

Australia's new renewable energy target

All energy conference
October 7 2009

Clean Energy – the future is now
Matthew Warren
Clean Energy Council



Clean Energy Council



Clean Energy Council

- Peak body for clean energy and energy efficiency in Australia
- Accelerate development and deployment of emerging and proven clean energy technologies
- Drive down cost
- Ensure actual and measurable abatement of greenhouse gases at the lowest cost





Clean energy policy in Australia

- 1996 - Australian Greenhouse Office
- 2001 – Mandatory Renewable Energy Target 9500 GWh
- 2003 Parer Review
- **2009 Renewable Energy Target 45,000 GWh by 2020**
- Solar Flagships, Renewable Energy Fund, Renewables Australia, geothermal drilling fund



Clean energy types

- **Proven lowest cost:** Hydro, bioenergy, landfill gas, solar hot water, wind
- **Proven falling cost:** Solar photovoltaic, some solar thermal
- **Emerging:** Concentrated PV, some solar thermal, wave and ocean, geothermal





Clean energy markets

- **Large scale generation:** Hydro, bioenergy, landfill gas, wind, solar thermal, geothermal, wave/ocean
- **Distributed generation:** Solar photovoltaic, micro wind, micro hydro
- **Heat:** Solar hot water, low temperature geothermal















Renewable Energy Target - basics

- Short to medium term industry development policy
- Designed to bring forward deployment of renewable energy technologies
- RET creates a certificate based market to bridge the cost of black energy and green energy ahead of a full carbon price
- As carbon price increases, REC price should decrease





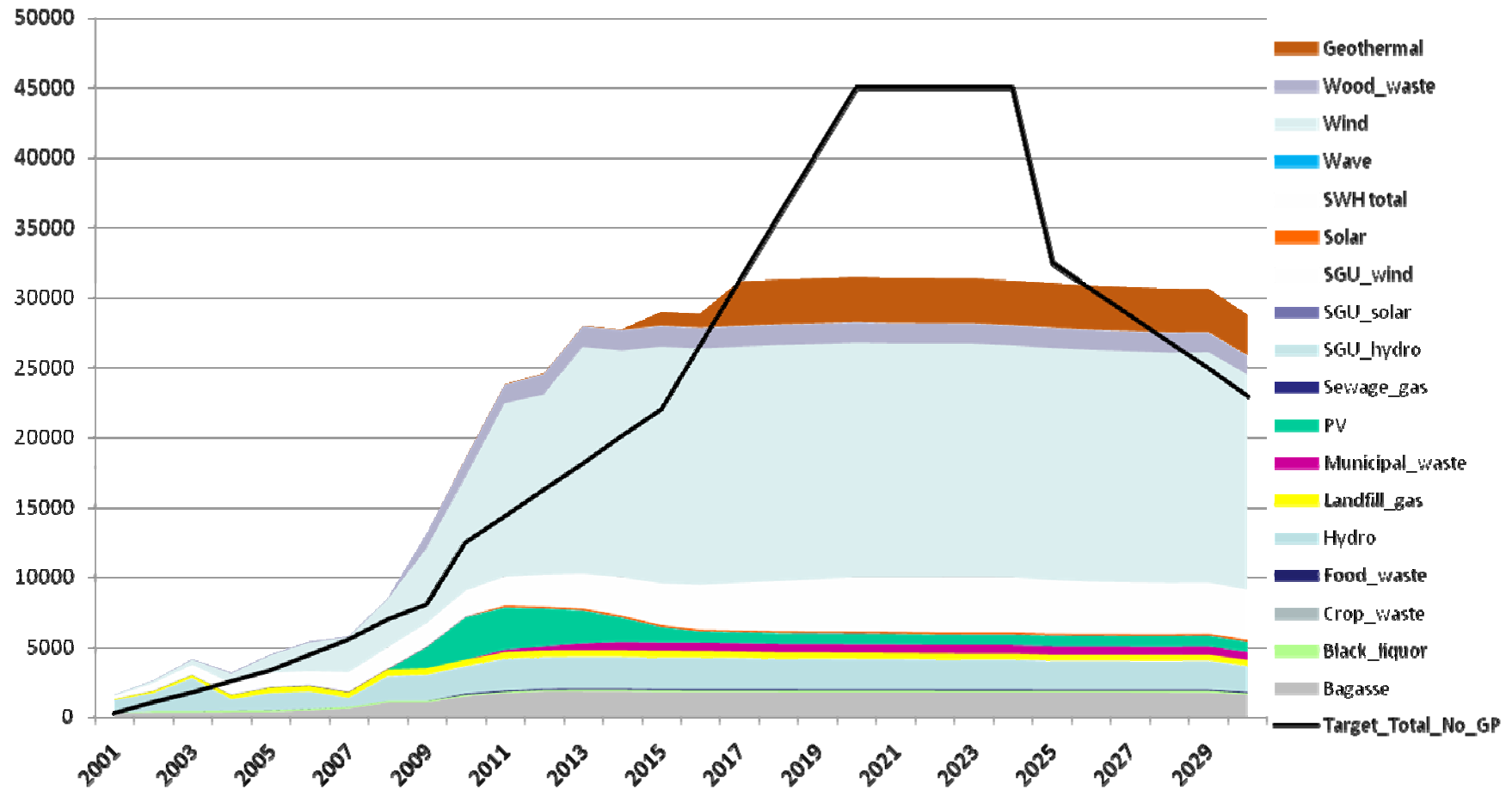
Renewable Energy Target - details

- 45,000 GWh (20 per cent) by 2020
- Full banking and borrowing of Renewable Energy Certificates
- Solar Credits (multiplier) until 2015
- Does NOT exclude emerging technologies
- Crucial trajectory change to enable emerging technologies to get into the RET



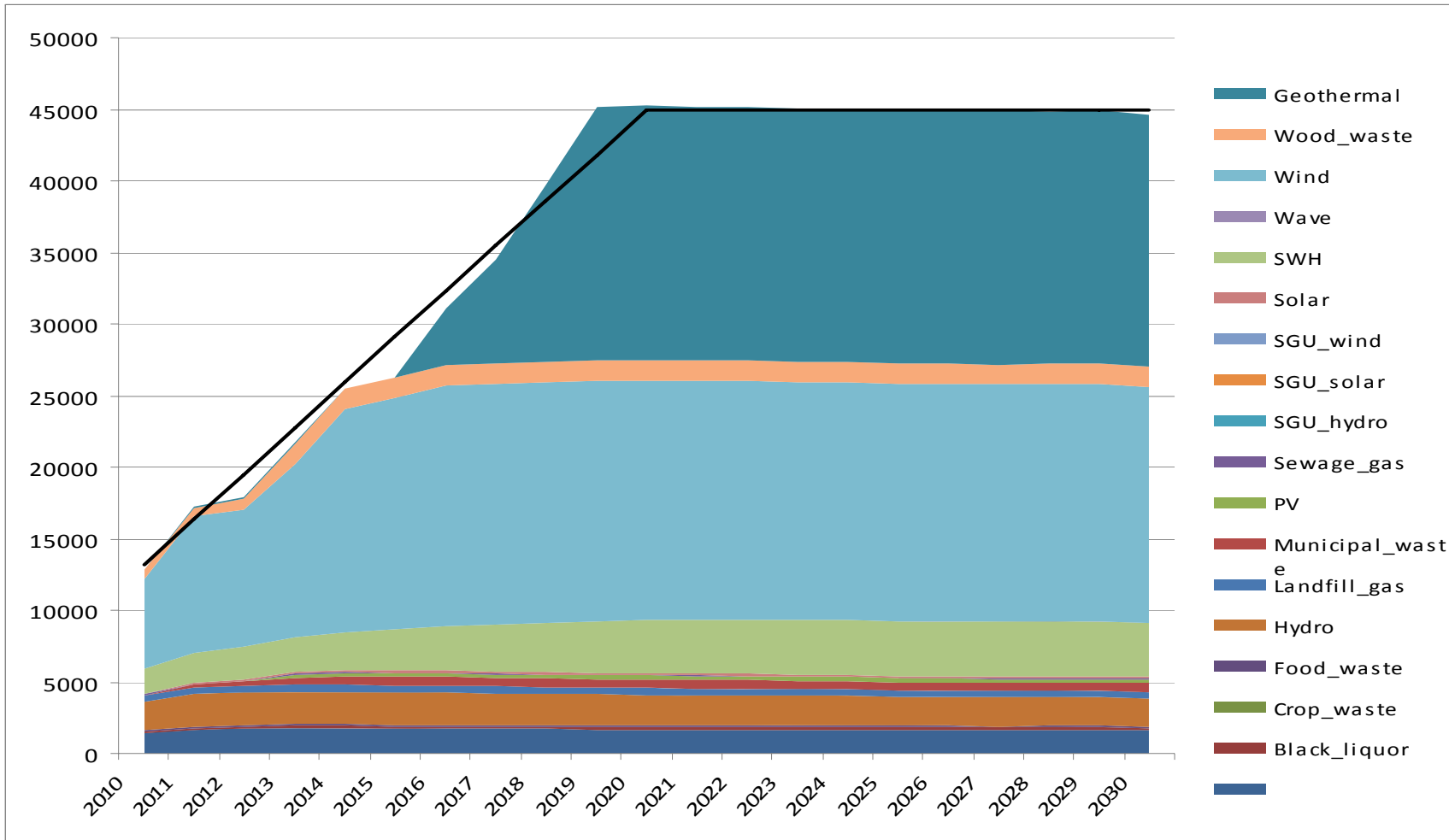


RET exposure draft trajectory





CEC preferred trajectory





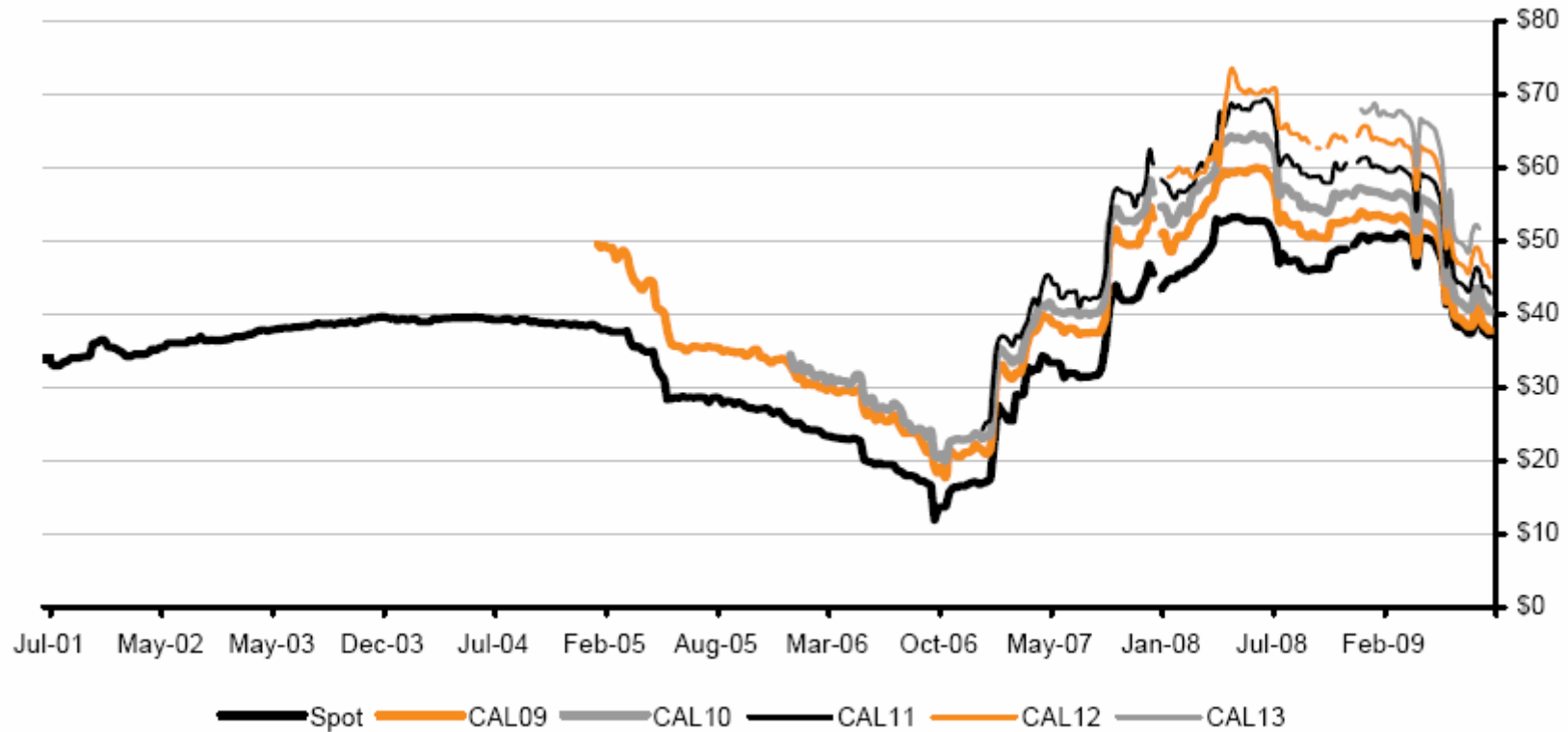
Key mechanics of scheme

- Electricity retailers are required to acquire and surrender RECs – pay penalty if they don't
- Retailers are therefore likely to be major clean energy project developers
- REC price soft since the legislation was passed (\$32 yesterday)
- Short run term oversupply of RECs
- Also reflects confidence in market the RET target is NOT oversized





REC market – source RBS





COAG review of RET - imminent

Crucial that the scheme is credible and effective

- Eligibility rules for technologies
- Consideration of off-grid systems
- Eligibility of new technologies and deeming rules
- Phantom RECs from Solar Credits



RET do's and dont's

- RET should be agnostic on technologies and commercial dynamics of REC market providing it WORKS
- That means it:
 - **MUST deliver genuine abatement (not just certificates)**
 - **MUST encourage competition (drives down cost)**





Emerging technologies

- Uncertain: revolving door of new entrants and ideas, failure and setbacks, constant change and evolution
- Time constrained R&D
- Abundance to drive innovation
- RET isn't the sole policy tool in this space: it's the foundation





Clean energy industry is **EVOLVING**

- From shed to the showroom
- From boutique/cottage industry to mainstream energy supply
- In the mainstream people want three things:
 - **Value**
 - **Reliability**
 - **Safety**

