



CAT PROJECTS

# Renewable Energy Projects in Central Australia

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CAT Projects



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- Traditional market is
  - Small cattle stations
  - Indigenous outstations
- RRP GP the primary funding support for these projects
- Typically Renewable component not larger than 30kW
- Project generally less than \$500,000



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- Changes to the market include
  - Cancellation or RRP GP funding
  - Marked increases in raw commodity prices, particularly lead (\$200kWh to \$400kWh increase in 3 years)
  - Transport cost to remote areas increasing
  - Significant subsidies for Residential PV
  - Programs such as Alice Solar City



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## Fracturing of market:

- Micro Renewables
- Large scale (>100kW Renewables) diesel offset projects
- Small Scale on Grid
- Large Scale on Grid



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## Large Scale Projects

- Projects currently underway or recently completed:
  - Crowne Plaza \$3.1M
  - Alice Springs Airport \$2.1M
  - DKA Solar Centre \$3.1M
  - Uterne \$6.6M
  - Ti Tree, Kalkarindji, Lake Nash \$11.2M



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## Just the Beginning

- Mandatory Renewable Energy Target (MRET)
- 20% Renewable Energy by 2020
- NT Obligation is 300GWh by 2020
- May be met by:
  - Wind
  - Solar PV
  - Solar Thermal
  - Geothermal
  - Wave/Tidal
  - Biomass



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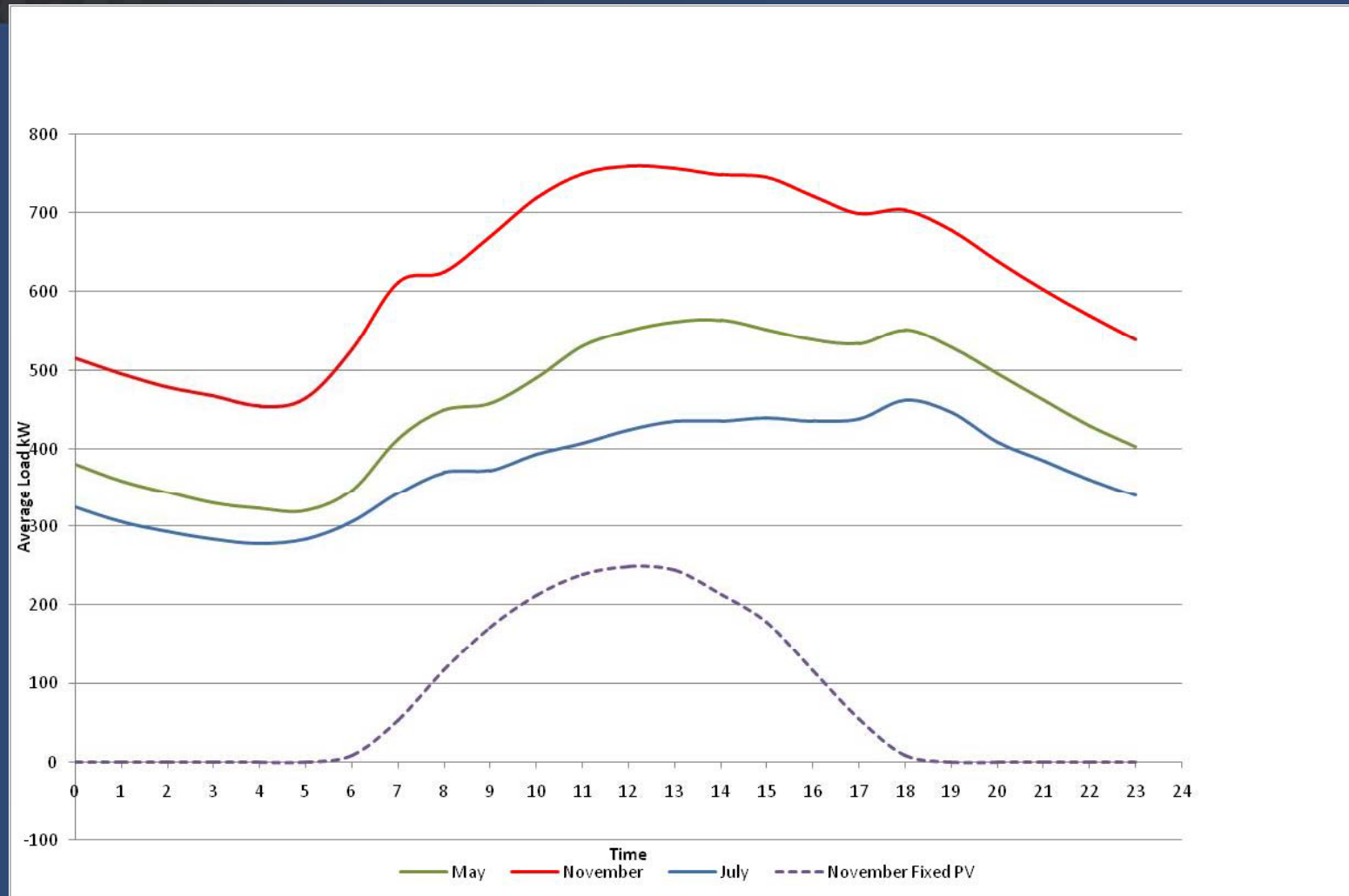
## Size of the challenge

- To meet target with PV:
  - 200MW installed (Currently NT total = 4MW)
  - \$1Billion worth of investment
  - Household PV doesn't count
  - 600 times the size of Crowne Plaza
- Wind resources is not significant
- Geothermal yet to reach potential
- Wave/Tidal being tested



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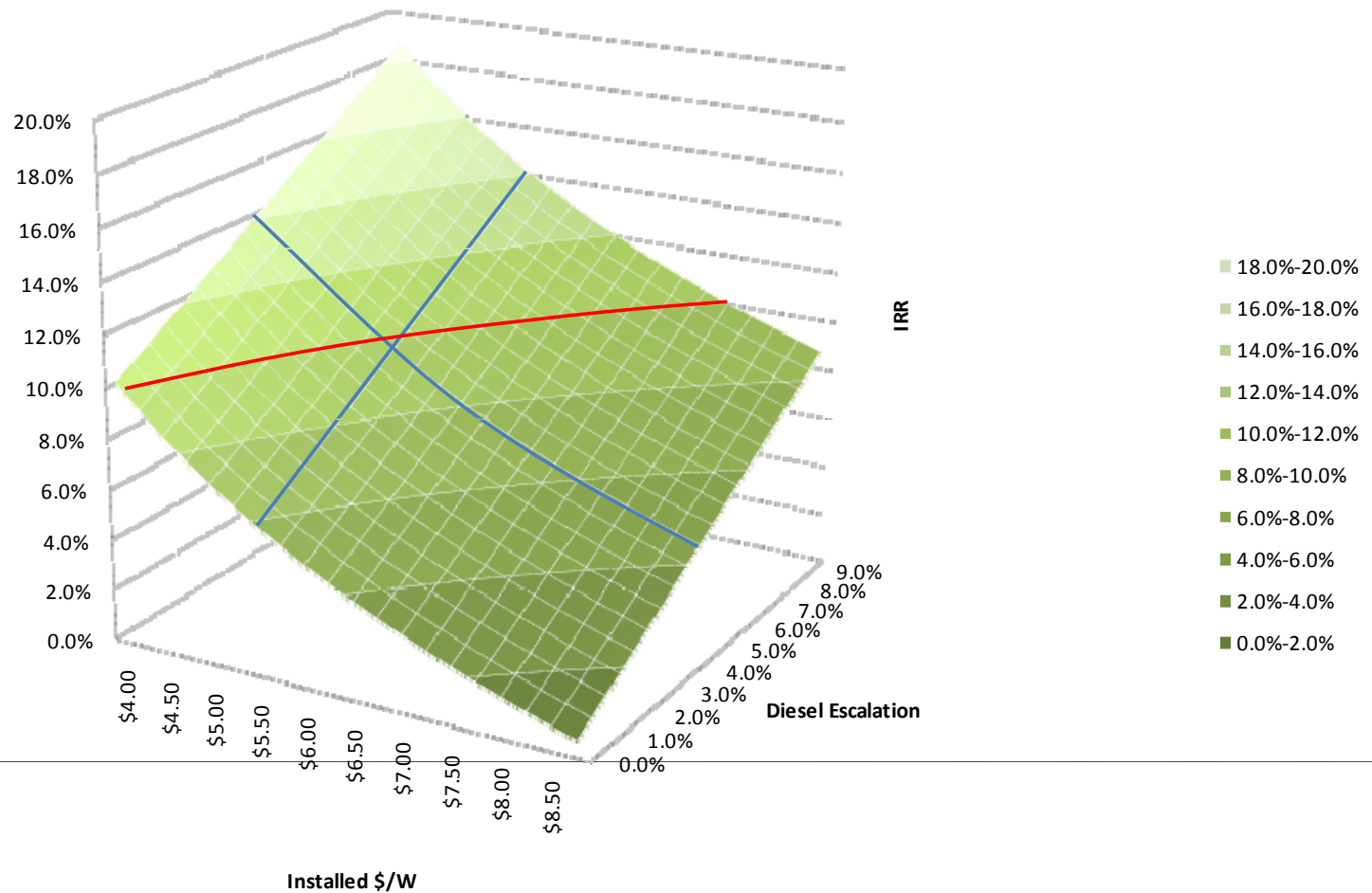
## 30% Penetration





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### Installed Cost vs Diesel Price Escalation impact on IRR





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## Construction Opportunities

- Key opportunities for meeting target are mine sites and remote communities
- PV or renewable component traditionally 50-80% of cost
- Future large scale projects PV cost <40%
- Civil construction increasingly important
  - Site leveling
  - Foundations
  - Array frames



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For more information:

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