



Australian Government

Department of the Environment and Energy

Update on Oil and Gas Security

Australia

Dr Shane Evans

Director

Economic Modelling & Analytics

Jennifer Beckman

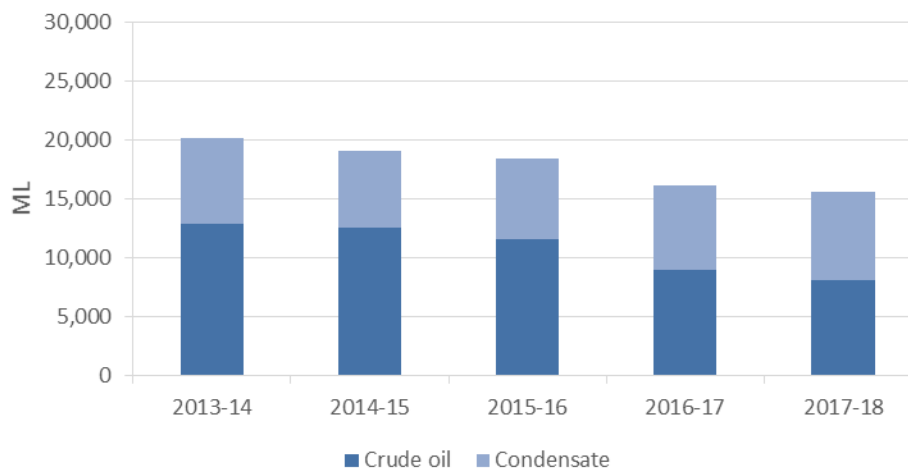
Assistant Director

Global Oil Security

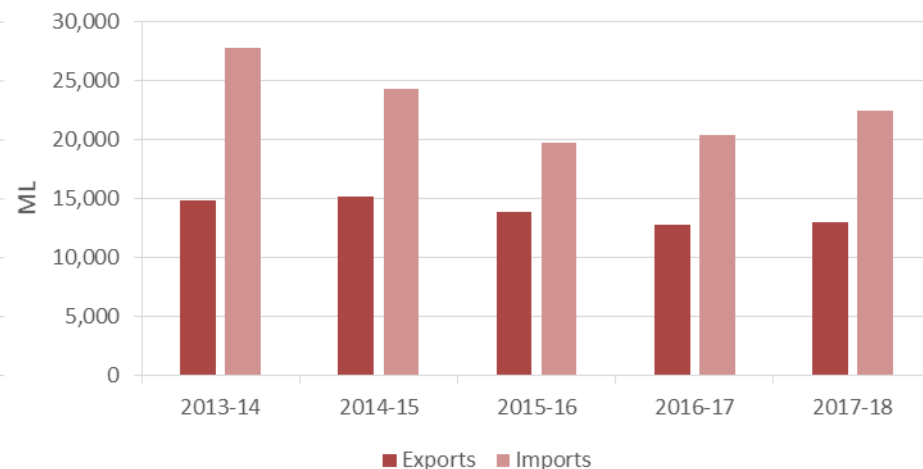


Crude Oil Supply Security

Australian crude oil & condensate



Australian crude exports and imports



Source: Department of the Environment and Energy (2018) *Australian Petroleum Statistics*, Table 1A, 4 and 5

Crude Oil Supply Security

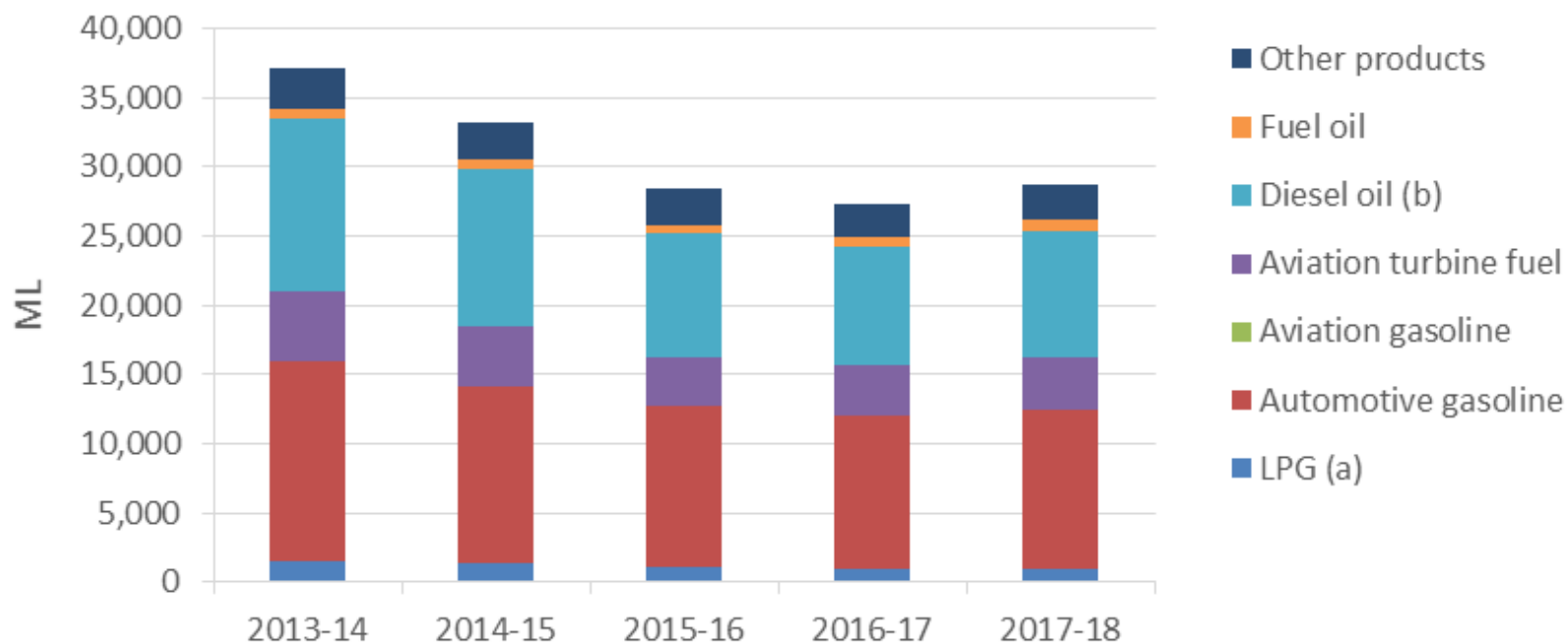
Australian crude oil & other refinery feedstocks 2017-18

Origin of imports	ML	%	Destination of exports	ML	%
Malaysia	7029	31.4	Indonesia	2608	20.0
United Arab Emirates	3812	17.0	Singapore	2117	16.2
Indonesia	1881	8.4	Thailand	2005	15.4
Nigeria	1722	7.7	Confidential	1276	9.8
New Zealand	1097	4.9	Republic of Korea	1258	9.6
Brunei Darussalam	1067	4.8	Malaysia	1152	8.8
Algeria	1012	4.5	China	1124	8.6
Gabon	1009	4.5	Japan	680	5.2
Congo	851	3.8	Papua New Guinea	289	2.2
Vietnam	848	3.8	India	226	1.7

Source: Department of the Environment and Energy (2019) *Australian Petroleum Statistics*, Tables 4A and 4B

Petroleum products supply security

Production of marketable refined products



Source: Department of the Environment and Energy (2019) *Australian Petroleum Statistics*, Table 5

(a) Includes petrochemical transfers to industry; (b) Includes automotive diesel oil and industrial & marine diesel fuel

Petroleum products supply security

2017-18 Australian import of refined petroleum products

Categories	Volume (ML)			Percentage of fuel type		
	Korea	Singapore	Japan	Korea	Singapore	Japan
Diesel oil	4,577	6,044	4,540	23%	30%	23%
Aviation turbine fuel	3,230	1,126	234	53%	18%	4%
Automotive gasoline	1,903	1,639	264	30%	26%	4%
Bitumen	387	151	-	42%	16%	0%
Lubricating oils, greases & basestocks	89	281	4	17%	54%	1%
Fuel oil	0	300	1	0%	42%	0%
Other products	49	55	0	7%	8%	0%
LPG	3	1	-	0%	0%	0%
Kerosene and heating oil	2	-	-	95%	0%	0%
Aviation gasoline	-	-	-	0%	0%	0%

Source: Department of the Environment and Energy (2019) *Australian Petroleum Statistics*, Table 4B

Petroleum products supply security

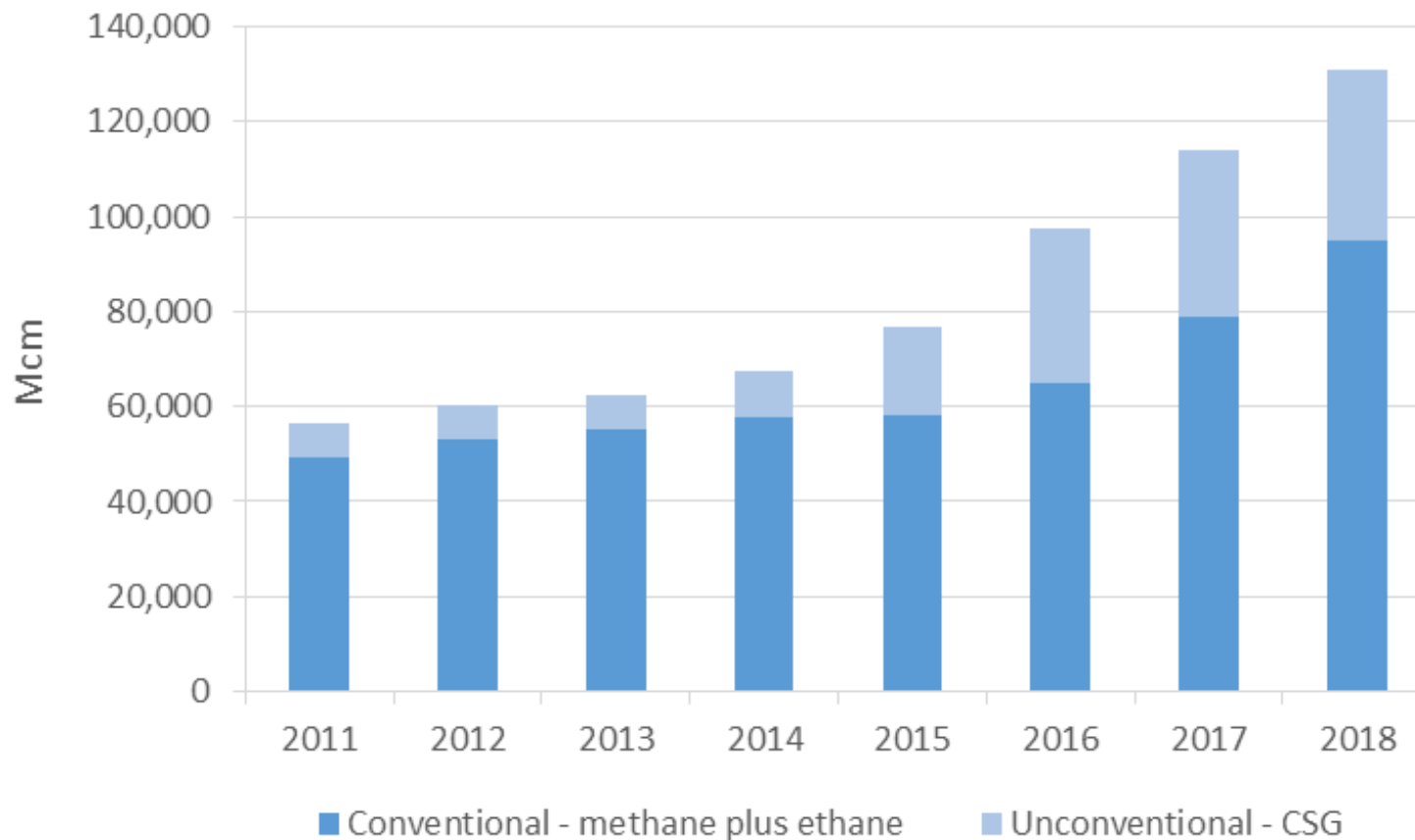
2017-18 Australian export of refined petroleum products

Categories	Volume (ML)			Percentage of fuel type		
	Singapore	Japan	China	Singapore	Japan	China
LPG	259	903	278	11%	40%	12%
Lubricating oils, greases & basestocks	225	0	1	83%	0%	0%
Fuel oil	188	-	0	38%	0%	0%
Automotive gasoline	135	-	0	89%	0%	0%
Aviation turbine fuel	98	0	-	5%	0%	0%
Other products	0	27	44	0%	7%	12%
Diesel oil (a)	28	-	-	26%	0%	0%
Aviation gasoline	-	-	-	-	-	-
Kerosene	-	-	-	-	-	-
Bitumen	-	-	-	-	-	-

Source: Department of the Environment and Energy (2019) *Australian Petroleum Statistics*, Table 5B

Natural gas supply security

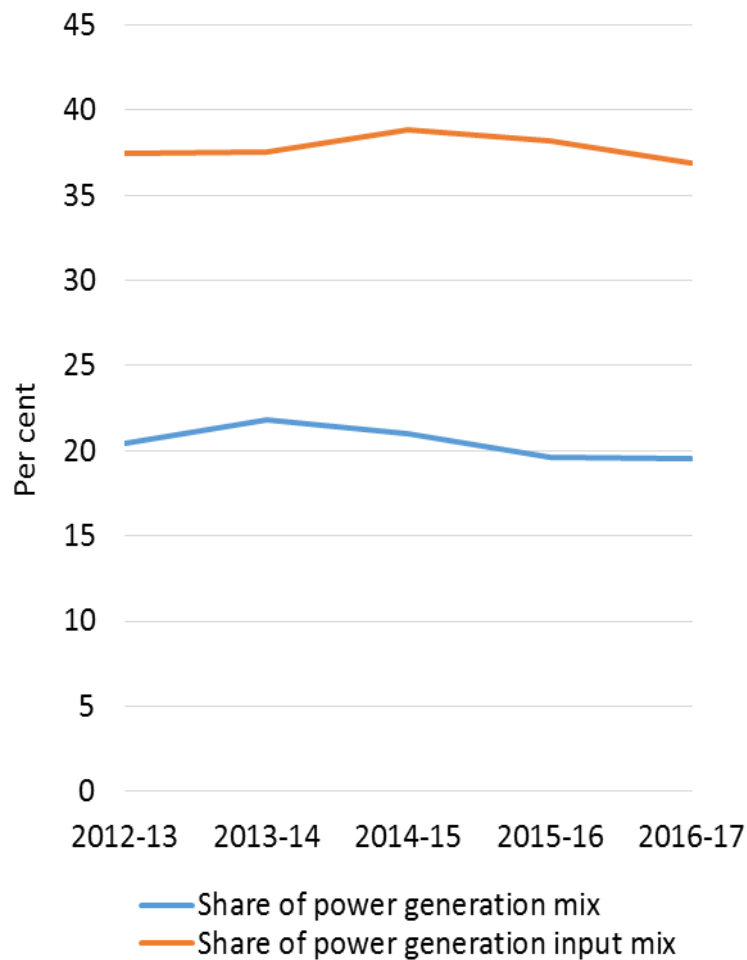
Australian natural gas production



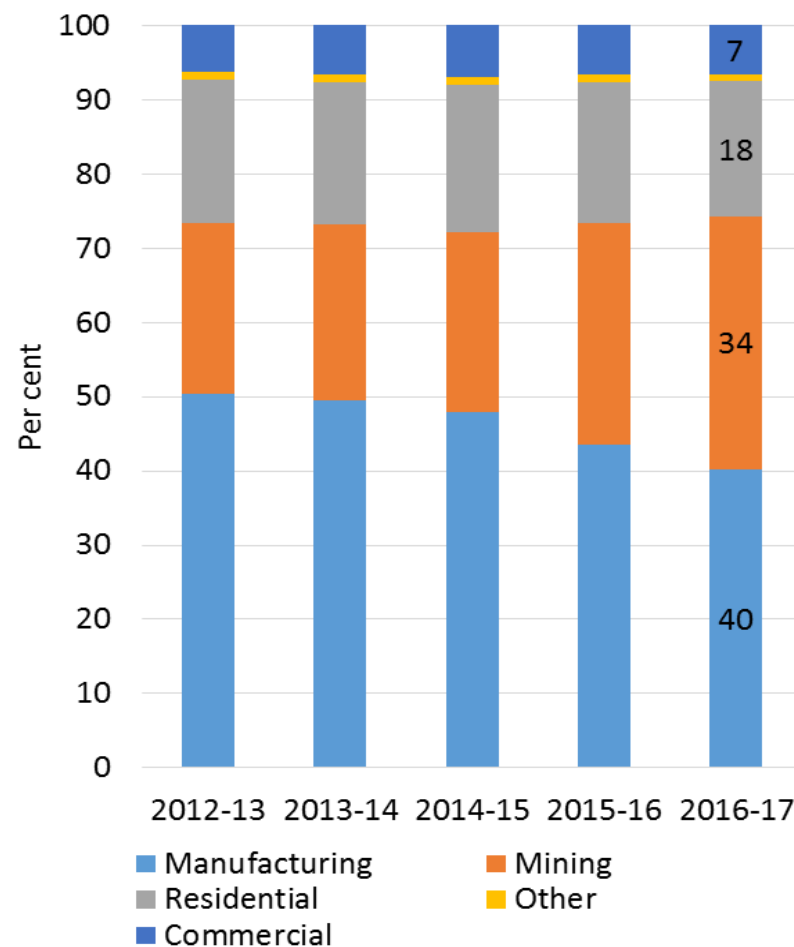
Source: Department of Industry, Innovation and Science, *Resources and Energy Quarterly December 2018*, Table 5

Natural gas supply security

Gas in the power sector



Gas share of demand, by end-use sector



Source: Department of the Environment and Energy (2018) *Australian Energy Statistics*, Table F and O

Natural gas supply security

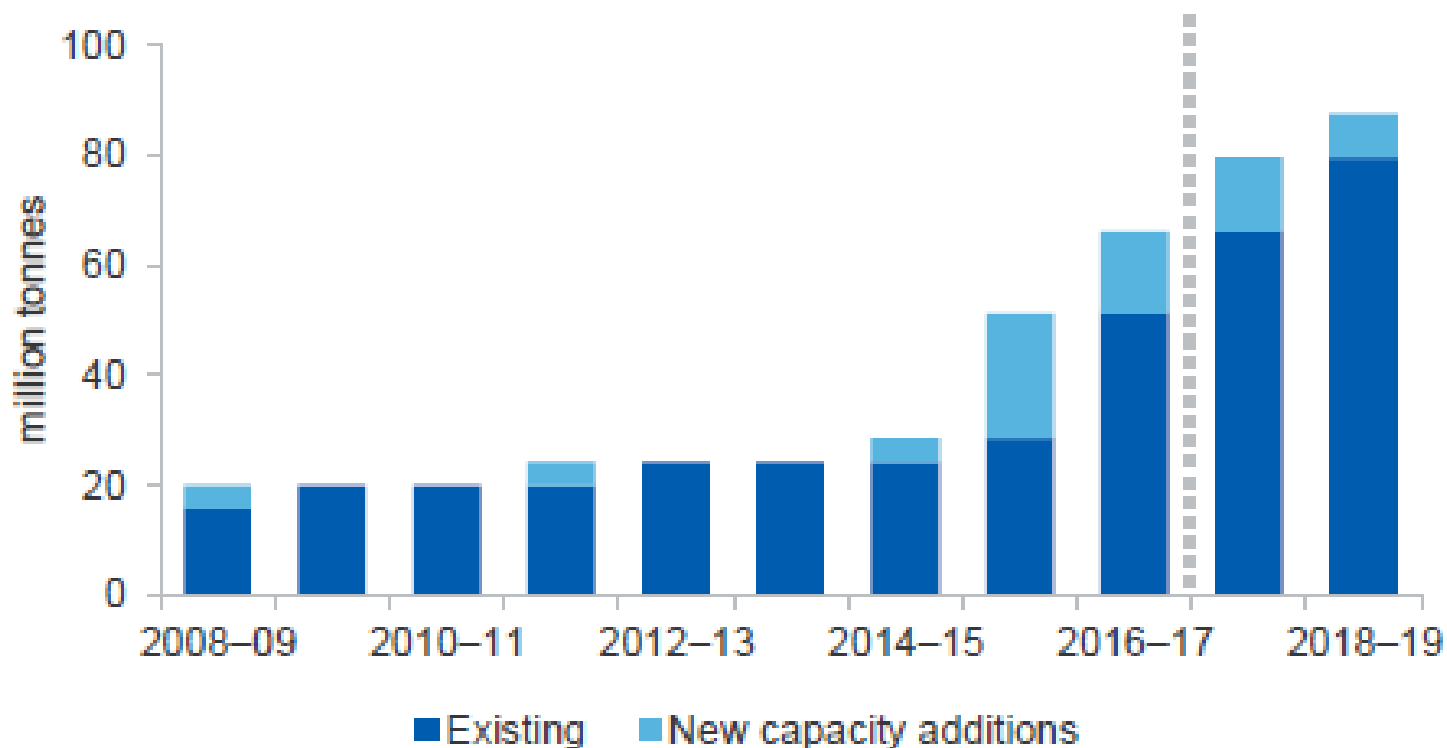
2016-17 Destination of LNG exports

Destination of LNG exports	Tonnes (millions)
Japan	24.8
China	15.0
Republic of Korea	5.6
Singapore	3.6
India	1.5
Thailand	0.3
United Arab Emirates	0.1
Kuwait	0.1
Mexico	0.1
Total ^(a)	52.2

^(a) Data for a small number of countries have been suppressed due to confidentiality but are included in the total. Totals are correct as of August 2017. Totals may not reconcile with those in Table 5BB due to the timing of revisions.

Natural gas supply security

Australian LNG liquefaction capacity



Notes: Nameplate capacity.

Source: Department of Industry, Innovation and Science (2017)

Oil and Gas Security Policy

Australia's approach to oil and gas security

- Market-based approach, backed up by strong regulatory powers:
 - establishes the market rules
 - monitors the markets
 - plans emergency response measures
- Australia has commercial and government held stocks of liquid fuel reserves:
 - Mandatory reporting of these stocks (since 2018)
 - 55 IEA days of stocks (January 2019)
 - 30 additional days of stocks outside the IEA calculation
 - 29 days consumption cover

Policy Framework - Update

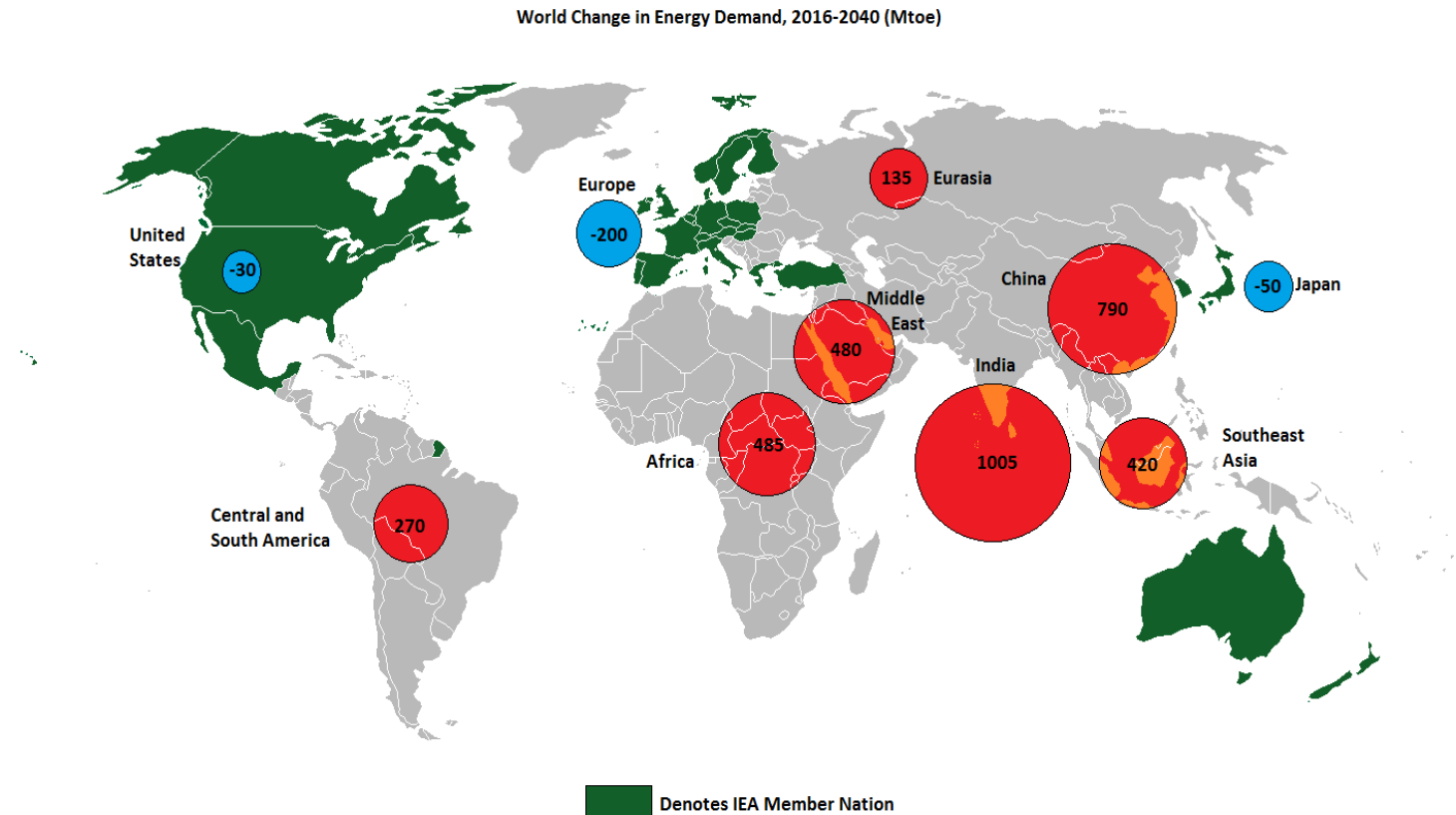
The Australian Government has committed significant funding in recent years to secure long term gas supply.

- Managing the integration of LNG and domestic markets
- COAG Energy Council Reforms
- National Energy Security Assessments
 - a review of **liquid fuel security**
 - a broader **National Energy Security Assessment (NESA)**
- Return to compliance with IEA

APEC-wide regional cooperation

Australia is advocating for a greater focus by the IEA in our region

Asia is driving global oil consumption growth, but IEA membership is limited to the two ends of the regional supply chain.





Australian Government

Department of the Environment and Energy

**Thank you
very much**

Shane.Evans@environment.gov.au
+612 6275 9049

Jennifer.Beckman@environment.gov.au
+612 6275 9714

