

Incentives for Energy Efficiency

Ric Brazzale, November 2015

EEC National Conference

Rewarding sustainable choices



Green Energy
Trading

Key points

- EE schemes making a material contribution to reducing power demand
- EE Schemes in place create market of more than \$350m pa by 2020
- Lighting has dominated activities under EE schemes (consistency and harmonisation required)
- ERF has provided little support to EE to date
- More EE will be needed to achieve our greenhouse abatement task

Who is Green Energy Trading?

- Independent REC Agent and accredited for commercial lighting and other EE activities in NSW & VIC
- Provide competitive pricing and payment terms
- Our difference
 - have best and fastest online system
 - finance broking for business systems



Our team in Hawthorn

www.greenenergytrading.com.au

[@greenenergytrad](https://www.instagram.com/greenenergytrad)

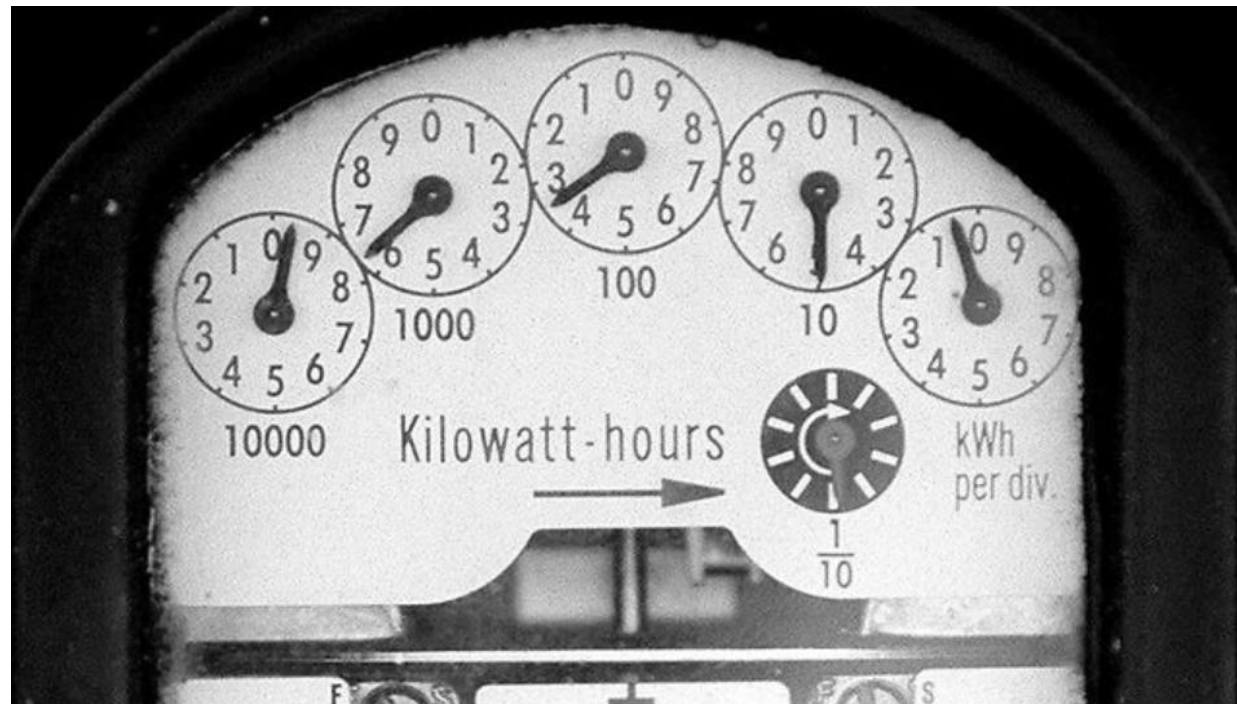


Green Energy
Markets

www.greenmarkets.com.au

- Research, consultancy and advisory associate (Green Energy Markets)
- Check out website for prices, research notes and other market information

EE Schemes role in the electricity market



NEM consumption fell 1.1% in 2014

Review of the NEM in 2014

Green Markets Insights: 1-2015

Ric Brazzale, Director

www.greenmarkets.com.au

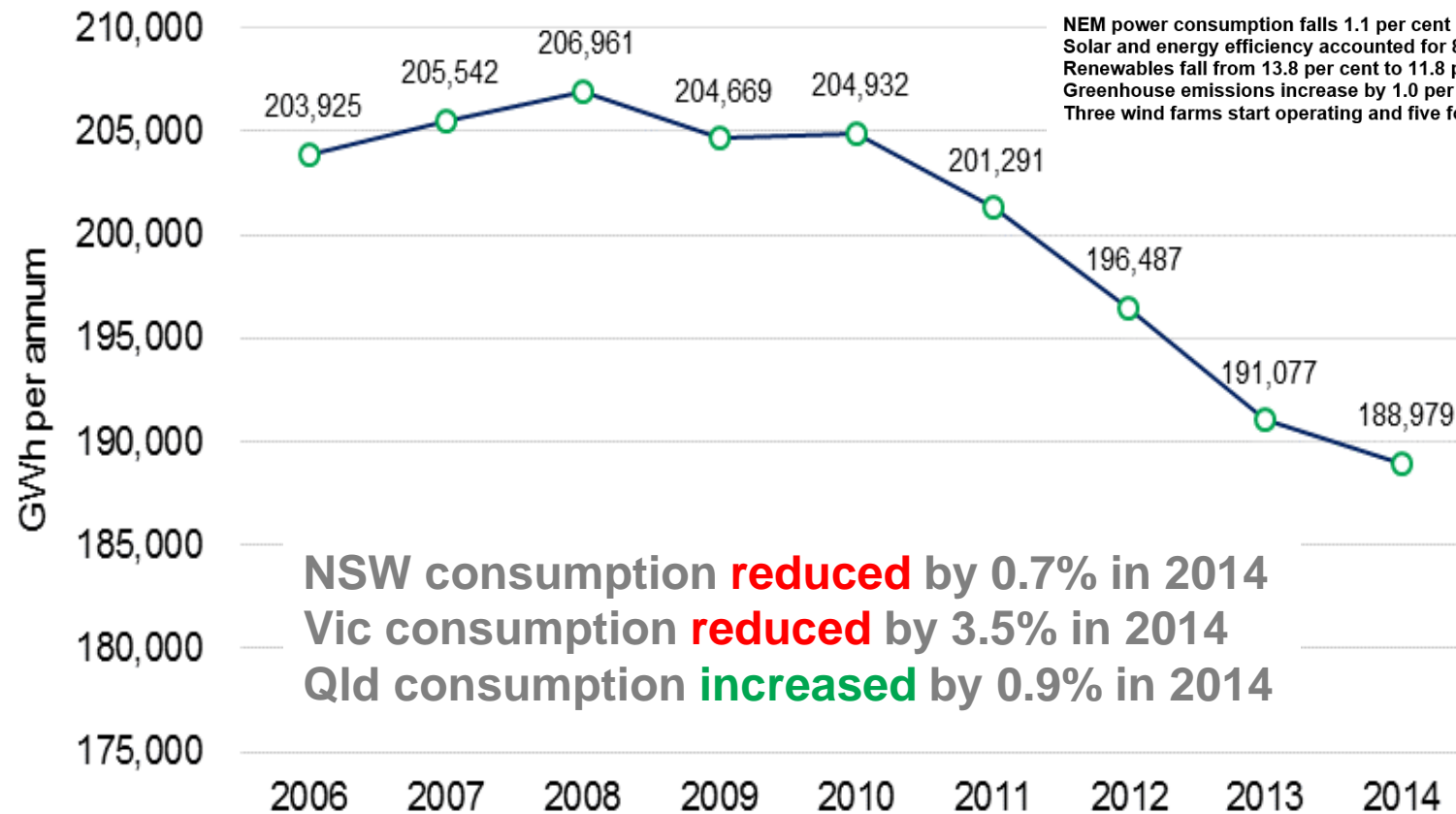
NEM power consumption falls 1.1 per cent in 2014

Solar and energy efficiency accounted for 89 per cent of the reduction

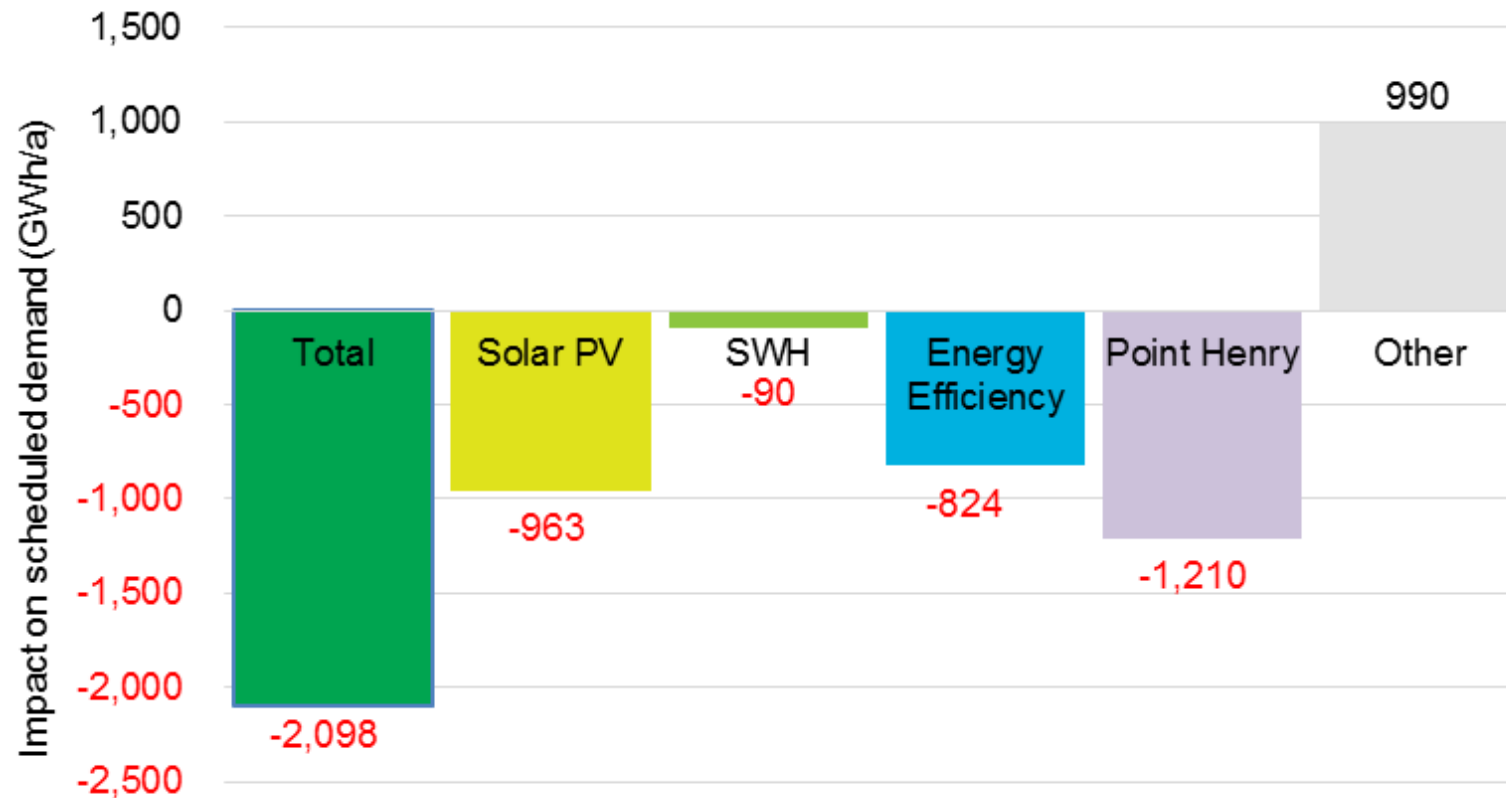
Renewables fall from 13.8 per cent to 11.8 per cent market share

Greenhouse emissions increase by 1.0 per cent in 2014

Three wind farms start operating and five fossil-fuel plants cease



Energy efficiency and solar making material contribution

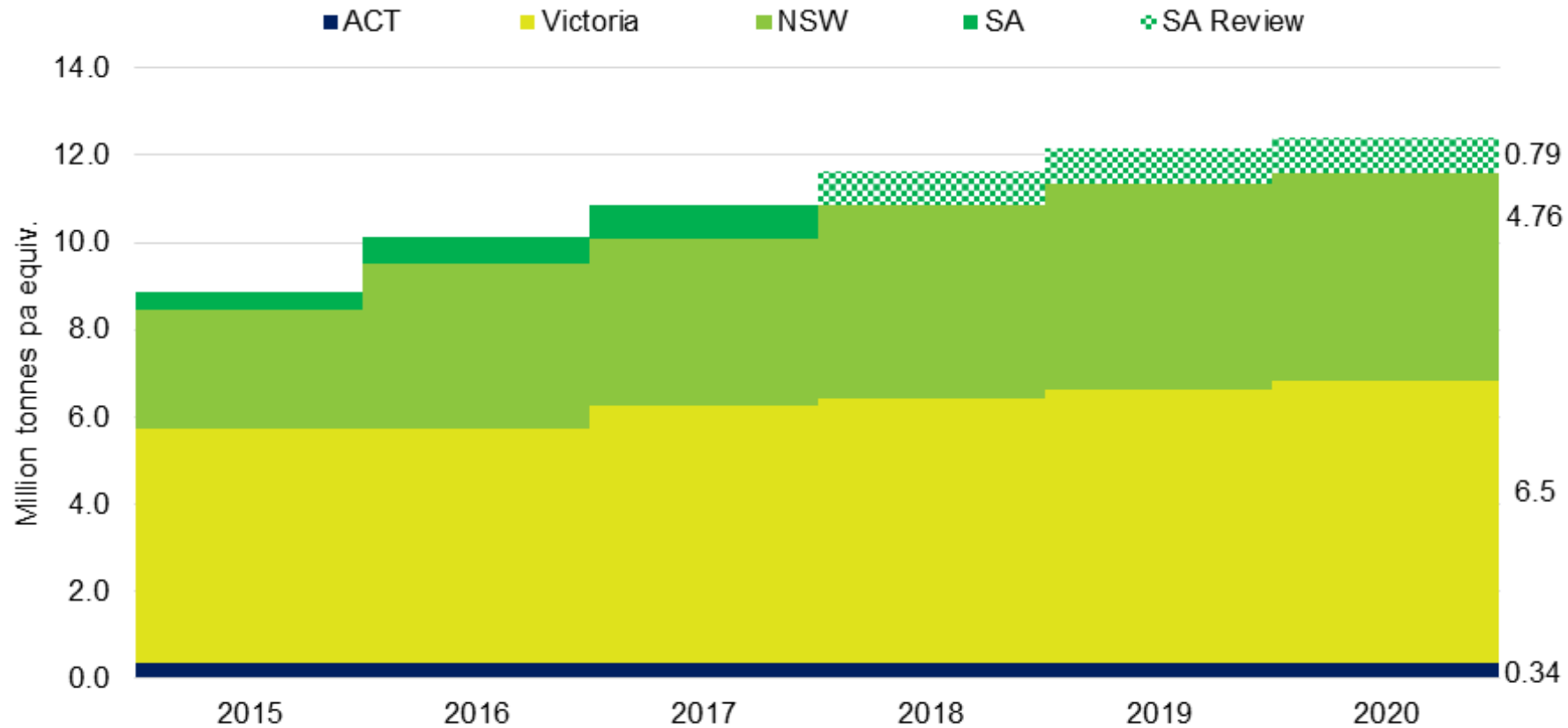


EE Schemes contributed 39% of reduction in power demand
Average of 700 MW of solar PV installed in NEM each year
over 2013 and 2014

**Total market size of \$350 m
per annum**



Schemes total of 12.4 mta by 2020



Equivalent to a combined market of \$350 million per annum by 2020

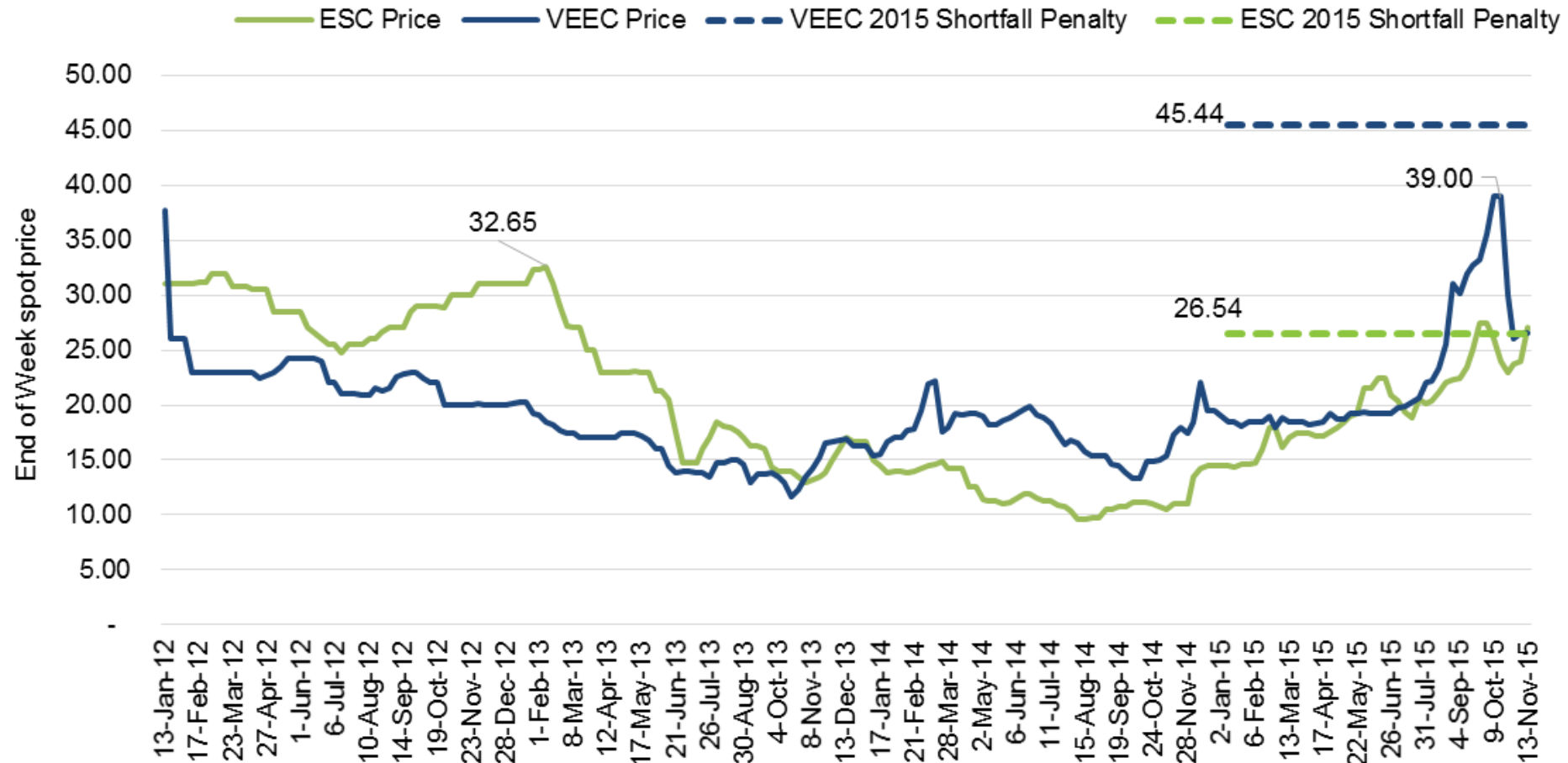
Scheme	Started	Type	Coverage	Target (2015) tonnes GHG	Target Review
Victorian Energy Efficiency Target Scheme	1 Jan 2009	Certificate based	Residential and business, electricity and gas	5.4 million	Expanded to 6.5m by 2020
NSW Energy Saving Scheme	1 Jul 2009	Certificate based	Residential and business, electricity and gas from 2016	2.7 million (5% of liable electricity sales)	Expanded to 8.5% by 2019 and extended to 2025
SA Retail Energy Efficiency Scheme	1 Jan 2009	Direct obligation	Residential and business, electricity and gas	0.4 million (equiv)	2016 Review for 2018-2020 period
ACT Energy Efficiency Implementation Scheme	1 Jan 2013	Direct obligation	Residential and business, electricity only	0.34 million (14% of electricity sales)	Expanded to 2020 in Jun 2015

More than 50 energy efficiency schemes operating globally according to Regulatory Assistance Project <http://www.raonline.org/>.

Certificate markets in NSW and Vic



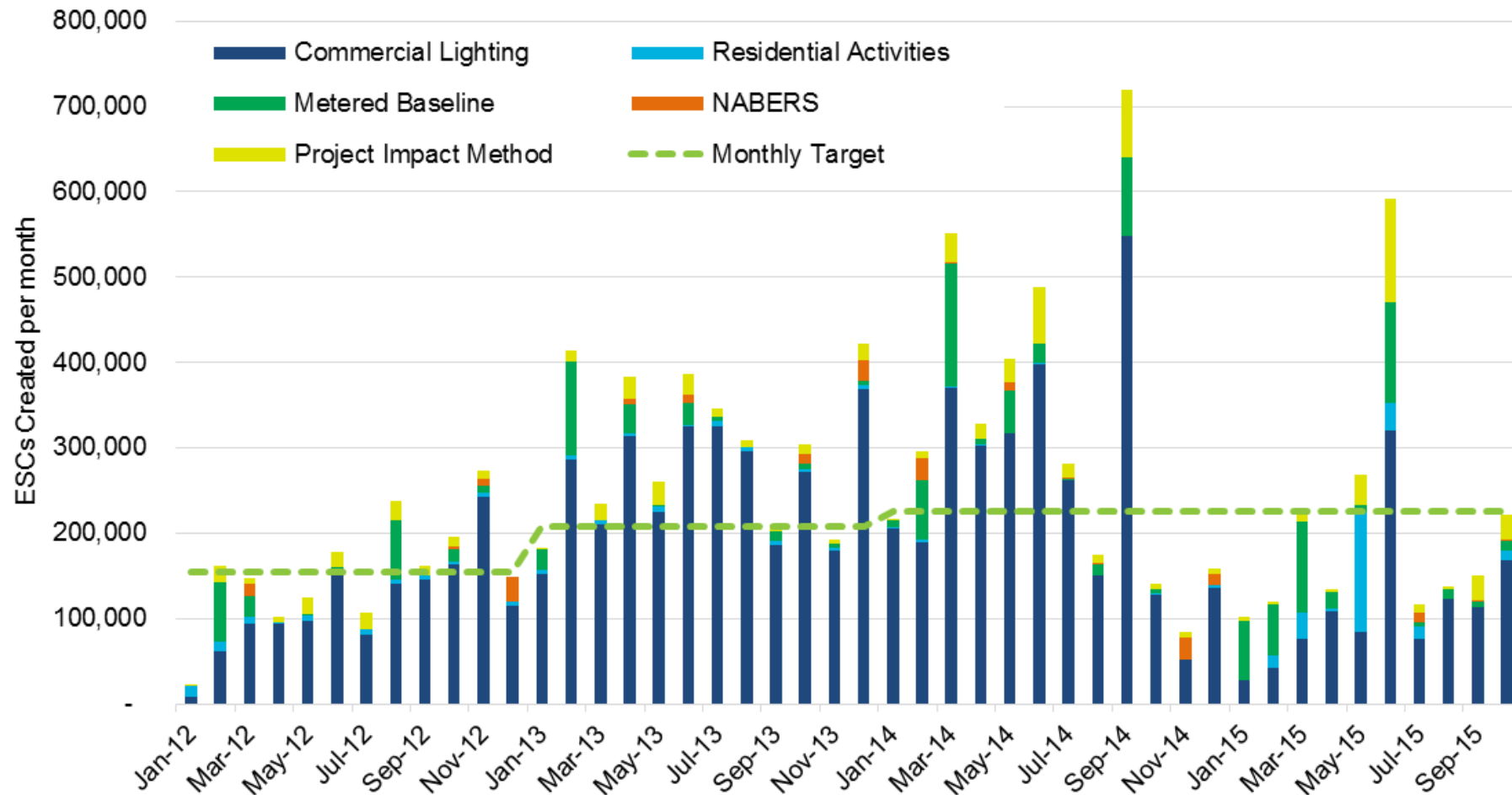
Considerable price volatility over last four years (from Jan 2012)



Volatility driven by:

- Policy and regulatory changes
- Surges in installations of activities (lighting / SPCs)

Commercial lighting has dominated in NSW

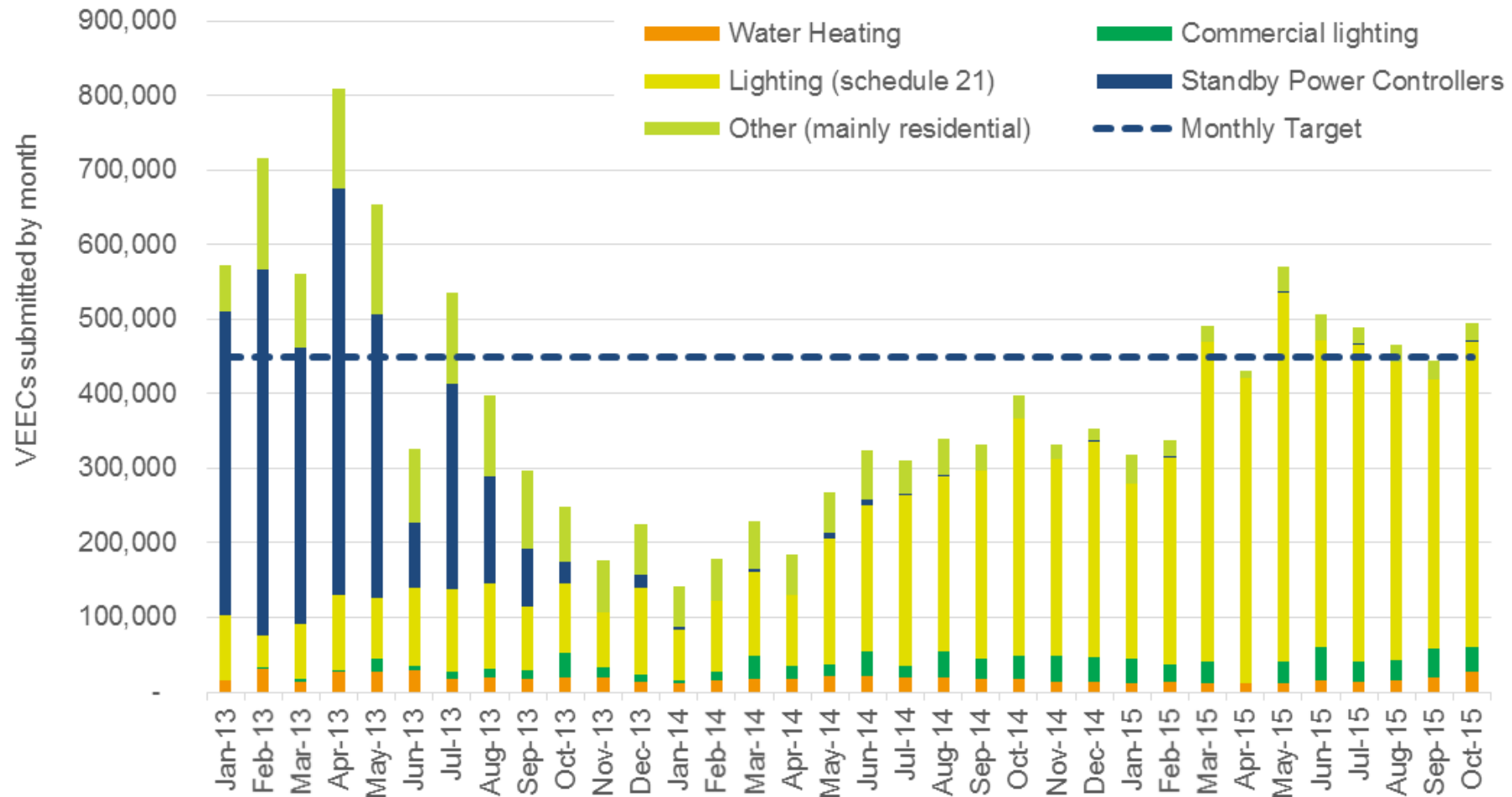


Commercial lighting accounted for:

- 85% of ESCs in 2013
- 80% of ESCs in 2014
- 55% of ESCs in YTD Oct 2015

Residential activities negligible - but 12% so far in 2015 (appliances)

Residential activities dominating in Victoria



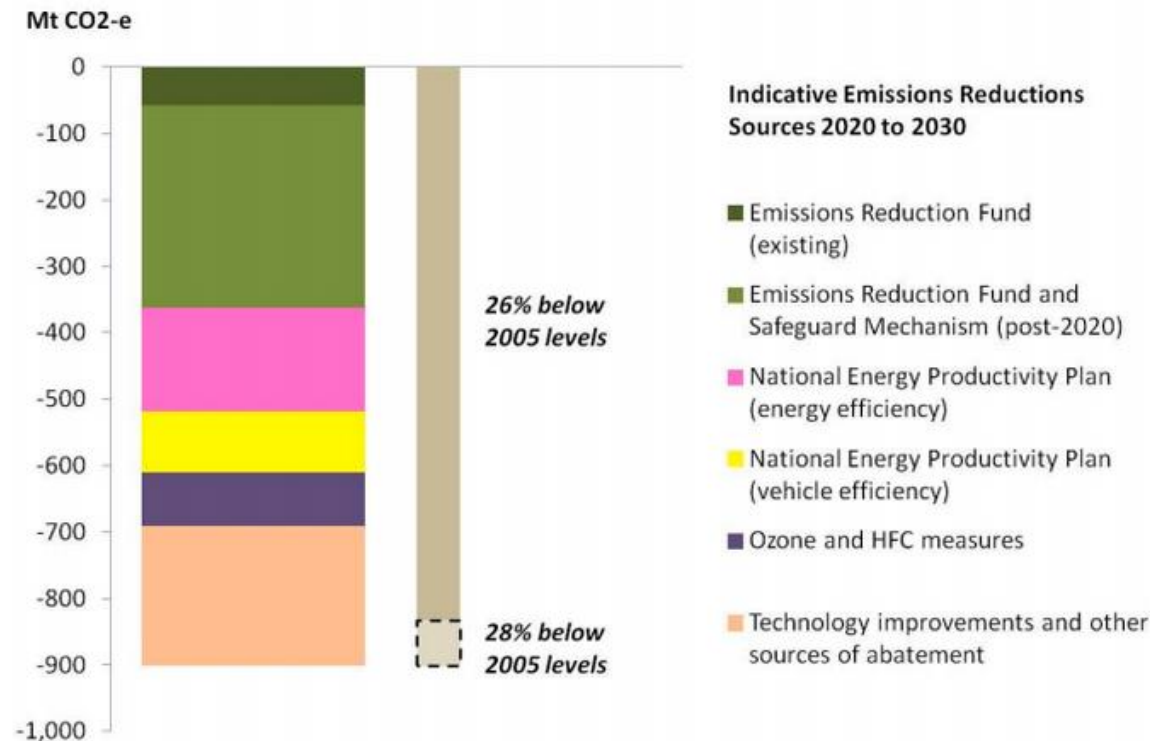
	2013	2014	2015 YTD
Commercial lighting	2.2%	8.5%	6.2%
Residential Lighting	19.7%	69.0%	85.0%
SPCs	50.9%		

- NSW has supported predominantly business activities (commercial lighting)
- Victoria has supported predominantly residential activities (SPCs and Halogen replacement)
- WHY?
- What happened to harmonisation?

- 2 Auctions to date
 - April 2015 – 107 contracts, 144 projects, 47.3 mta, average price of \$13.95 (\$660m)
 - Nov 2015 – 129 contracts, 131 projects, 45.5 mta @ \$12.25 per tonne (\$557m)
- Two successful EE projects (commercial lighting methodology)
 - Clean Energy Technology Holdings – 2,400,000t (over 7 years)
 - Wesfarmers – 104,927t (over 7 years)
- 22 EE Projects that have registered
 - Aggregated Small Energy Users (1 project)
 - Commercial and Public Lighting (6 projects)
 - Commercial Buildings (2 projects)
 - Industrial and Fuel Efficiency (13 projects)

Energy Efficiency expected to play key role in emissions reduction

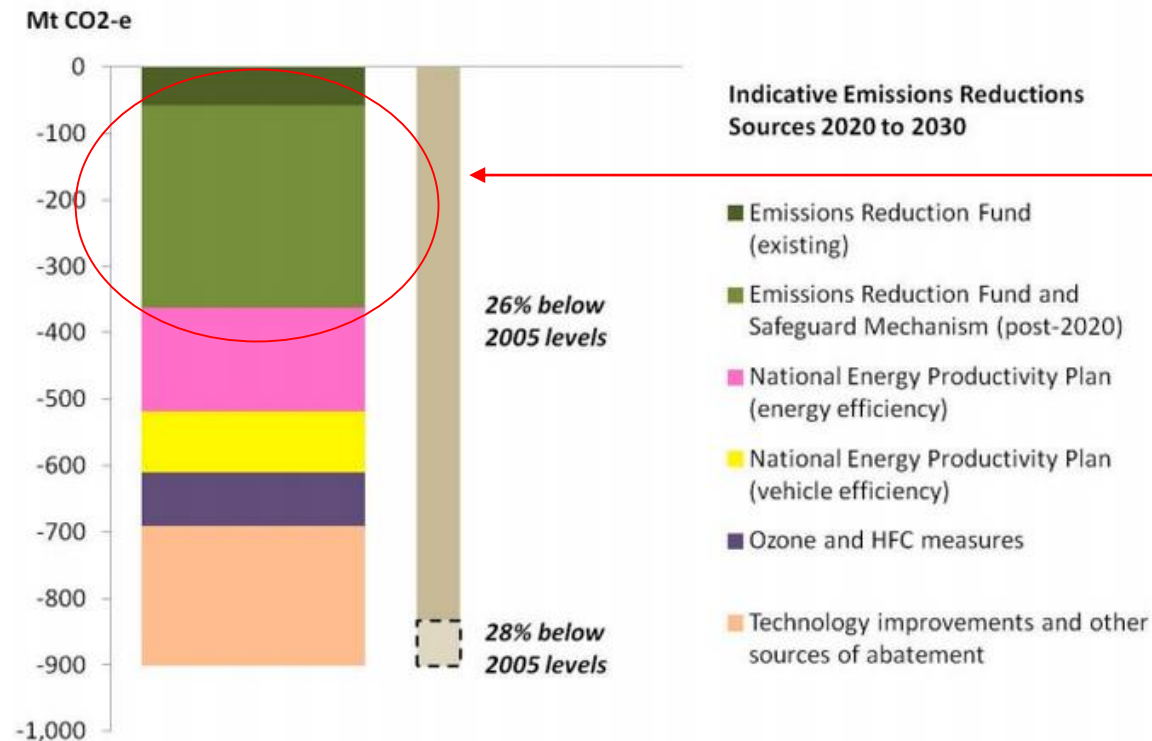
Australia can achieve the 2030 target by improving productivity, reducing costs and through technology



Presentation on announcement of Australia's 2030 target for Paris Conference

Energy Efficiency expected to play key role in emissions reduction

Australia can achieve the 2030 target by improving productivity, reducing costs and through technology



The Safeguard Mechanism may create another source of demand for ACCUs

Presentation on announcement of Australia's 2030 target for Paris Conference

- EE schemes have made a material impact to date
- Schemes have supported creation of many new businesses and more than 4000 people working on EE across 4 jurisdictions
- Lighting has dominated activities
- Certificate prices have been volatile and impacted by many policy and regulatory changes
- ERF could become important for EE if Safeguard Mechanism is effective in creating new source of demand

Thank you

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