

Off-Target: Australia's Residential Energy Efficiency Market to 2020

A Private Report for Strategic Intelligence Clients

1.0 Overview

Australia's residential energy efficiency industry has suffered a history of Federal policy reversals and a patchwork state based schemes. Nevertheless, hope may be appearing on the horizon in the form of a comprehensive national market, mandatory residential property energy efficiency reporting, rising retail energy prices and increasingly cost effective technology.

In this exclusive Private Report for our Strategic Intelligence Service clients, Energeia examines the developing market for residential energy efficiency products and services in the major Eastern states. Products and services covered include energy audits, insulation, glazing, hot water, space heating and cooling, standby-killers, in-house displays, major whitegoods, pool pumps and electronics.

Although activity in Queensland and South Australia is addressed, the report focuses on the formally established markets of New South Wales and Victoria. These markets' key drivers, challenges, trends, developments and players are analysed in detail to gain insight into their near to medium-term futures. Energeia's ten year outlook covers industry regulation, government target setting, sources and cost effectiveness of supplies, and industry strategy.

Australia's residential energy efficiency markets, like those in virtually all overseas countries, are mainly driven by government incentives and regulations. Although Australia's overall energy efficiency policy and regulatory framework is consistent with international best practice, Energeia's research has found significant gaps – the Victorian scheme alone is excluding an estimated 1.8 million tonnes of CO₂ annually. This is leading to higher certificate prices and discouraging efficient investment.

Energeia's detailed end user analysis has identified that implementing cost effective energy efficiency products could save residents 5.5 MWh per annum, or around 43% off their annual energy consumption. At the state level, we estimate that annual product turnover is currently reducing consumption by 4.3 million in lifetime GWh per annum in Victoria alone. Our analysis also shows that energy efficiency programs are delivering greater value for money than state audit programs.

Most Australian markets are currently focused on deploying products such as lighting, shower roses and standby power boards that may be given away on a door-to-door basis. The key questions facing the market are when this opportunity will dry up, what the most profitable new sources of energy efficiency certificates will be, and how best to target them. Energeia's analysis suggests that few new D2D opportunities are likely to emerge, and players will need to change to survive.

Energeia's outlook to 2020 anticipates major changes to state based schemes, a shift in industry structure and strategy, and rising consumer interest driven by rising electricity prices and mandatory residential property reporting. Our modelling suggests that the residential energy efficiency certificate market could be worth \$3.2 billion over the next ten years, resulting in around a 30% cumulative reduction in average annual residential consumption and emissions from a 2009 baseline.

Our view assumes the establishment of a 30% target by 2020 per the recommendations of the Prime Minister's Task Force on Energy Efficiency, and implementation of a national energy efficiency or carbon market covering residential activities by 2015. While our analysis shows such a target is achievable, all states are significantly off-target at the present time. Victoria's revised target does not appear sustainable past 2013, and we anticipate major target adjustments in all states by 2014.

Despite the energy efficiency market's threat to business-as-usual, the potential size of the revenue opportunity and existing customer relationships, Energeia's research has found retailers and networks have yet to respond. Instead, a crop of new entrants are emerging to compete for energy revenue, and are on-track to take one third of it by 2020.

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8.0 Glossary

This report uses the following abbreviations:

AC	Air-conditioner
ACT	Australian Capital Territory
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AIMRO	Advanced Interval Meter Roll-Out
AMI	Advanced Metering Infrastructure
AU	Australia
BCA	Building Council of Australia
CFL	Compact Fluorescent Light
COAG	Council of Australian Governments
CPRS	Carbon Pollution Reduction Scheme
DER	Distributed Energy Resources
E3	Equipment and Energy Efficiency Program
EA	EnergyAustralia
EMS	Energy Management System
ESS	Energy Savings Scheme
EU	European Union
FiT	Feed-in Tariff
GW	Giga Watt
GWh	Giga Watt-hour
HW	Hot water
IEC	International Electrotechnical Commission
IHD	In-Home Display
IT	Information Technology
kW	Kilo Watt
kWh	Kilo Watt Hour
LED	Light Emitting Diode
LV	Low Voltage
MCE	Ministerial Council on Energy
MW	Mega Watt
MWh	Mega Watt-hour
NFEE	National Framework for Energy Efficiency
NEES	National Energy Efficiency Strategy
NEEI	National Energy Efficiency Initiative
NSMP	National Smart Metering Program
NSW	New South Wales
PV	Photo Voltaic
QLD	Queensland
R&D	Research and Development
REC	Renewable Energy Certificates
REES	Renewable Energy Efficiency Scheme
RET	Renewable Energy Target
RIS	Regulatory Impact Statement
SA	South Australia
STC	Small-scale Technology Credit
SRET	Small-scale Renewable Energy Target
TAS	Tasmania
TV	Television
US	United States
UK	United Kingdom
VEEC	Victoria Energy Efficiency Credit
VEET	Victoria Energy Efficiency Target
VIC	Victoria
WA	Western Australia
WACC	Weighted Average Cost of Capital

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