

Energy statistics in Australia

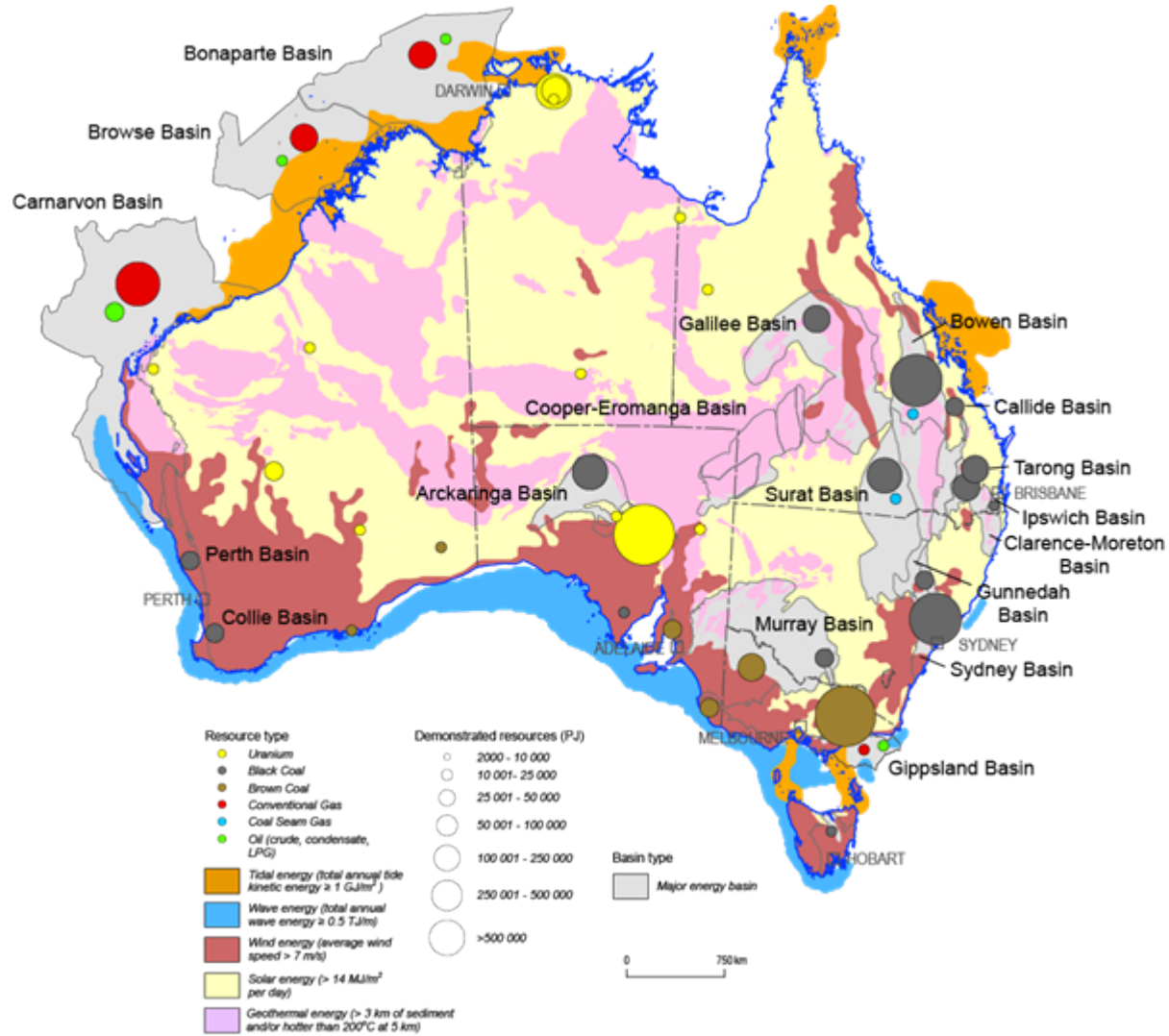
Drew Clarke

Secretary

Department of Resources, Energy and Tourism

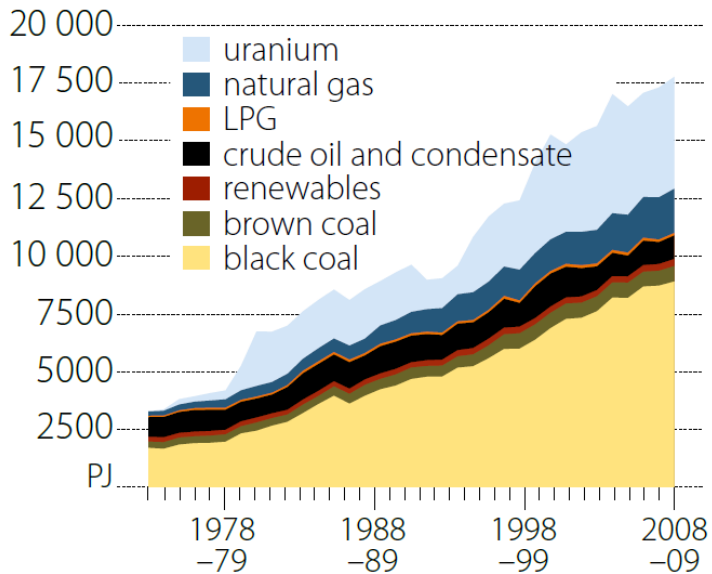
4 May 2011

Australian Energy Resource Assessment



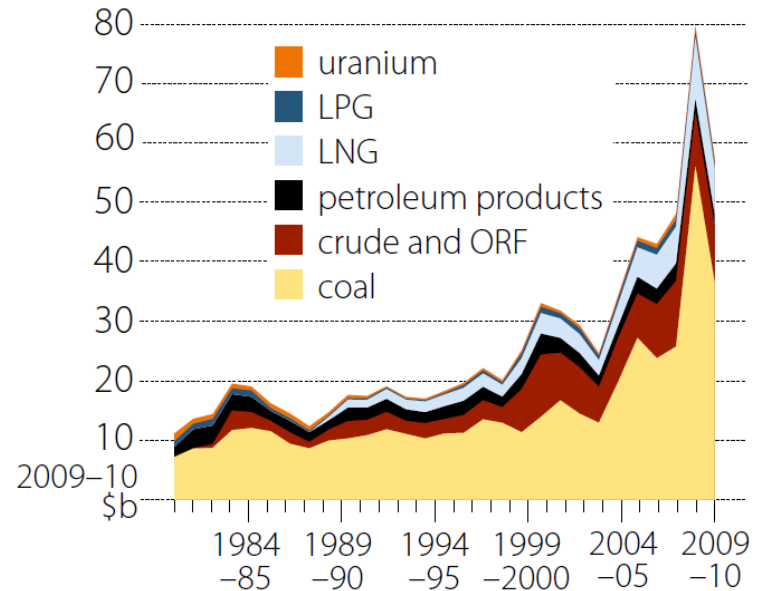
Energy in the Australian context

Australian energy production



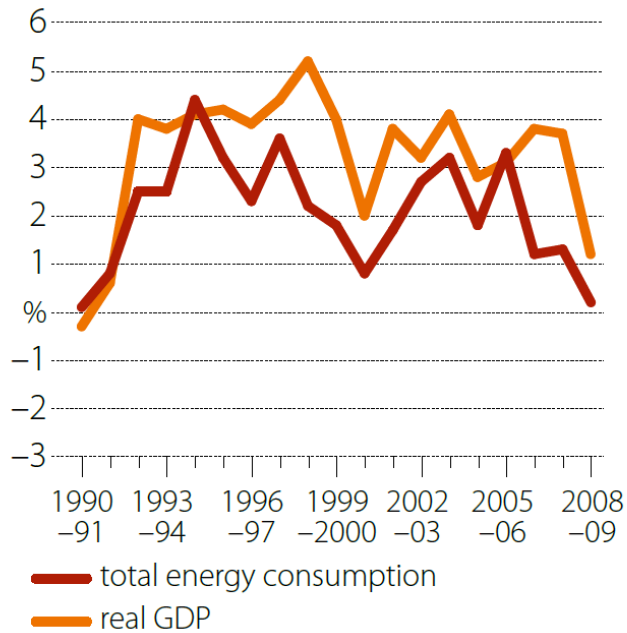
Source: ABARES, Australian energy statistics. (2011)

Australian energy exports



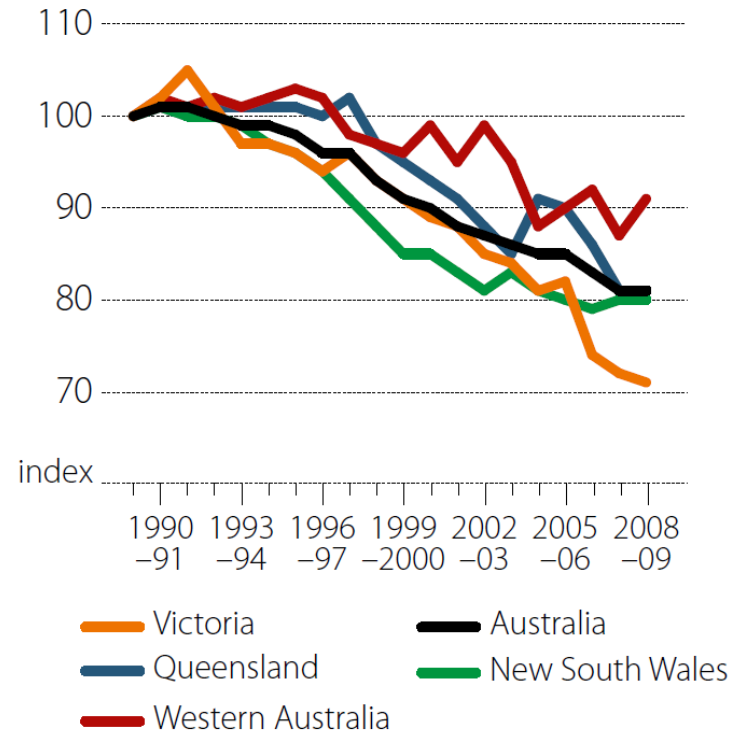
Source: ABARES, Australian commodities.(2011)

Annual growth in primary energy consumption in Australia



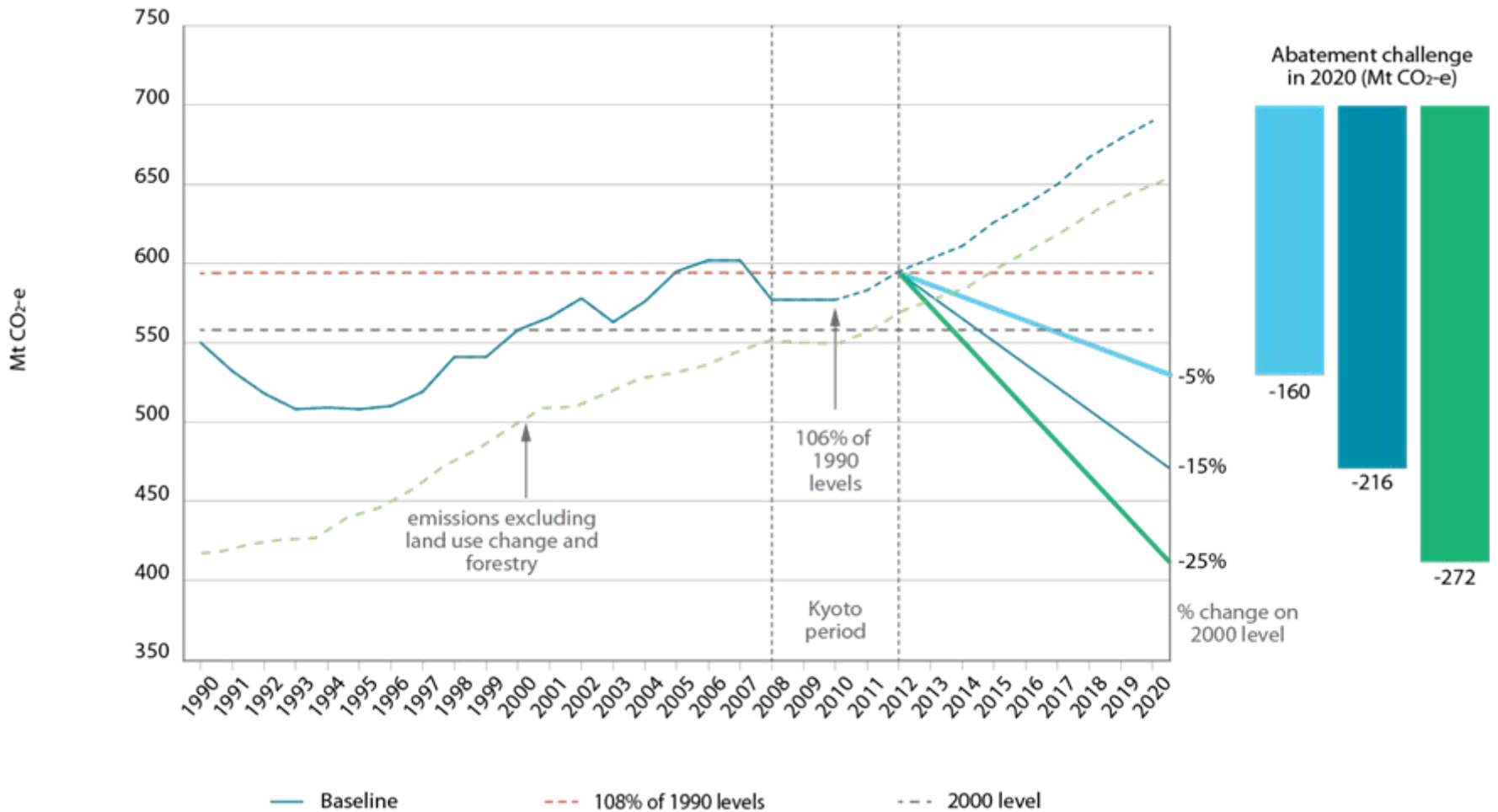
Sources: ABARES, Australian energy statistics; ABS, Australian National Accounts: State Accounts, cat. no. 5220.

Energy intensity trends

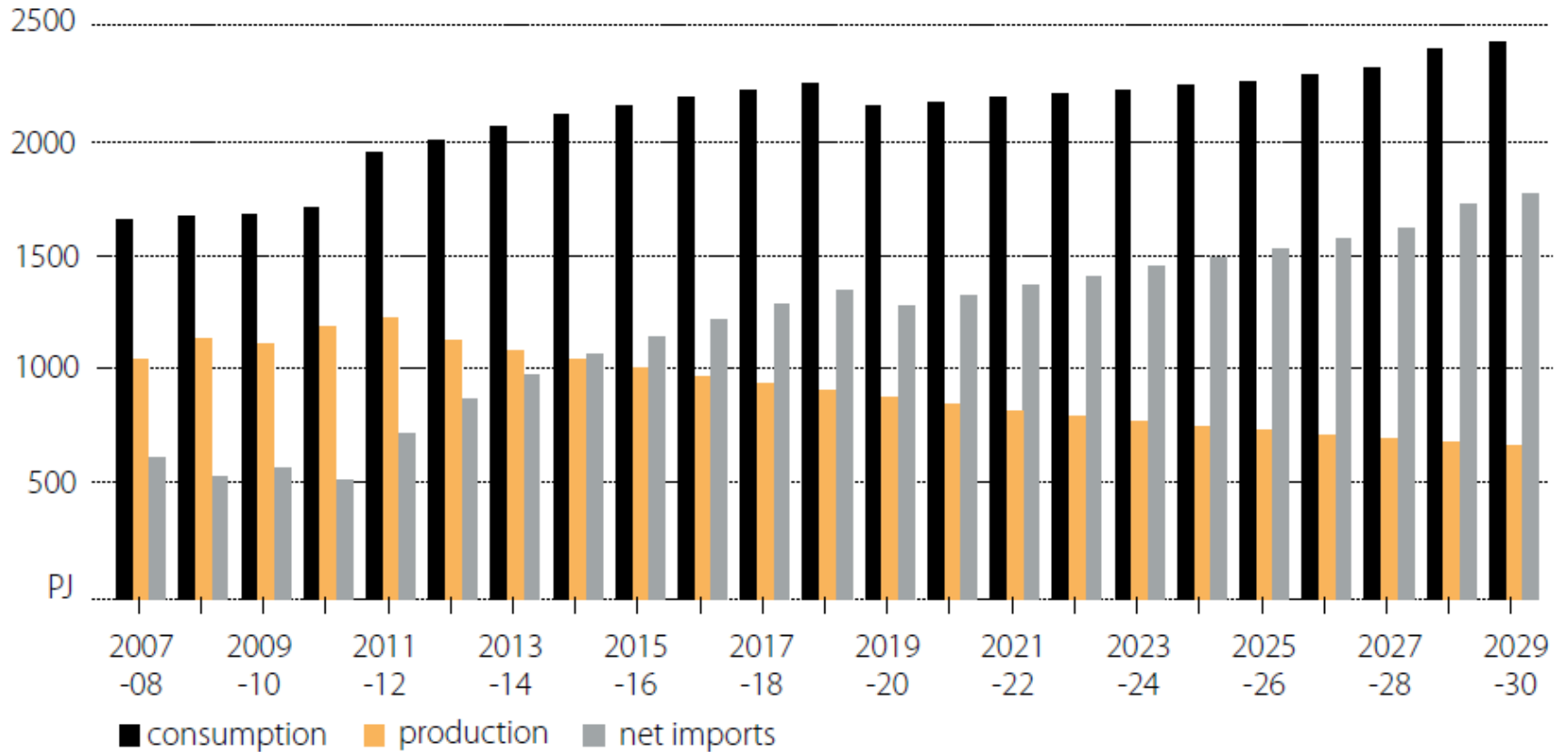


Sources: ABARES, Australian energy statistics; ABS, Australian National Accounts: State Accounts, cat. no. 5220.

Australia's Emissions Trends, 1990 to 2020

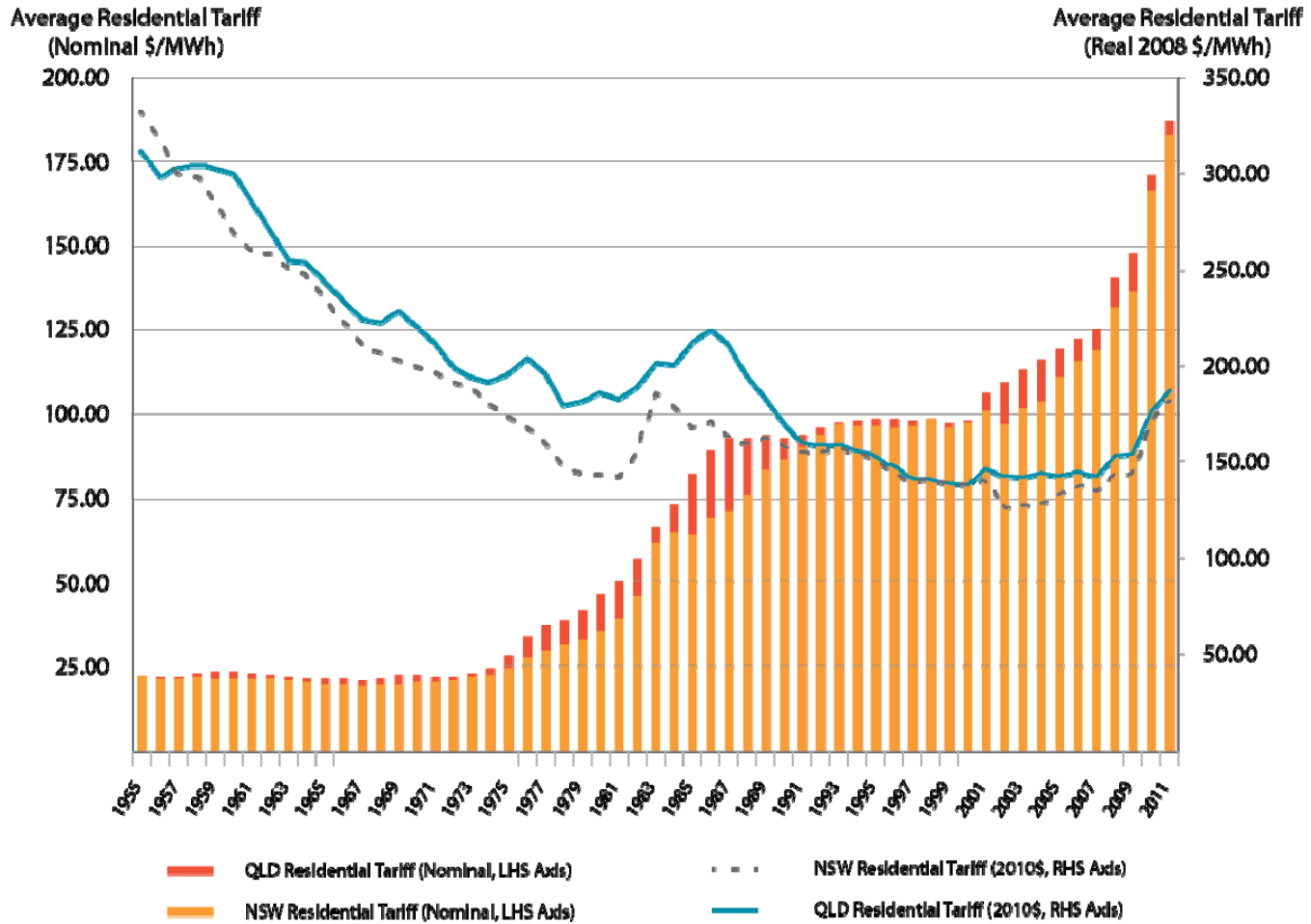


Oil dependency is growing



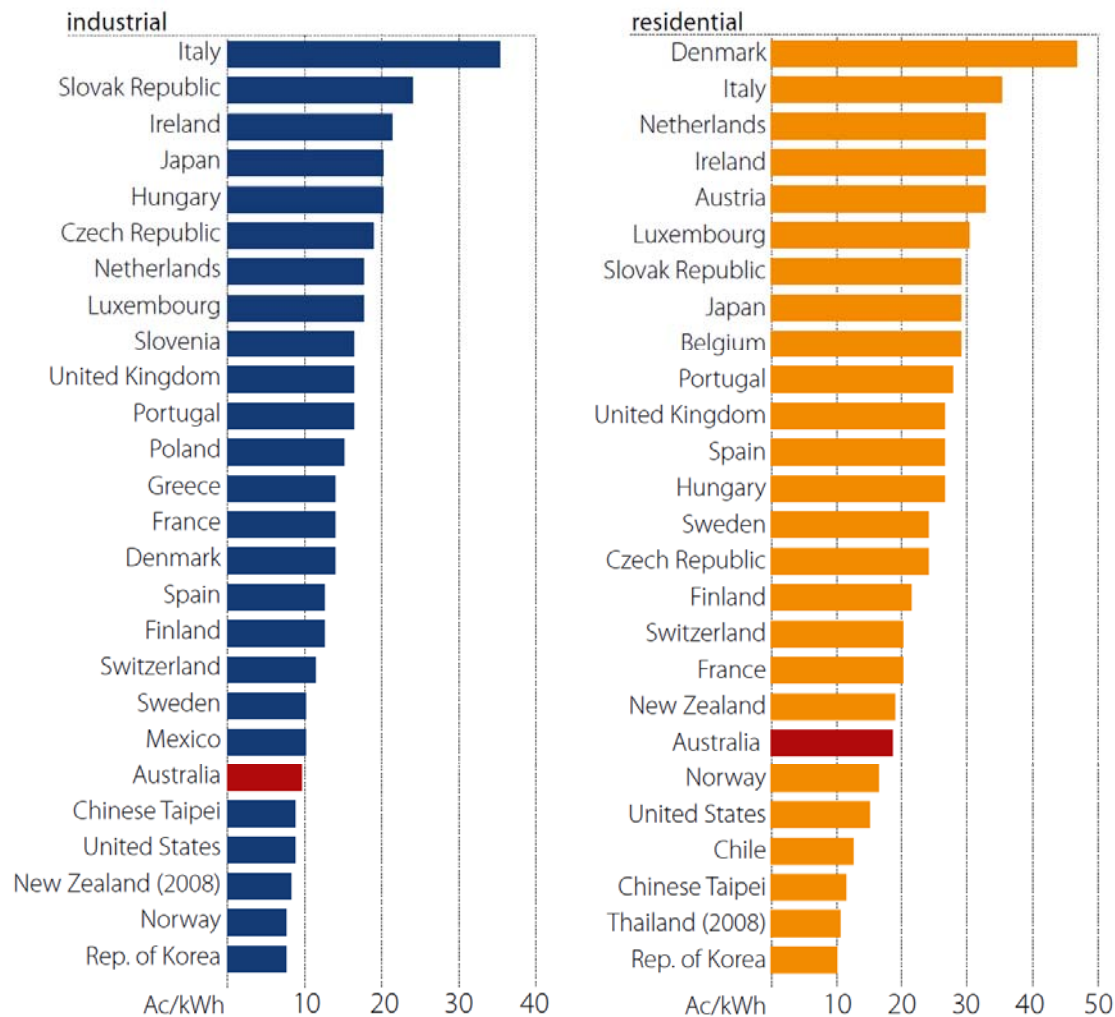
Source: ABARE, *Australian Energy Projections to 2029-30*, March 2010

History of Residential Electricity Prices in NSW and QLD



Source: AGL Energy Ltd

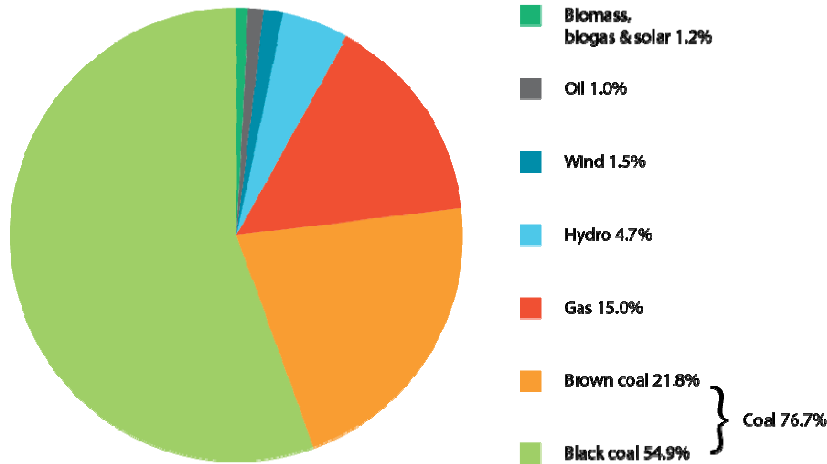
World electricity prices, selected countries, 2009 a



a Australian prices estimated using 2004 prices from IEA Energy Prices and Taxes, and ABS index of electricity prices for households and businesses.
Sources: IEA, *Energy Prices and Taxes 2010*; ABS.

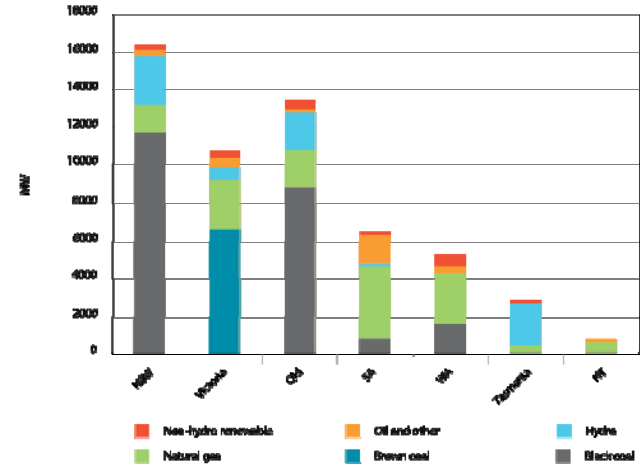
Australia's electricity generation fleet is mostly coal-fired ...

Australian electricity generation by fuel, 2008-09



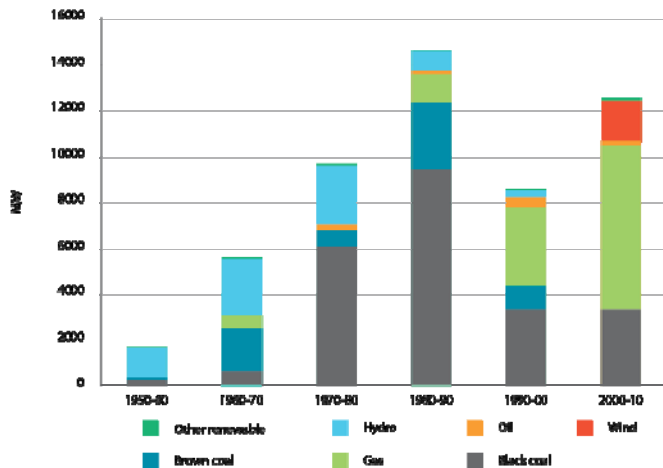
Source: ABARES

Capacity by State and Fuel



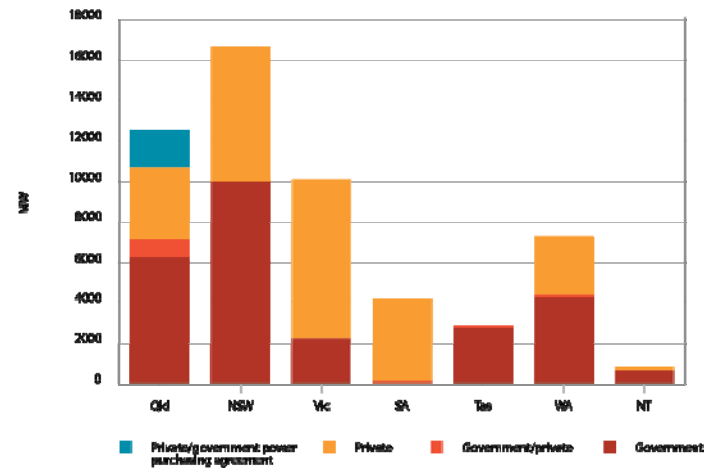
Source: ABARES

Year of Installation of Current Generation Capacity



Source: ESAA

Ownership of Generation Assets¹

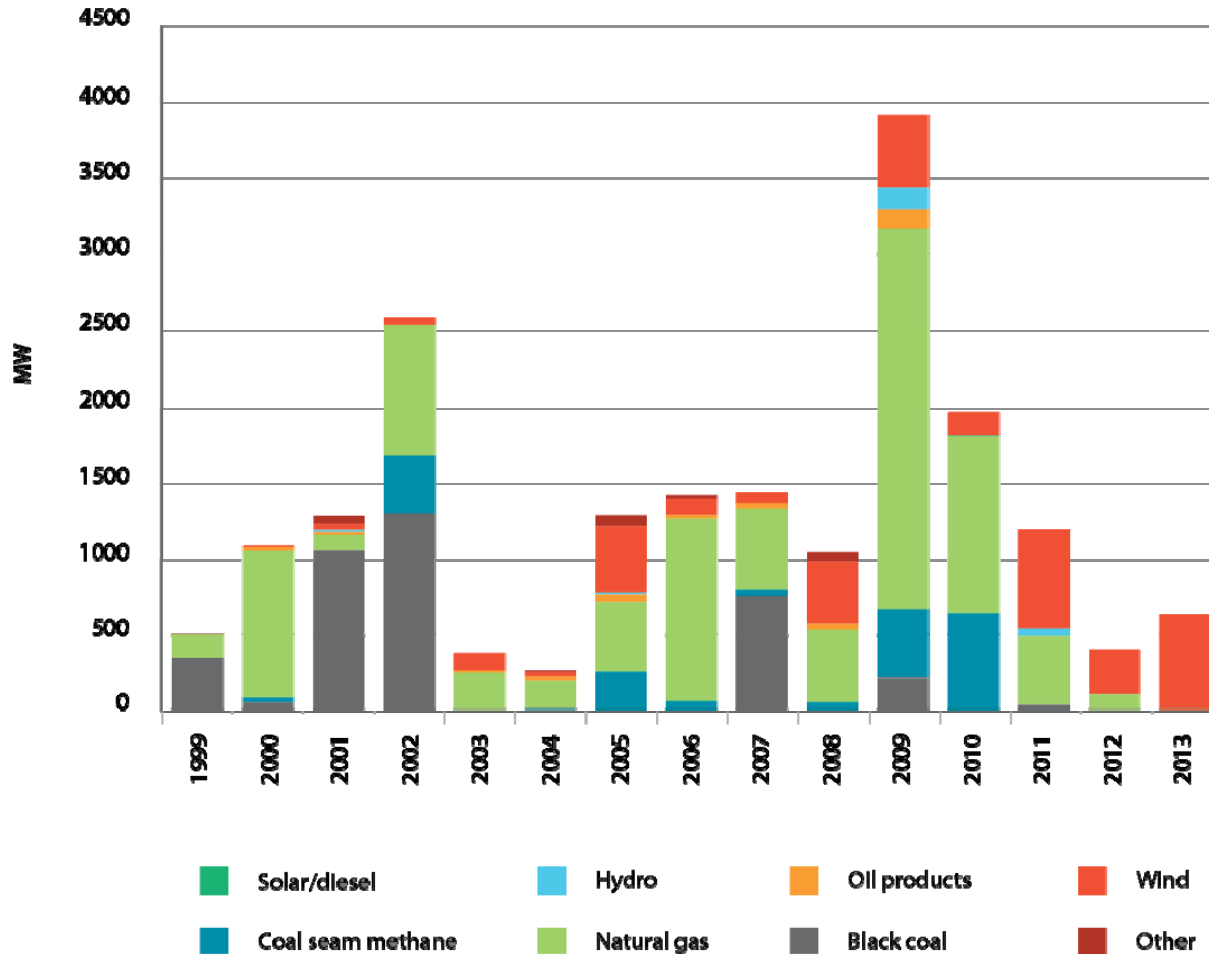


Source: AER

1. NSW includes recent Gentrader arrangements

Investment trends in electricity capacity

Capacity Installed, Committed or under Construction since 1999 (All Australia)¹

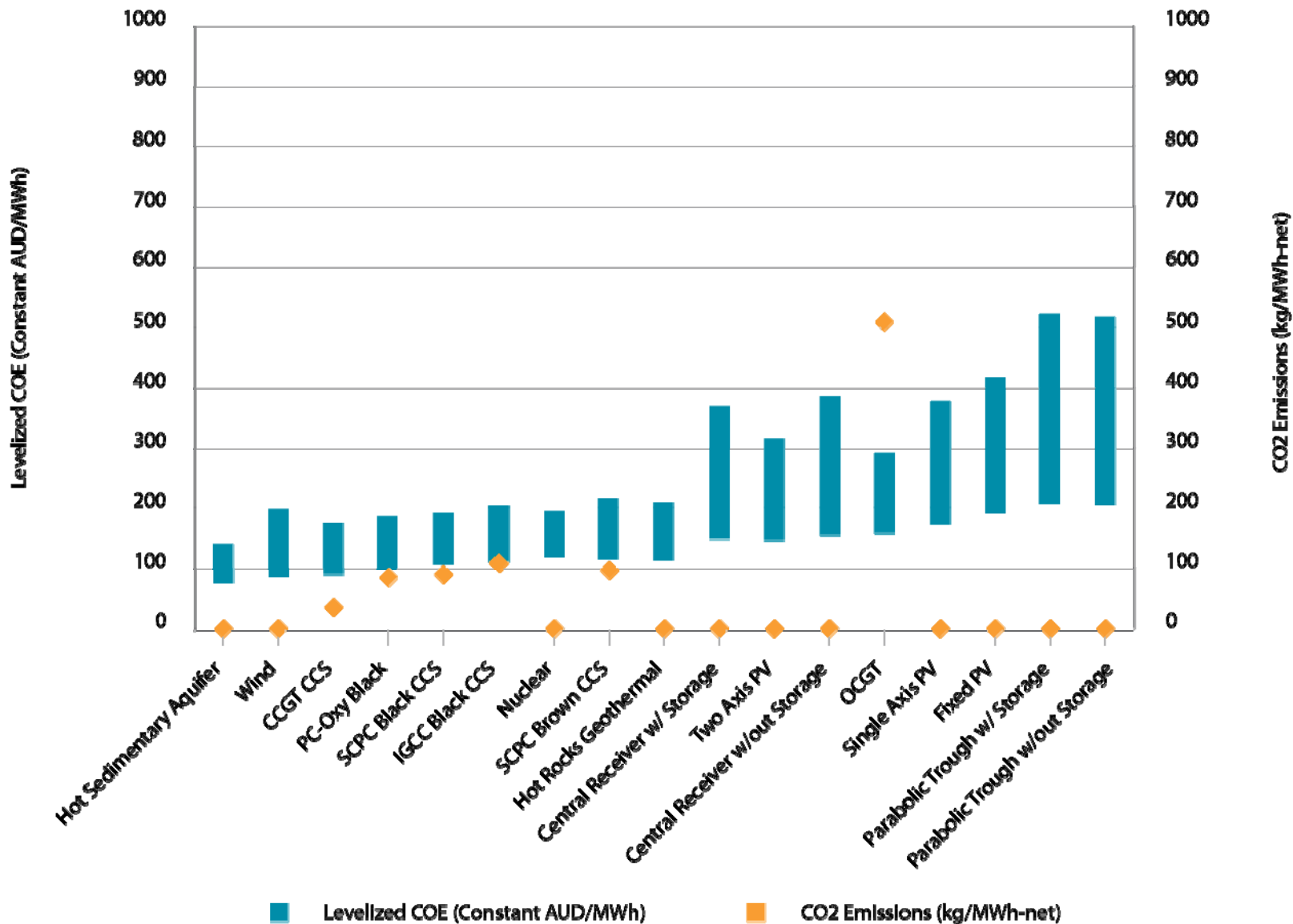


- At the end of October 2010 16 projects were either committed or under construction with a total capacity of 2297 megawatts
- An additional 148 projects with a total potential capacity of 34,661 megawatts is at a less advanced stage.

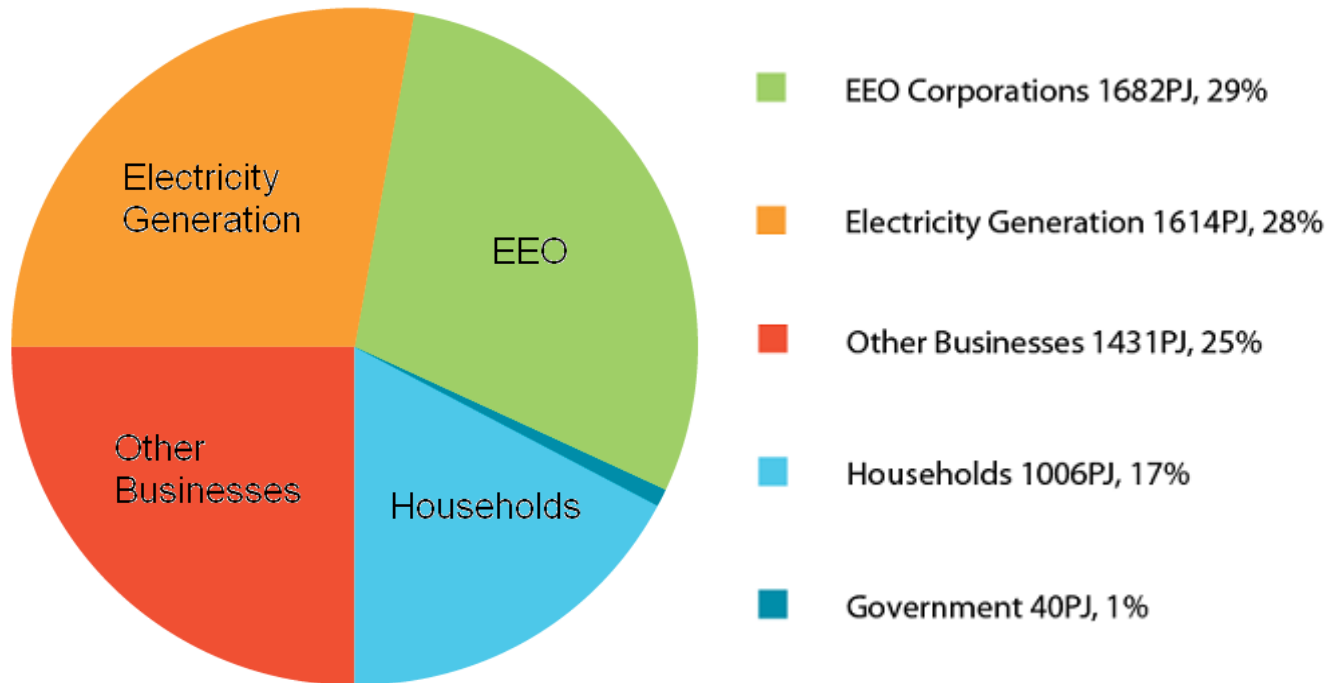
1. Year of commissioning or expected start-up year - as of October 2010.

The technology cost challenge

Technology Cost Ranges - 2030



Primary Energy Use Energy Efficiency Opportunities Program



(RET 2010)

Opportunities identified by corporations	Energy savings per year (PJ)	Net financial benefits per year (\$ million)	Emissions reductions (MtCO ₂ -e)
Opportunities to be adopted	61.5	714	6.4
Opportunities under investigation	36.3	362	3.8
Opportunities not to be implemented	1.9	174	1.3
Total identified opportunities	113.7	\$1,250 million	11.5 MtCO₂-e

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