



RECS: who, what, when, where...

An introduction to an environmental/energy
commodity market

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Overview

- What is a “REC”?
- Making a REC
- The market: intention, product history, buyers, sellers,
- Local Government usage...(create: hold, sell, buy, bank...)



If only it were this easy...

So, what is a REC?

- Renewable Energy Certificate
- ORER:
- are an electronic form of currency initiated by the *Renewable Energy (Electricity) Act 2000*
- 1 REC = 1 MWh energy created or deemed to have been created by registered “power station”

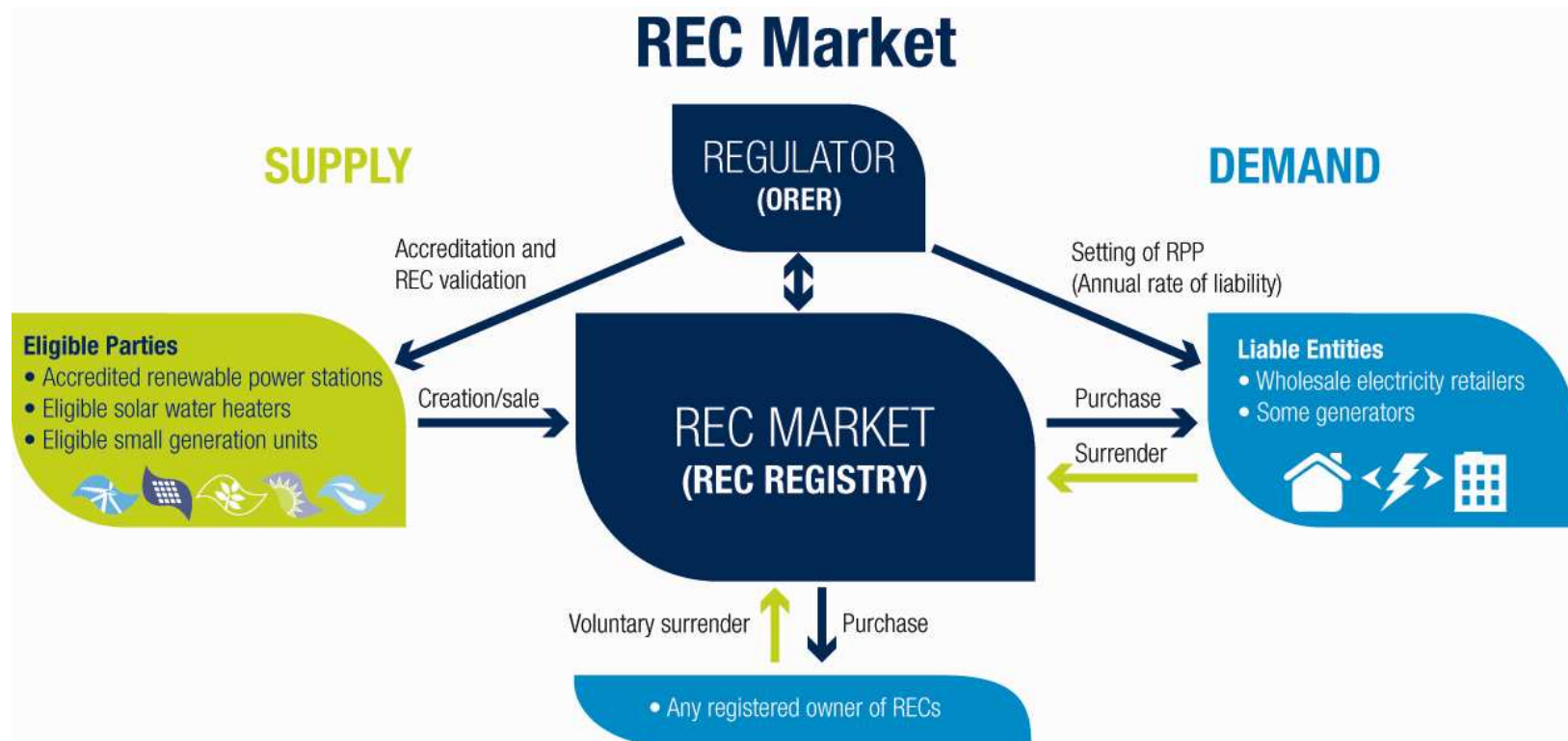
What is a REC?

- **Sits on REC Registry (oversight and auditing undertaken by ORER)**
- **Bought for voluntary surrender or compliance against RET**
 - **Renewable Energy Target, 20% of all power in Au at 2020 must come from renewables**
 - **RECs allow for decoupled electricity market**

Intention of RECs?

- Drive investment in renewable energy production
- Allows decoupled market to exist
 - Cant really buy “green” electrons from the grid
- Market based instrument (legislated demand, market driven prices, theoretical price cap)

The market



Eligible parties

- Anyone, including LGs and individuals
- “Power stations” could include grid connected:
 - biomass (inc native forests, bagasse),
 - landfill gas,
 - large solar, small solar, solar hot water,
 - wind
 - new hydro

Small scale mobile ag gas plants?



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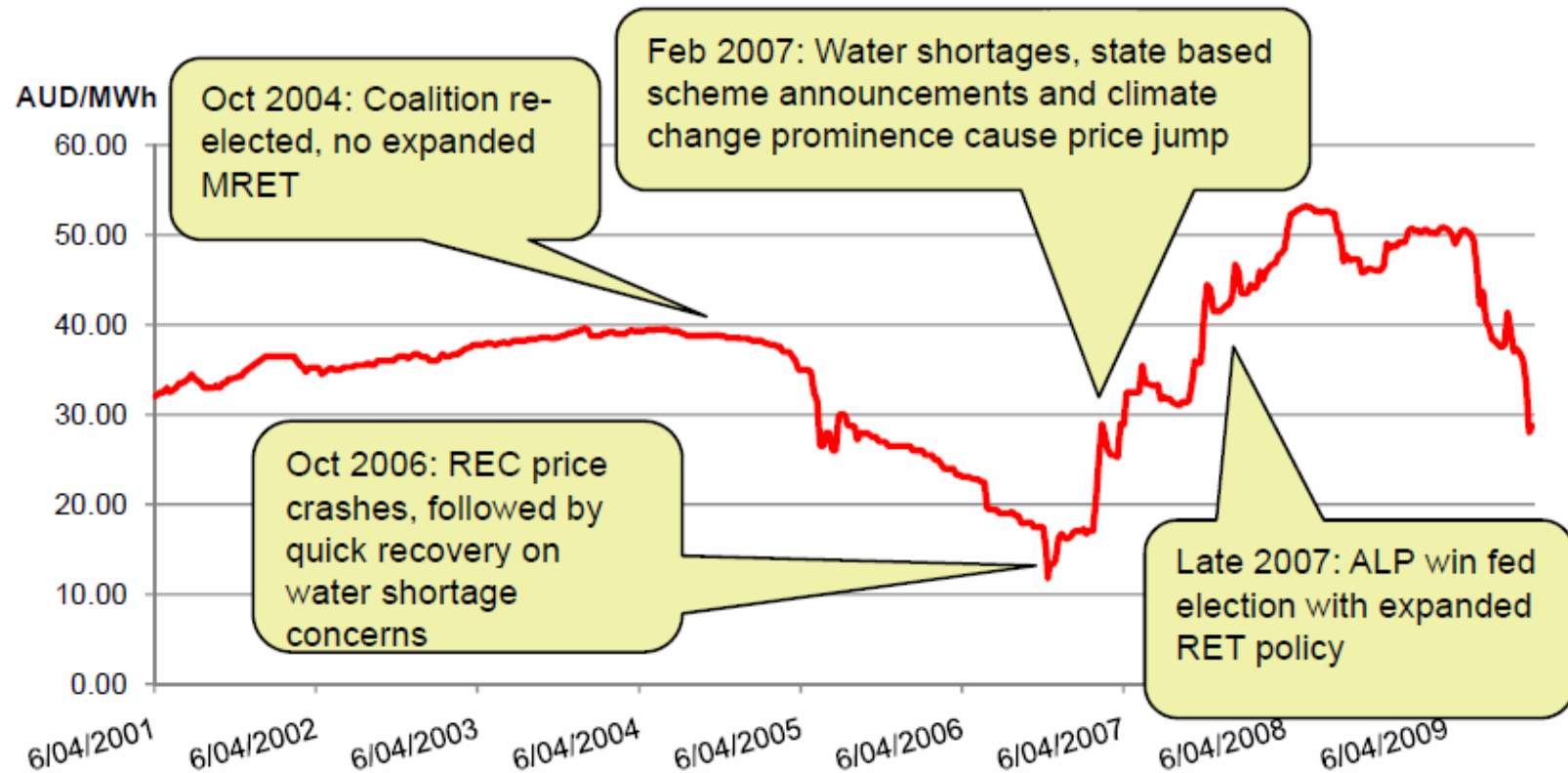
Liabile parties

- Basically, electricity retailers.
- They have to meet their RPP
- So, they either invest in renewable power stations, or
- Buy RECs

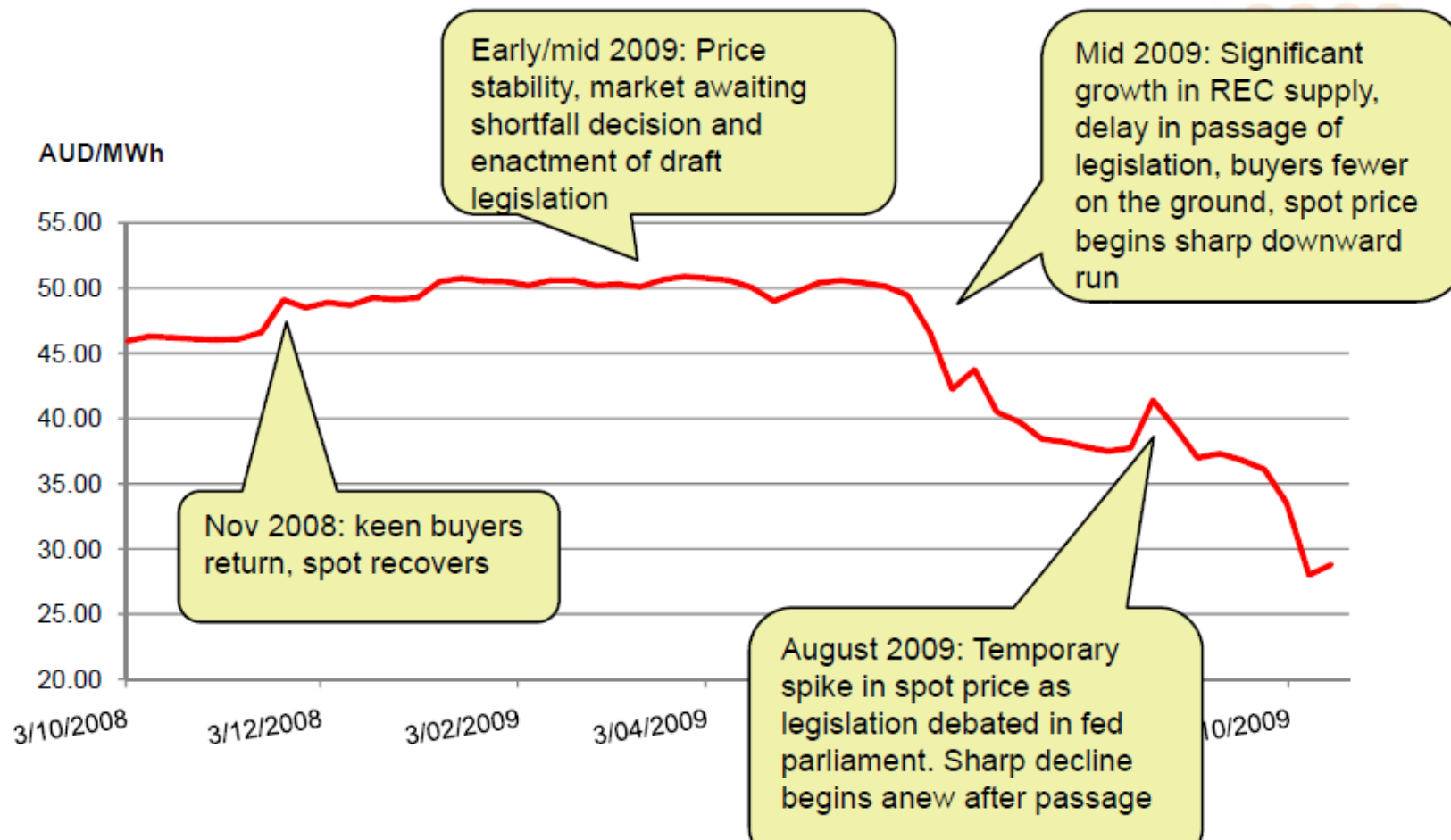
GreenPower™

- RECs have also been sold into the market as GreenPower™
- When you buy e.g. 20% GP, retailer must retire $0.2 \times$ (your MWh consumption)
- Additional to RET RPP

Historical prices



Contemporary prices



Market dynamics: why?

- Like all good markets, its about supply and demand...
- Renewable are more expensive than conventional power.
- REC sales make up the shortfall between construction/operation costs and marginal cost of production
- More renewable power plants come on line, more RECs
- If RECs >> RET/RPP, price falls
- Regulation is the price driver

Local Government and Renewables: Production

- Plenty of good ideas following...
- Many existing and developing technologies: watch this space!
- Basically, lots of small power stations, decentralisation, community power...

Local Government and Renewables: Use

- Sell them to defray cost of installation up front (including deemed credits)
- Bank them for future sale (risk)
- Use them as your own “greenpower” (voluntary retirement to drive demand)

Brief consideration of issues

- When Renewable power produced in SA (RECs), SA State based EF reduces
- So, all power users in SA benefit
- Claimed by Au Govt in Kyoto accounts
- Can you reasonably claim your use of GP in your corporate greenhouse accounts?

What are the effects of the proposed CPRS going to be on the REC market?

Rolling reduction of Au permits based on renewable purchases above RET/2009 baseline



Big picture

- Renewables are here to stay
- Market will be subject to some volatility
- RET/CPRS interaction may influence price dynamics for the (better?)
- If you create and sell RECs, you are helping emission reductions
- If you keep and use RECs, you are (should be) reducing your own emissions