

# Projects Mechanism

**Tararua Stage 2**  
**Peter Calderwood**

# Outline of Presentation



- **Background to Tararua**
- **Cross Border Project**
- **International Kyoto Mechanisms**
- **NZ Policy**
- **What to consider in proposing a project**

# Background to Tararua



- **Tararua Ranges best wind site in Southern Hemisphere**
  - Ideally suited due to consistent high wind speed
- **Class 1 wind site**
  - Limits types of turbines that can be used
  - Higher than normal maintenance costs
- **Stage 1 built by Central Power**
- **Purchased by TrustPower**

# Cross Border Project



- **Study took place in 2001**
- **Endorsed by WEC Asia Pacific Regional Committee**
- **Study Partners**
  - Japan Energy Association
  - Energy Council of Australia
  - Energy Federation of New Zealand

# Details of Project



- **Tararua Stage 2 identified as near viable renewable project**
- **Demonstrated that construction of project would offset CO<sub>2</sub> emissions in 2008-2012**
- **Potentially eligible for allocation of emission units to trade either using JI or IET**
- **Project studied mechanisms for trading**

# International Mechanisms



- **Two International Mechanisms under Kyoto Protocol**
- **Joint Implementation (JI)**
- **International Emissions Trading (IET)**

# Joint Implementation



- **Basically allocation of Emission Units between Governments**
- **Both Sponsor (Receiver) and Host (Provider) must be satisfied that project meets eligibility criteria**
- **May be subject to audit by IPCC committee**
- **Could have high transaction costs**

# International Emissions Trading



- **Trading between any parties**
- **Seller must have arrangement for allocation of emission units from own Government**
- **Allocation purely a domestic issue**
- **Lower transaction costs**

# NZ domestic policy



- **Carbon Charge applies from 2007/8**
  - Capped at \$NZ25/tCO<sub>2</sub>
- **Projects Mechanism designed to assist near viable projects**
- **Emission units are granted up to level of avoided emissions**
- **Benefits are additional to what is received from effect of Carbon Charge on electricity price**

# Form of Promissory Note



- **Promissory Note is in effect Contract by Government to deliver emission units based on project performance in 2008-2012**
- **Could be forward sold, but buyer may discount because of uncertainty over delivery**
- **Assessment of counterparty risk will be critical in gaining maximum value**

# Potential Value to Projects



- **Assuming \$10/tCO<sub>2</sub>**
  - Value to Wind Farm \$3-5/MWh depending on when payment is made.
- **Or will fund less than 5% of capital**
- **Project needs to be nearly viable**
- **Needs to be considered carefully with other project risks**

# Things to Consider



- **Emission Reduction Units (ERUs under JI), may be higher value than Assigned Amount Units (AAUs under IET).**
- **Income from Emission Units from renewable energy will be small compared with energy revenue**
- **Projects mechanism will only work for near viable projects**

# Summary



- **Tararua Stage 2 is proceeding because of Government commitment to Allocation of Emission Units**
- **Project Assistance will not make bad projects good**
- **It will bring forward projects that are not yet viable**
- **It may mean near viable renewables will beat non-renewables in project viability**

**The End**

