

# Strategy on resilient, low carbon transport

- Halving domestic transport emissions by 2040 per capita is an aggressive target
- Means NZ must move away from petroleum based fuels (no means of capturing distributed emissions)
- Correct assumption that emissions charge will not be sufficient on its own
- Government policy can help but only market dynamic (a more economic alternative) is going to result in the major shift needed to reduce emissions to that level
- Low carbon energy scenario has electricity and biodiesel as major replacement fuels

# Impact on current fuel suppliers

- Could have significant impact on investment decisions
- Refinery may have limited payback periods for investment
- Major oil companies adaptable – expect them to adapt to new technologies and new requirements – e.g.
  - already involved in power generation
  - already involved in solar
  - already involved in new vehicle development
  - investing in second generation biofuels

# Strategy details

- Consumer will remain driven by price and convenience
- Need to ensure policies don't work against economics
  - move of the fleet to diesel is limited by the barrel of oil (petrol is produced with jet fuel and diesel)
  - electricity demand for transport is significant (22% of total current demand by 2050); can this all be renewable?
  - biofuels are likely to remain linked to oil price; low carbon energy scenario very optimistic on biodiesel
- Policies also needs to adjust to technology and time – not one off implementation

# Price push

- Public transport is covered and correctly identified as needing a pull (efficient/attractive) as well as a push (cost effective)
- Public transport caught out before not being ready for the influx; there will be another one coming
- Table shows petrol price change with no change in the oil price

	Current	2009	2009 (@0.6 NZ/US)
Petrol Price (per litre)	~\$1.70	~\$1.97	~\$2.23
Additions		- Regional fuel tax, emissions charge, ACC levy, excise inflation, biofuels tax loss recovery, biofuels costs	