



GreenPower Trends and Challenges

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Program Manager GreenPower



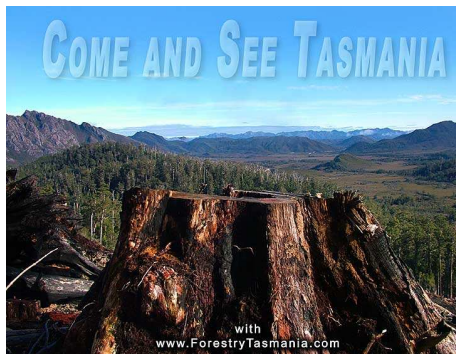


GreenPower Overview

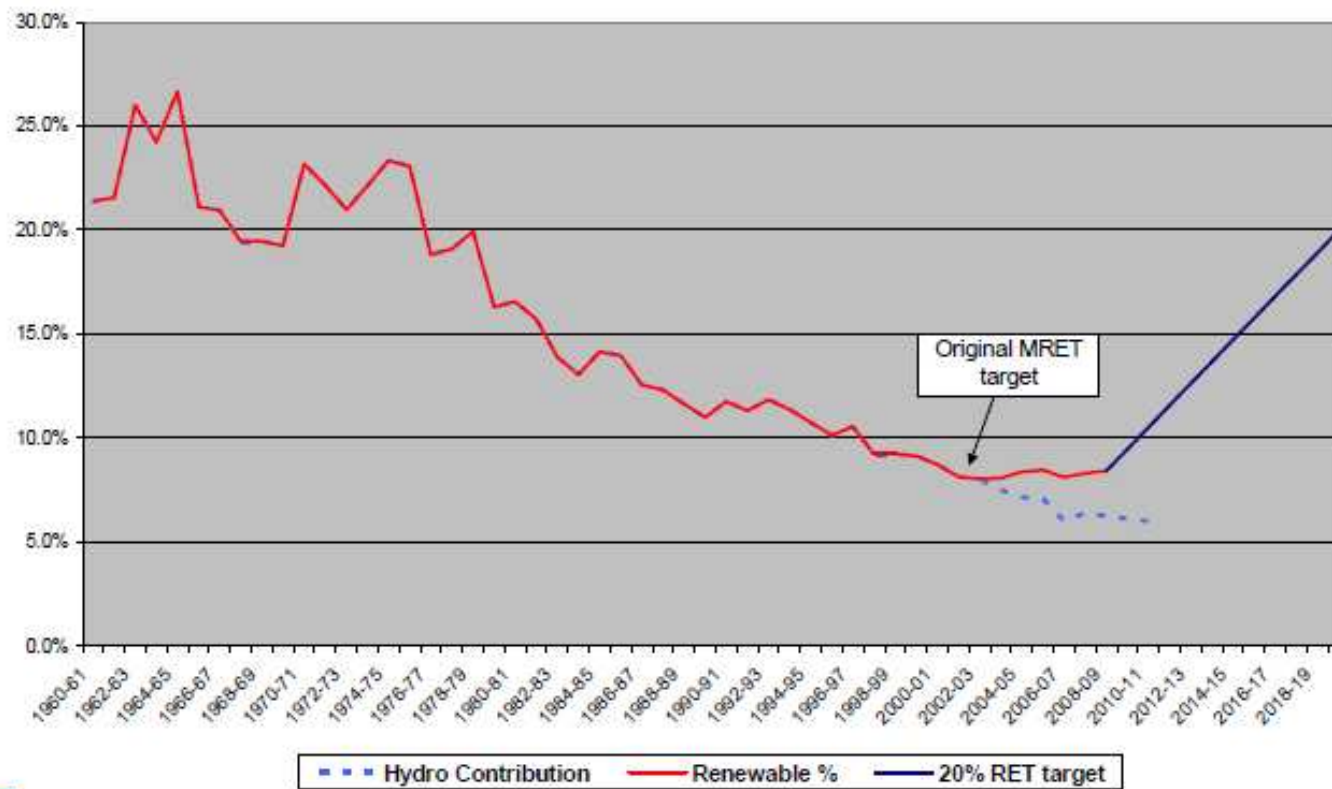
What is GreenPower?

Brief Overview :

- ✔ State Government initiative started in 1997
- ✔ Government Accredited Renewable Energy
- ✔ Strict Environmental Criteria
- ✔ One Phonecall and you can get Greenpower



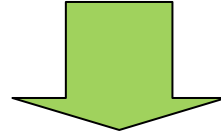
GreenPower Purpose



Source: Thornton, 2009



1 MWh of electricity = REC



REC Details

Certificate Number : 000811-WD00VC06-2010-007885

Certificate Details

Creator (Registered Person Code) : 811

Accreditation Code : WD00VC06

Generation Year : 2010

Serial Number : 7885

Certificate Creation Date : 16/06/2010

Apple i-phone



Consumer demand



more i-phones made



REC



Consumer demand



more REC's made



Who Generates RECs and what is the Criteria?

> Solar power



> Biomass
(agricultural/wood waste, energy crops)



> Hydro-electric power (small-scale or on existing d



> Wind



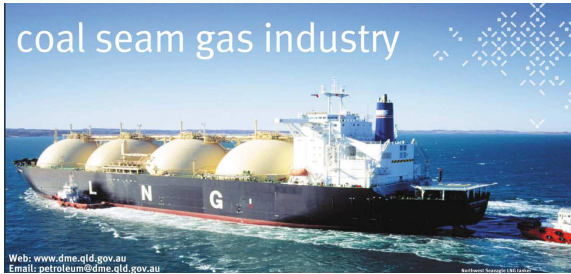
> Biomass (landfill gas)



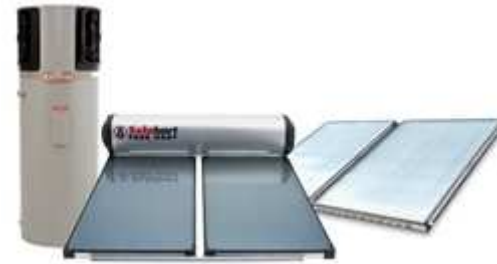
> Geothermal energy

> Wave and tidal power.

What “Renewables” are Excluded?



Coal Seam RECs



Solar Hot Water RECs

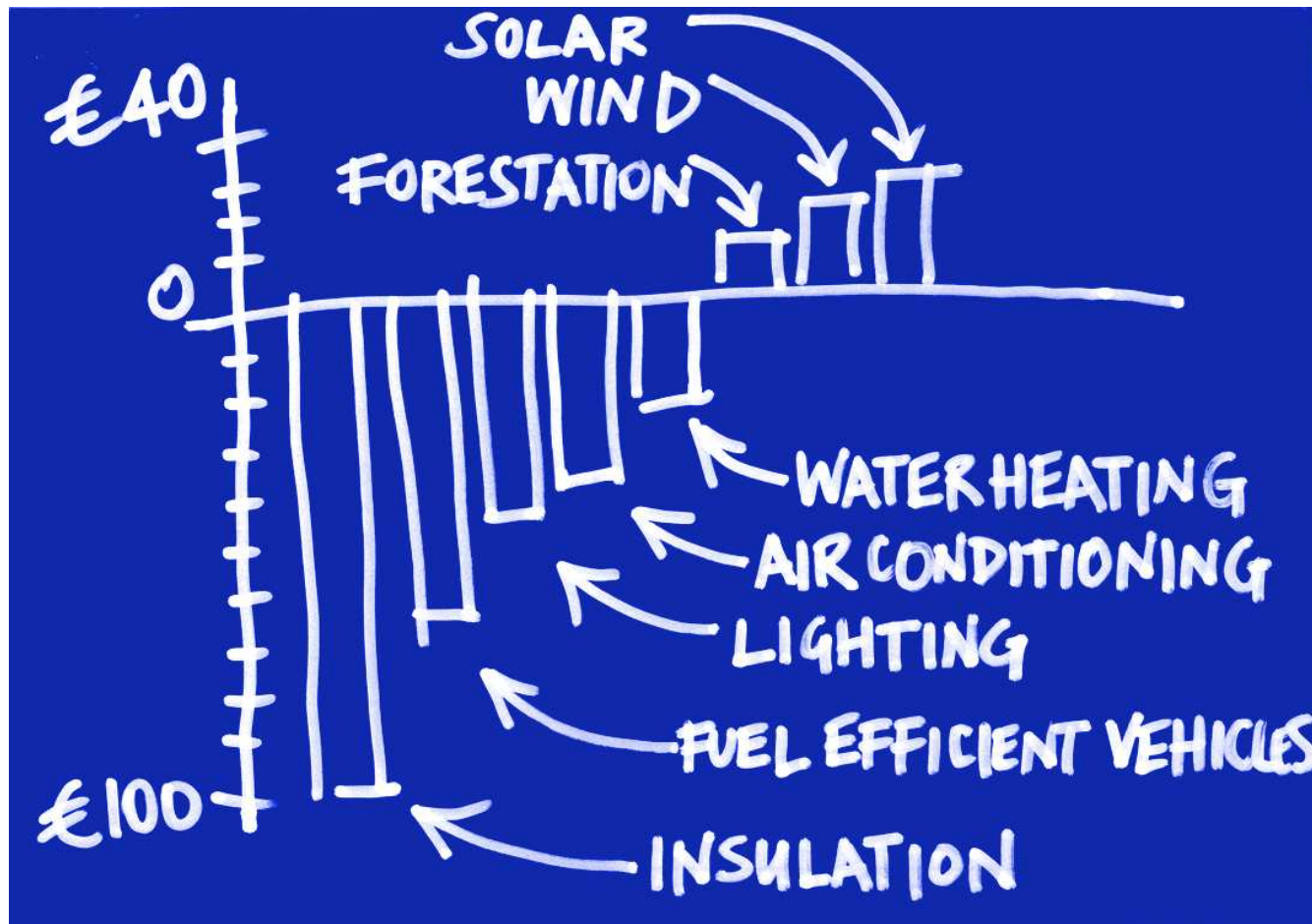


Phantom RECs



Existing Pre-1997 Hydro

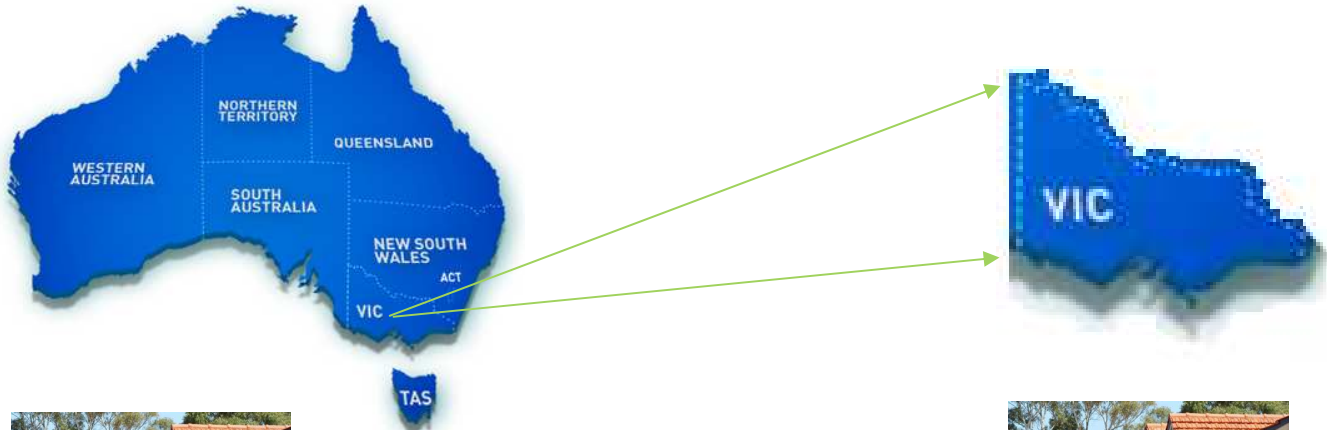
Where is GreenPower in the Scheme of things?





GreenPower Trends

Achievements 2009 Compared to 2008



950,000 (↑ 14%)
customers



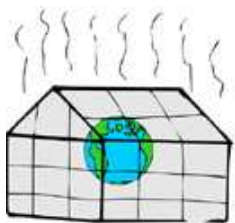
357000 (↑ 15%)
customers



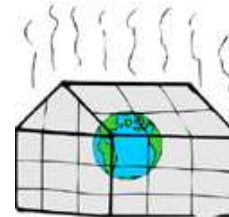
2.2 Million (↑ 23%)
MWh in sales



635,000 (↑ 32%) MWh
in sales



2.2 Million
Tonnes CO₂e saved



858,000
Tonnes CO₂e saved

Achieving Program aims:

- > Increase investment into new renewable energy generation across Australia
- > GreenPower customers invested roughly \$88 million into the renewable energy industry nationally in 2009 (based on \$40 REC price)

GreenPower 2010

- > Decline in Residential Customers Numbers in Most States Vic: 295K, Total 841K
- > Increased Business uptake
- > MWh approximately the same

GreenPower Achievements 2009 LGA

> Planetfootprint.org surveyed 160 councils in Australia

- ✔ 35% Purchase GreenPower

- ✔ This accounts for 7% of all GreenPower purchases

- ✔ Purchase equivalent to 20 Windturbines

GreenPower Achievements 2009 LGA

Top 5 GreenPowered LGA's

City of Boroondara

City of Greater Geelong

City of Melbourne

Brimbank City Council

Glen Eira and Port Phillip

| MWh | Municipality | % of total |
|-------|-------------------------|------------|
| 44994 | Melbourne | 7.1 |
| 60758 | Boroondara | 9.6 |
| 47422 | City of Greater Geelong | 7.5 |
| 35440 | Brimbank City Council | 5.6 |
| 28899 | City of Casey | 4.6 |
| 28665 | City of Manningham | 4.5 |
| 26548 | Mornington Peninsula | 4.2 |
| 29586 | Glen Eira | 4.7 |
| 29564 | City of Port Phillip | 4.7 |
| 22304 | Moreland City Council | 3.5 |
| 19487 | Ballarat | 3.1 |
| 17898 | Stonnington | 2.8 |
| 17499 | Shepparton | 2.8 |
| 17821 | Bendigo | 2.8 |
| 15597 | Melton | 2.5 |
| 9541 | Yarra | 1.5 |
| 1791 | Monash | 0.3 |
| 1450 | Darebin | 0.2 |
| 1450 | Hobsons Bay | 0.2 |
| 1379 | Campbellfield | 0.2 |





Challenges

Challenges

- ✔ Climate change and resource depletion
 - ✔ Victorians in the top of CO₂ emissions per capita
 - ✔ 53% of our CO₂ is from electricity generation
 - ✔ The world ecofootprint at 1.2 Earths and Australia at 4
 - ✔ 79% of Victorians are well informed about Climate change
 - ✔ 78% feel that there is an urgency to do something
 - ✔ 86% of Victorian surveyed for the Light Green Report agree they can do something for the environment

Challenges

> Yet Although



The easiest way to significantly reduce your impact on climate change

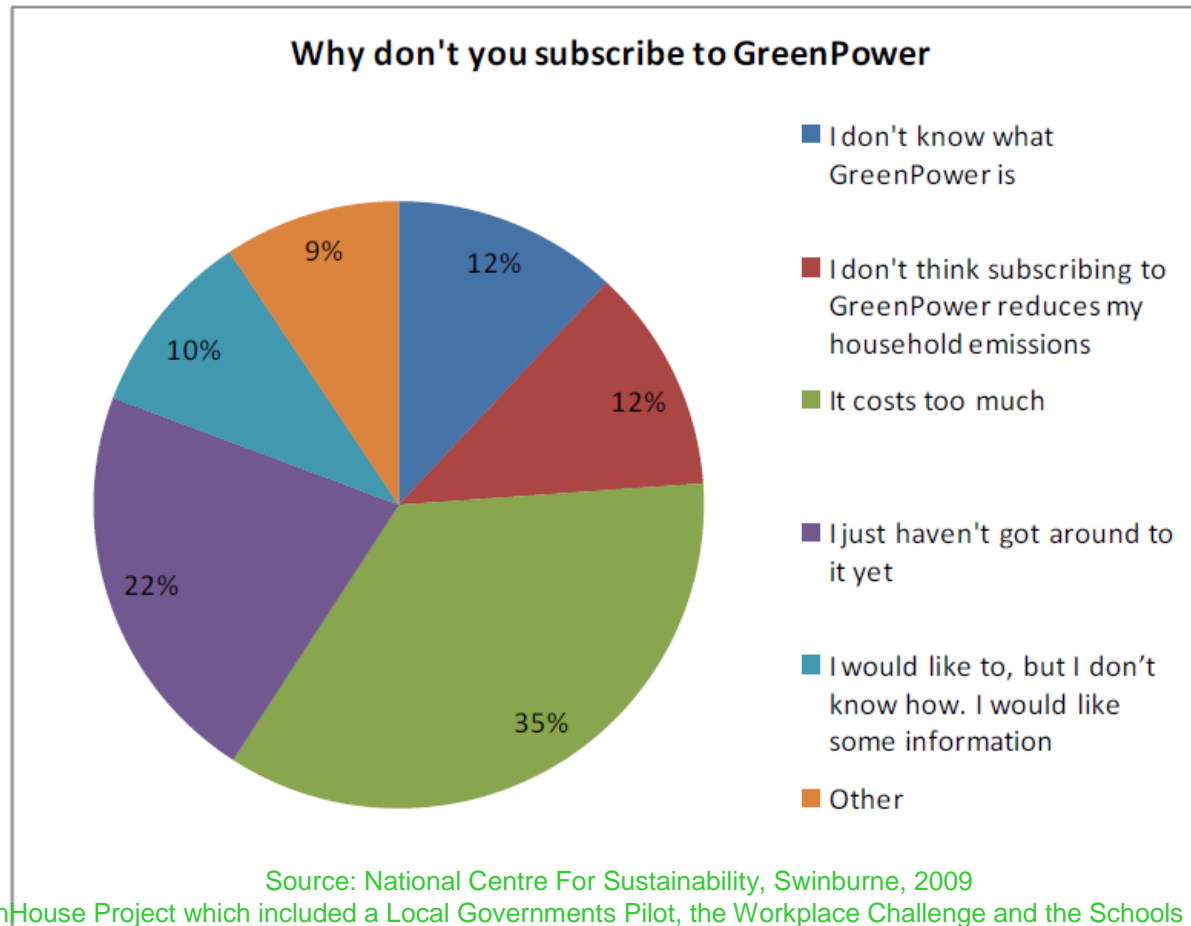
> Only 11.7% Residents and

> Only 2.4% Businesses buy GreenPower



Challenges

Figure 11. Why don't participants subscribe to GreenPower?



Challenges

> Cost Not Always a Barrier to Business

- > Vecci and Carbon Down Pilot Recently:
- > 100 cost comparisons conducted, 59 <40MWh, 19 >40MWh, Remainder locked in Contract
- > 63 showed cost savings (min 10% GreenPower)
- > 21 sites converted
- > 405.21 tonnes carbon abated
 - Average of 19.3 tonnes per site
- > Purchasing 40% GreenPower (average)

Choose GreenPower
Benefits to your business
How to switch
Take your business green
Useful resources
About us

Small business counts
Choose GreenPower

Be part of the solution
Small and medium-sized businesses account for more than 99% of the business sector. Together, their collective carbon emissions really add up. So if you own or work for a small to medium-sized business, here's your chance to reduce your impact on the planet and your business or workplace too. Choose GreenPower and start reducing your emissions immediately – with the right plan, you might even save money on your electricity bill.

So what is GreenPower?
Renewable energy
GreenPower Accredited Renewable Energy
Electricity grid
Coal-generated electricity

VECCI research has shown that businesses spending up to \$350/month on electricity can save approximately \$40 and 6.5 tonnes of greenhouse gases per year by moving to a more competitive plan that includes 50% GreenPower.

Ready to make a difference? Choose the category that best describes you:

Employee
Employer/Business Owner

Legal | Privacy | Site map
Carbon Down
Carbon Down is a climate change partnership between VECCI and the Victorian Government
vecci
Sustainability victoria

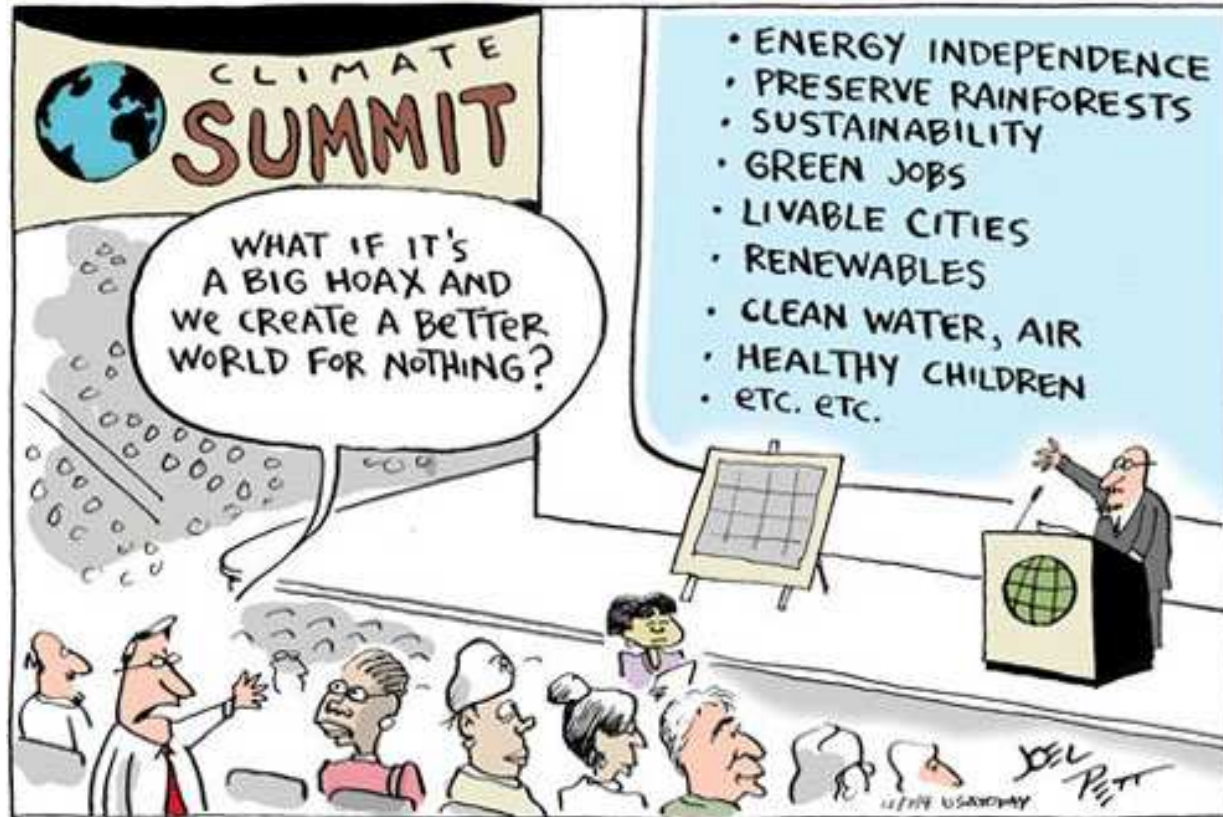
GreenPower Policy Framework

- > GreenPower and RET
 - Fully additional to legislated renewable energy targets
- > GreenPower and NCOS
 - Fully deductible as an abatement
- > GreenPower and CPRS (delayed)
 - Baseline removed
 - Cap adjusted after 5 years according to sales
 - Fully additional
- > GreenPower and Kyoto Protocol
 - Not additional at present

Conclusion

- > Significant reduces individual emissions
- > Barriers can be overcome
- > Most Victorians believe we need to do something
- > Most Victorians feel they can make a difference
- > Local Government involvement makes a difference

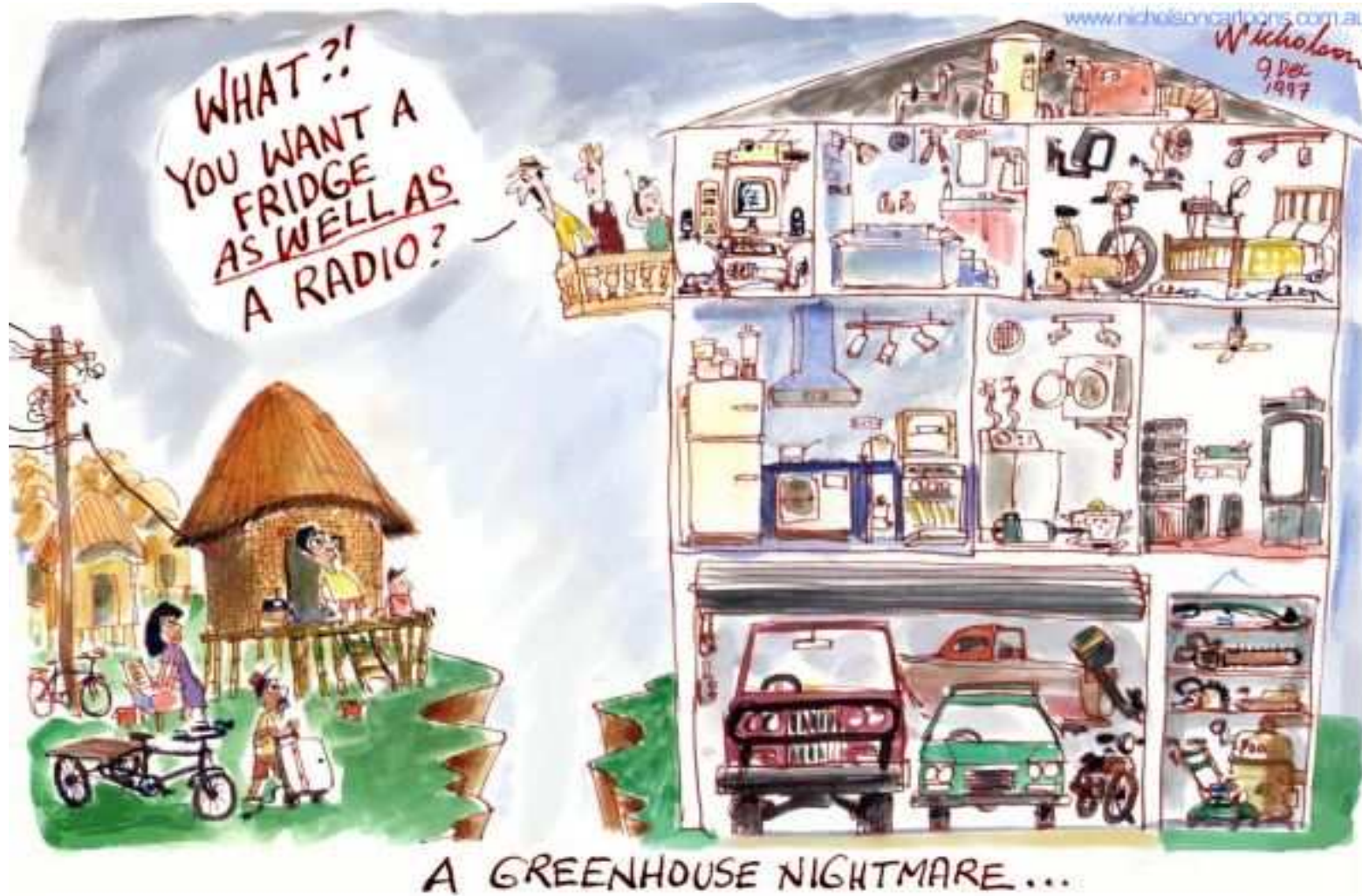
THANK YOU



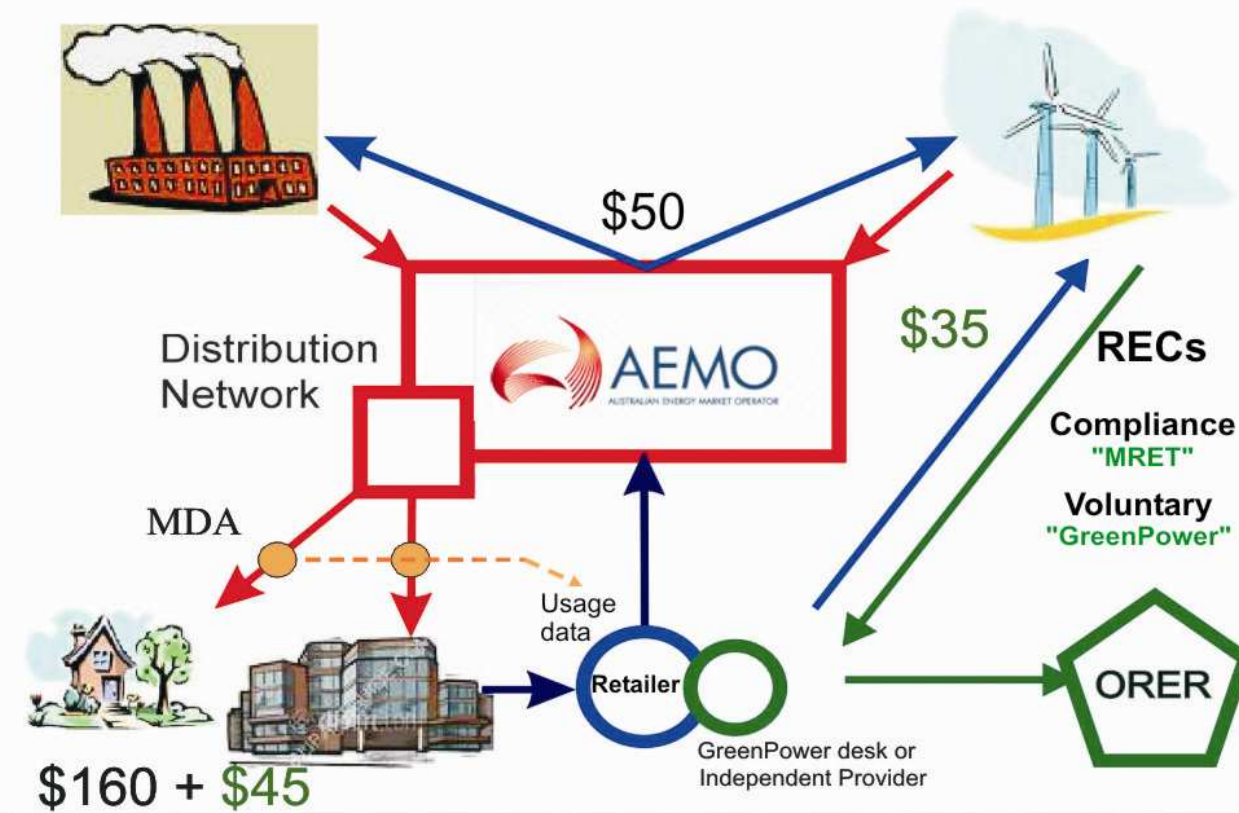
More Information? www.greenpower.gov.au

Save Energy? <http://www.saveenergy.vic.gov.au/>

Questions?



How GreenPower Works



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