 years to action an irrigation scheme while costs double and triple.
- Every extra bureaucrat has to justify his/her existence. The regulators are breeding.
- Economy held together by productivity increase in the agricultural sector.
- But student numbers in agriculture are down 40% since 2015. And we import foreigners to work in our export industries.
- **Social welfare:** Primary industry with 78% of merchandise exports has to support an increasing number of dependants in cities.

Reality check

Written by Derek Daniell, farmer in the Wairarapa. "It is a huge worry to witness the kneejerk, political response to the Paris Accord. Accord...blame the animals? There is so much muddled thinking for the short term, not for a sustainable New Zealand." derek@wairererams.co.nz

Party time!

- Never has life been so good to so many.
- Magic carpet rides. Air travel not in Paris Accord.
- 6% of manmade global GHG emissions from tourism.
- Airport car parks are growing bigger every year. People vote with their wings.
- New houses are built bigger every year.
- Don't spoil our fun ...

Our crappy economic model

- Rural New Zealand earns export income which is wasted building bigger cities!
- The fast growing population adds to GHG emissions, as do growing tourist numbers.
- There is shonky thinking re planting trees, grooming political egos over a pretence of short term carbon neutrality.
- Banning exploration for oil and gas will lead to more imported energy.
- Shafting pastoral farming will reduce export income by billions of dollars. What will replace that?

Common sense policies

- Cap New Zealand's population at 5 million.
- New Zealand's Paris Accord targets: remove ruminant emissions.
- Continue oil and gas exploration, target self-sufficiency.
- Impose a significant entry charge on tourists. Increase foreign visitor charges for all taxpayer created facilities, e.g. Aotearoa trail. It works in Bhutan.

A Bugger's Muddle

Here is what New Zealand politicians seem to want for New Zealand:

1. An ever increasing population. If the population continues to grow by around 100,000 per year, our 5 million will be 13 million by the end of this century. Every extra person creates more GHG emissions. How will that affect our commitment to the Paris Accord? 91 countries have static or declining populations. We can't plant trees until we run out of land...
2. Favouring international tourism as preferable to farming. But if air travel is brought into the Paris Accord, tourist numbers will face rapid reduction.
3. World population is predicted to rise to 11.2 billion by the end of this century. What will have greater value, food or wood?
4. Pastoral farming covers 40% of New Zealand, horticulture 2%. Only 17% of New Zealand is flat, and suitable for intensive agriculture. We are busy squandering our good land under houses and lifestyle blocks. If half our hill country is planted in trees, prompted by taxpayer subsidy of carbon credits, we will have less than a quarter of New Zealand's land area for growing food. Will that cope with a much bigger population, plus provide as much export income as from agriculture today? The more intensive the agriculture, the greater the need for sprays and nitrogen fertiliser.
5. Who knows what the market for wood will be in 30-40 years time? Or will logging twenty times in five hundred years be found to be unsustainable?
6. New Zealand is one of the remote countries in the world. Common sense would argue for self sufficiency in energy (currently oil, coal and renewables), rather than having to import. Worldwide there is lots of hope for a cheap and endless, clean source of energy. But let's be practical until/if it does arrive.

Nations like Norway and the USA have relished the opportunity to be self sufficient for energy. Energy security and food security should never be taken for granted. But rules are currently being made, for the most part, by people who have never been hungry, never run a farming business, and never fought in a war.

New Zealand is about to kick an own goal