



**SOLID ENERGY**  
Coals of New Zealand

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# Strategy for Low Emission Power & Heat

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# Solid Energy – Renewables Business

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- Strategy – to balance NZ's traditional resources with new energy technologies and renewables



*Fuel production capacity 30Ktpa*



*Fuel production 1 ML/yr  
15ML in '08*



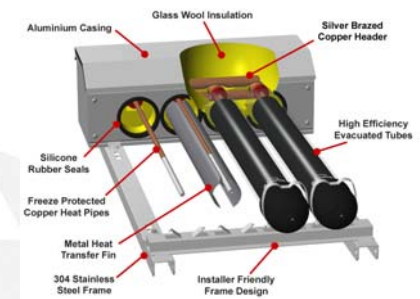
## **Growth Business:**

- **70 Staff now – 100+ soon**
- **6 Sites**
- **3 year Investment Plans = \$80-150M**



# Broader view on “emissions” – particulate & sulphur are highlighted under the NES

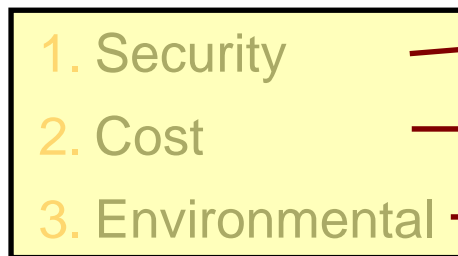
- Wood Pellet Fuel – Nature’s Flame
  - Significant particulate emissions reductions (PM10’s)
  - Lower sulphur emissions
  - Renewable solution
  - Growth – target 150-300Ktpa
  - 2,000 to 4,000 new customers each year
- Energy Services - Switch
  - Residential solar, pellet appliances
  - Integrated packages – commercial, schools – 10 major conversions
  - Solar heating backed up with pellets/biodiesel/electricity
- Biodiesel
  - Lower sulphur than mineral diesel
  - Lower particulate emissions
  - GHG’s on lifecycle basis -50%
  - Growth – target 70MLpa, 2% of mineral diesel



# Keeping our options open – to achieve energy security

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- IEA assessment criteria important:



*Can we do it with no base thermal in our portfolio?*

*Already costs are increasing - \$200 per household now \$600*

*Renewables still have consequences...*

- Solid Energy has a unique opportunity to balance a traditional energy source, coal, with new technologies to assist New Zealanders in reducing our Carbon Footprint
- CCS – we must continue to commercialise this technology
- Security & diversity objectives are important – energy “independence”