

# Peak Oil: Time to Act

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# Overview

- Peak Oil in the New Zealand Context
- Why This Is Urgent
- Where Are We Most Vulnerable? A Risk Management Approach
- Rethinking Transport
- “Taskforce Waitakere”
- Obstacles to Action
- Conclusion

# Peak Oil in the NZ Context - 1

NZ and the US: similarities and differences:

- NZ transport is highly dependent on oil, but we have 65% renewable electricity generation
- NZ can't expropriate other countries' oil supplies
- Oil not major source of winter heating in NZ
- NZ domestic oil production may not have peaked, whereas US has
- NZ smaller and therefore (potentially) more adaptable
- Car/road lobby politically powerful in both countries

# Peak Oil in the NZ Context - 2

- NZ's transport system isn't the only sector heavily dependent on oil.
- Other heavily dependent sectors include tourism, trade (imports and exports), food production and distribution
- Effects of climate change and peak oil intertwined
- Domestic oil production: The Tui effect: exports currently running at 2/3 of imports - but almost no domestic production used onshore.
- Further oil finds are possible e.g. Great South Basin - probably little significance in world supply terms, unlikely to affect price of fuel in NZ, but a major find could have effect on psychology of issue in NZ

# Why This Is Urgent

- Peak or “bumpy plateau”: they end the same way
- 4-8% decline rate on far side of peak
- Planning and policy horizons: 2030, 2050
- Energy Watch Group (Germany): conventional oil production will have declined to 39 million barrels per day by 2030 (< 50% of present level)
- Even 10 year plans e.g. Waitakere City Transport Strategy, will be affected.
- Hirsch report estimates that 20 year lead time needed for mitigation efforts (in the US). But in NZ, we’ve hardly started yet

# Where Are We Most Vulnerable?

- Take a risk management approach - like civil defence, but for the “long emergency”
- Areas that are most critical, areas of highest dependence, e.g. transport and food. Let’s look at food:
  - We produce much more than we consume, but operate in a globalised context
  - Agriculture is heavily mechanised, and dependent on imported fertiliser
  - We depend on trucks to move food around - and trucking is highly exposed to high fuel prices
  - We need to think about growing more food at home, or close to where we live
- Also: access to essential manufactured items (medicine, clothes, shoes ...) - globalisation makes us more vulnerable

# Rethinking Transport - 1

- A transport system almost totally dependent on fossil fuels is neither sustainable nor resilient
- The top priority is to end, or at least severely reduce, this dependence
- The transition to a sustainable transport system requires us to:
  - Avoid fossil-fueled transport use where possible
  - Use transport energy more efficiently
  - Use other forms of energy for motorised transport, e.g. electrical energy - from electrified rail and electric buses, through electric cars, to electric personal transport, e.g. electric-assisted bikes, electric scooters
- Infrastructure spending needs to be directed to strengthening the sustainability of the transport system.

# Rethinking Transport - 2

- Current transport spending is primarily directed to building highways and motorways. This is a waste of money and scarce resources, and it needs to stop
- Building new roads to solve congestion doesn't work - it induces more traffic
- Anyway, congestion is no longer the problem
- Public transport, urban form, and alternatives to transport - like teleworking - are the places for new infrastructure spending
- Maintenance of existing infrastructure, where it's still relevant, is the other key priority
- “When you're already in a hole, stop digging”

# “Taskforce Waitakere”

- My most fundamental suggestion is that Waitakere City set up a taskforce to oversee the transition to a sustainable, resilient Waitakere, prepared for both peak oil and climate change
- It should work with community groups and initiatives. It needs both community and council buy-in
- If possible, it should be part of an Auckland-wide effort
- It should focus on Waitakere’s key strengths and vulnerabilities, both within its borders and in its relationships with its near and far neighbours
- I’m sure you can come up with a better name!

# Obstacles to Action

- **Transport planning:**
  - Stuck in “predict and provide” mode
  - Dominated by the “more roads are the answer” mentality
  - Based on outdated models - e.g. Transit using fuel price of \$1/litre when justifying road funding
- **Politicians who believe that more roads=more votes**
- **Lobby groups, contractors, the AA**
- **“Something will turn up” attitude**
  - “Nothing should be done”
  - “Nothing can be done”
- **Inability to imagine that the era of cheap energy isn't permanent**
- **Change at the level of rhetoric rather than action**

# Conclusion

- **Business as usual is over. Change is coming. We can either prepare for it, or let it hit us unawares.**

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