

# Influencing the transition to renewable energy: a Wellington perspective

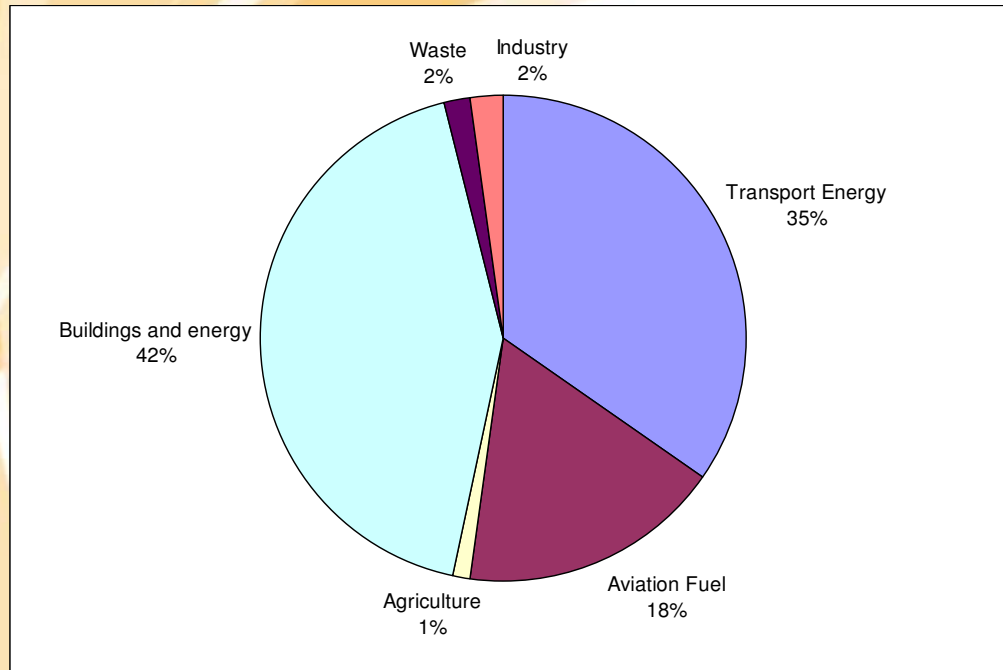


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30 March 2010

# Outline

- Some context
- Council strategies
- Resource Management Act and the District Plan
- Small scale renewable facilitation
- Council operations
- Centre of Excellence – Grow Wellington
- Opportunities

# Context: Wellington's Emissions



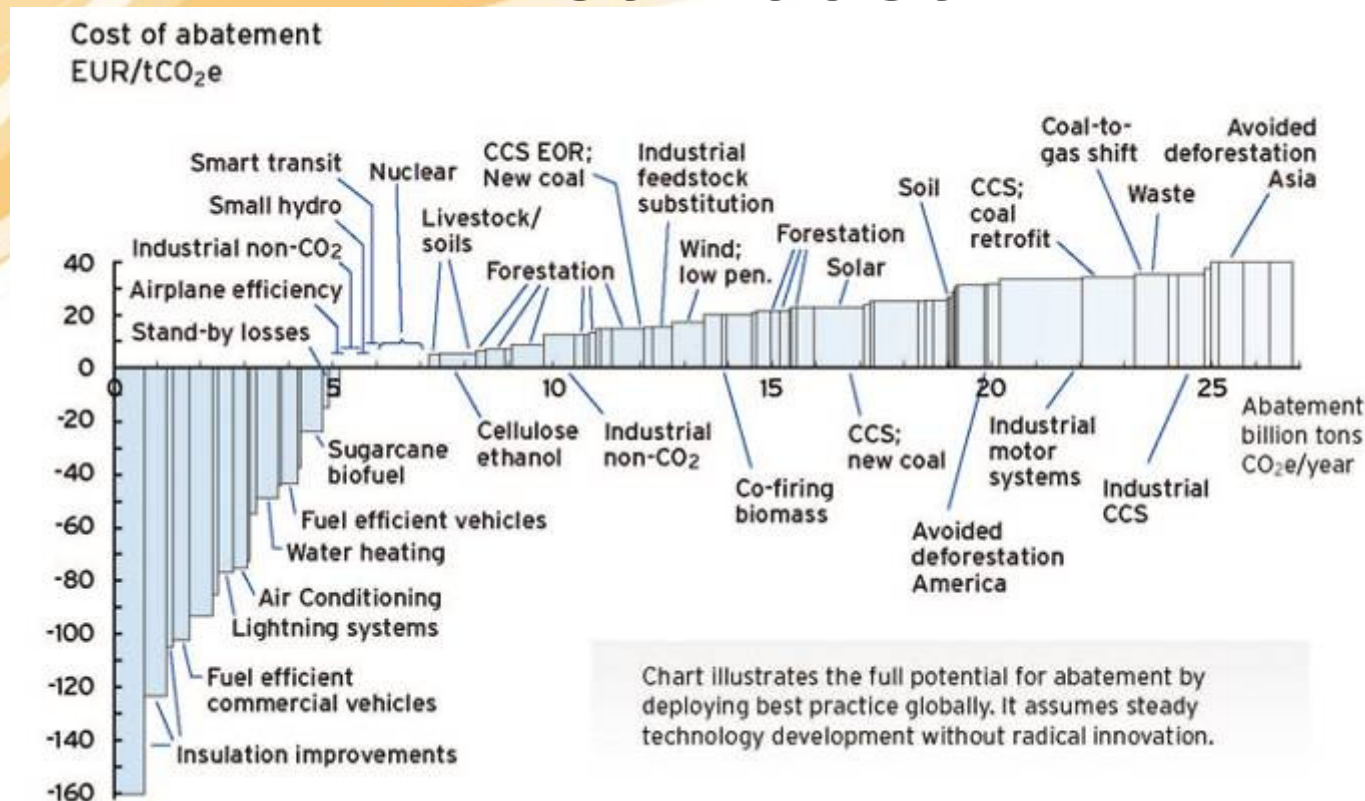
Three ways to reduce emissions from buildings and energy

1. Reducing energy consumed in **existing** buildings through retrofits/behaviour
2. Reducing energy consumed in **new** buildings with smarter design and modern technology
3. **Reducing the emissions 'intensity' of the electricity supply**

# Context: NZ renewable energy profile

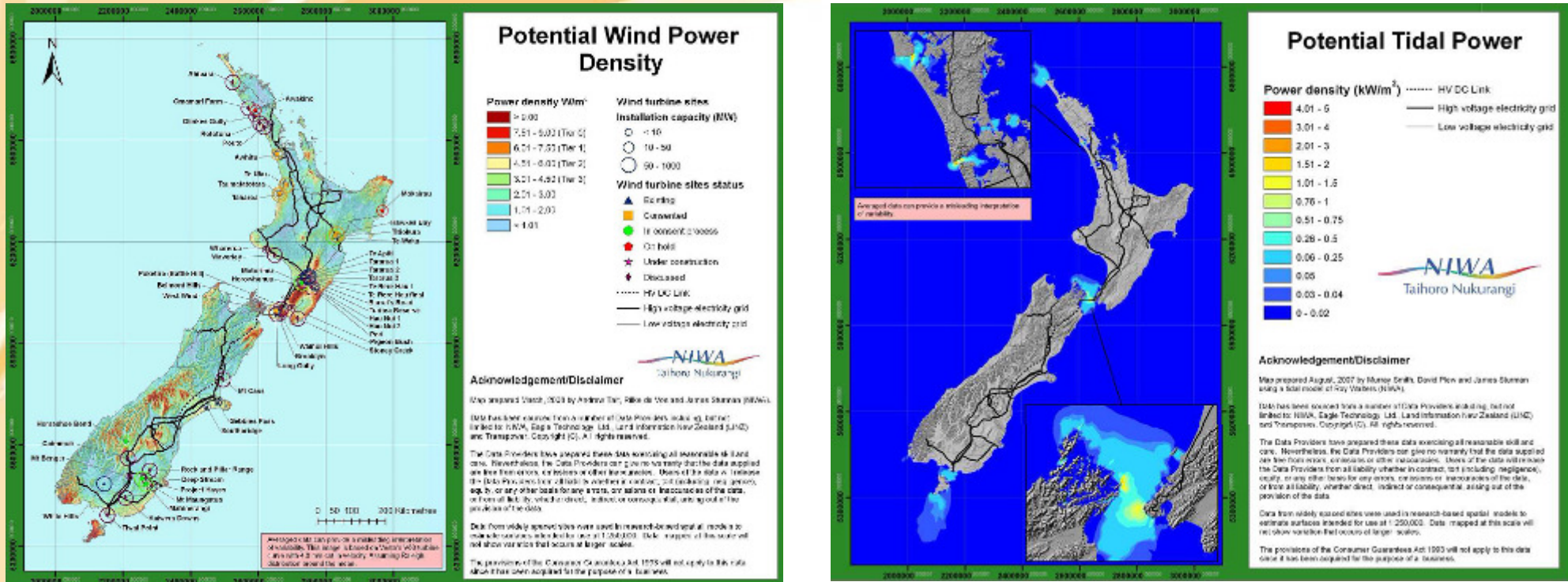
- 60-70% of New Zealand's electricity supply is renewable (fluctuates by year)
- If 90% of New Zealand's electricity supply was renewable, this could reduce Wellington's emissions by 17% and its electricity emissions by as much as 65%

# Context: Big barrier to renewable is still cost



- Effective emissions pricing would fix this issue – not going to happen globally anytime soon

# Context: Renewable Resources



- Wellington well positioned with wind and marine resources  
*source: NIWA*

# Context: Renewable Energy and Council Strategies

- 10-yr approach: reduce emissions, resource use and convert to renewable energy
- 3-year priority: reduce Council and City emissions
- Strategic outcome: more efficient use of energy

# RMA and the District Plan

- RMA amended in 2003 requiring councils “to have particular regard to the benefits of renewable energy”
- Wellington’s Plan Change 32 encourages use and development of renewable energy (specific rules for wind energy proposals)
- Manages wind activities in rural zones
- Wind resources & encouraging planning environment lead to wind farm developments and proposals

# RMA and the District Plan: Recent Developments

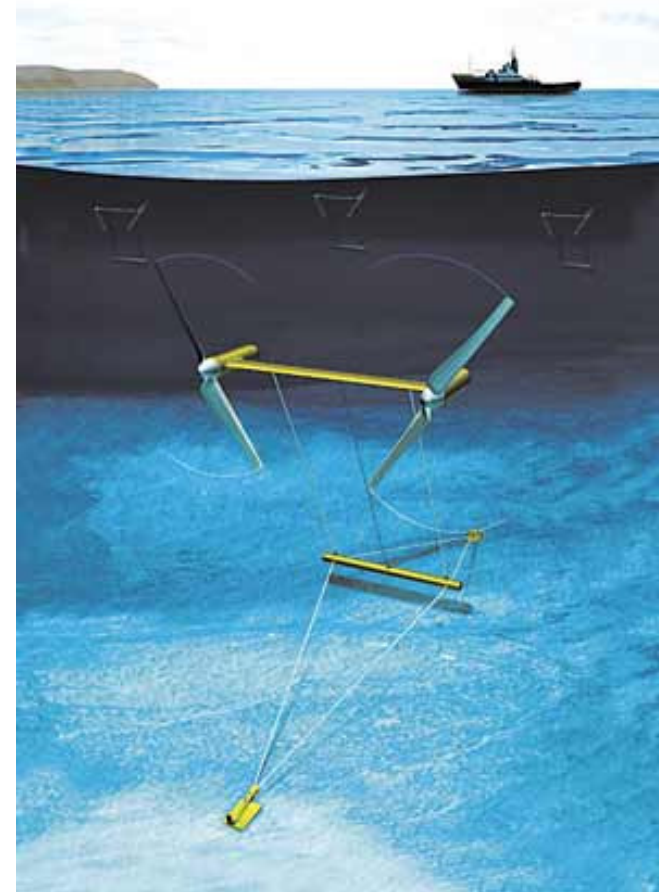
	Turbines	MW	Avg Homes
<i>Brooklyn</i>	<i>1</i>	<i>0.225</i>	<i>80</i>
West Wind	62	143	70,000
Mill Creek*	29	66.7	33,000
Long Gully*	25	12.5	6,000
<b>TOTAL</b>	111	213MW	104,000

\* Under appeal



# RMA and District Plan

- Project Neptune
  - 1MW Prototype
  - 2010?
- Energy Pacifica
  - Ten 1.2MW prototypes in Tory Channel



# Small scale renewable facilitation

- \$300 grant to support micro-generation
  - Mostly solar hot water and linked to building consent
  - Low-take up
- Removed need to obtain resource consent for some solar arrays

# Council operations

- Growing examples of Council projects
  - Landfill gas to energy
  - Solar PV
  - Solar Hot Water heating on facilities



# Centre of Excellence for Clean Tech

- Grow Wellington (economic development agency)
  - **Marine Energy Research Centre**
  - Nurturing local entrepreneurs with links to CIR's
    - Waste (sewage sludge) to Energy application
    - Inductive power transfer research
  - Business clusters and attracting skilled professionals
- Create jobs and grow economy by addressing energy and climate change problems



# Opportunities

- Cook Straight (link to centre of excellence work)
- Solar hot water heating: Nelson example
- District Plan changes for small scale renewable (urban settings)
- Renewable projects on Council facilities/land
  - Moa Point hydro
  - Carey's Gulley wind

# Opportunities

- Transport fuels – renewable electricity powering our vehicles
- Role of wood as fuel (commercial boiler, residential heating)?
- Advocacy
  - 90% renewable target
  - Building code
  - Feed-in tariffs

# Questions?

- Consultation on the draft 2010 Climate Change Action Plan
  - 9 April to 10 May