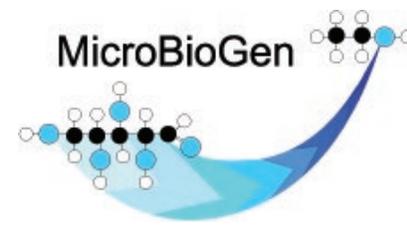


# Australia Task 42 Update November 2019

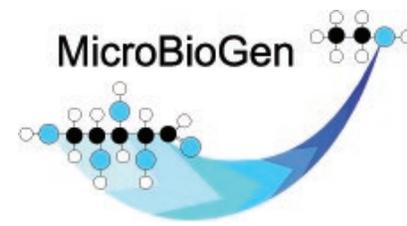


Geoff Bell - Microbiogen



## Australian emissions trends and targets

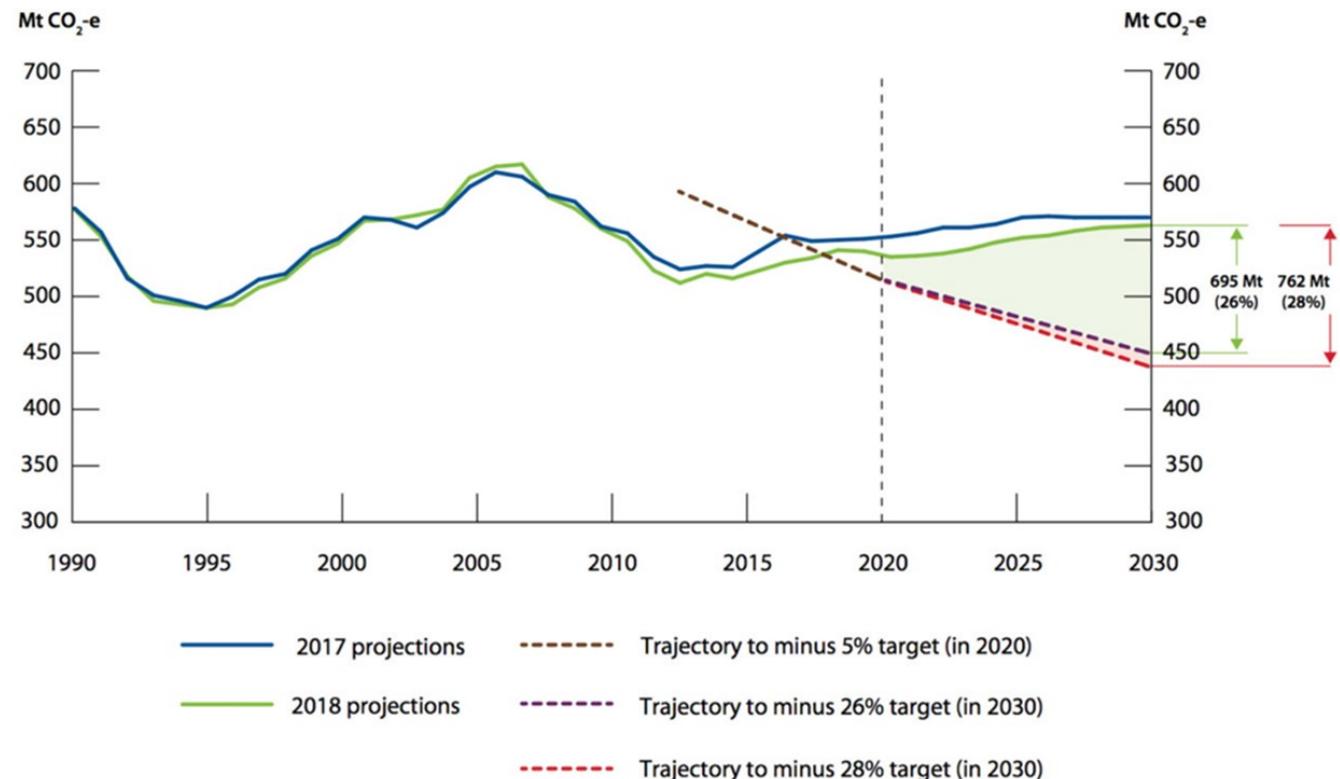
- **Current Government policies are targeting a 26% to 28% CO<sub>2</sub> reduction below 2005 by 2030**
  - Reduction is to be driven through various mechanisms
    - A\$2 billion Climate Solutions Fund
    - Snowy 2.0 pumped hydro
    - A second power from Tasmania
    - National Electric Vehicle Strategy
    - Improved energy efficiency



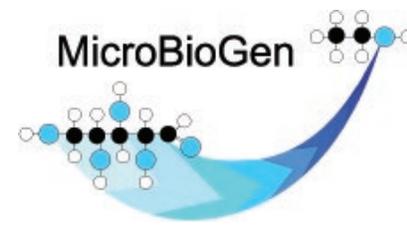
## However, analysis suggests targets may not necessarily be achieved

- Australia's emissions have been rising for the last 4 years
- Excluding adjustments for land use emissions, the increase will be about 41 million tonnes per year increase

Australia's emissions trends, 1990 to 2030

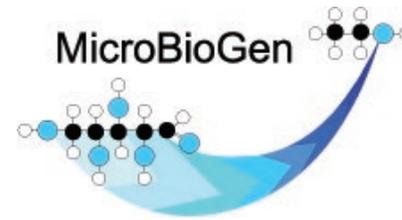


Source: Australian Federal Government: Australia's emissions projections 2018



## Barnawartha biodiesel plant brought back on line

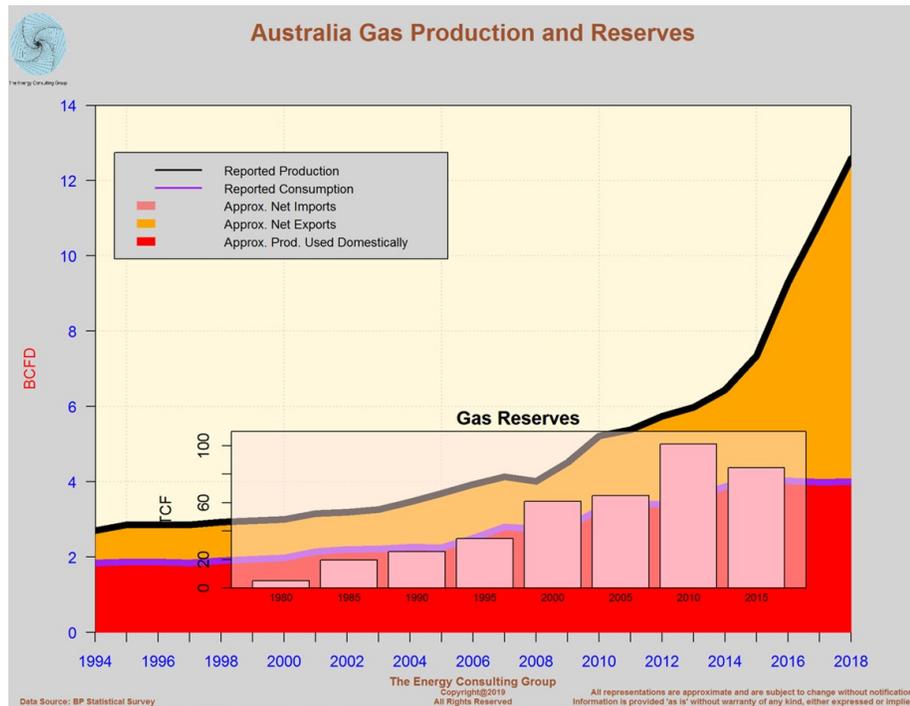
- Three years after its closure the Barnawartha biodiesel plant was reopened in July 2019
- It is the largest biodiesel plant in Australia with an annual capacity of 50 million liters
- It can produce B5, B20 and B100 fuels
- Located in north-east Victoria
- Input substrate is generally recycled vegetable oils and tallow
- Operators say that biodiesel still requires Government support
- Biodiesel excise is currently at 13% but will gradually rise to 50% by 2030
- The company suggests that tax is a major constraint in Australia in expanding the industry



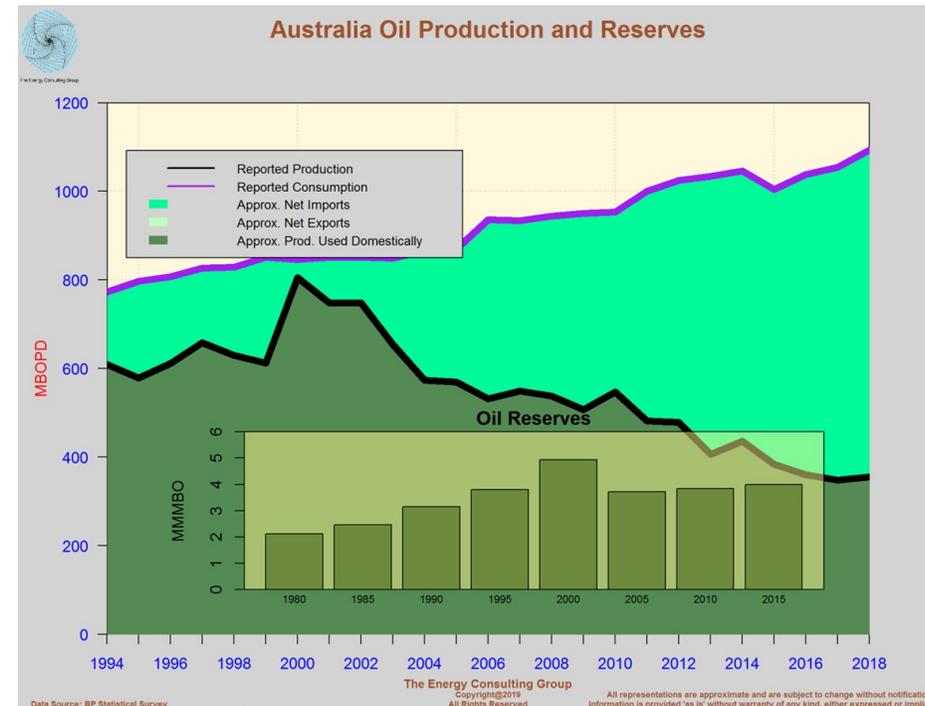
## Recent attacks on Saudi Arabia highlight Australia's fuel security issues

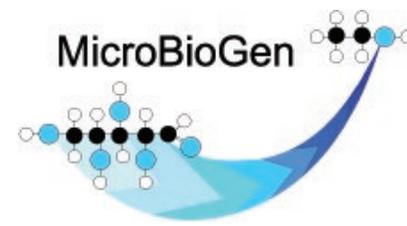
- Houthi rebels attack the world's largest oil refinery
- The facility is damaged reducing output by 5 million barrels/day – highlights vulnerability of oil importers

Plenty of gas...



... but not much oil



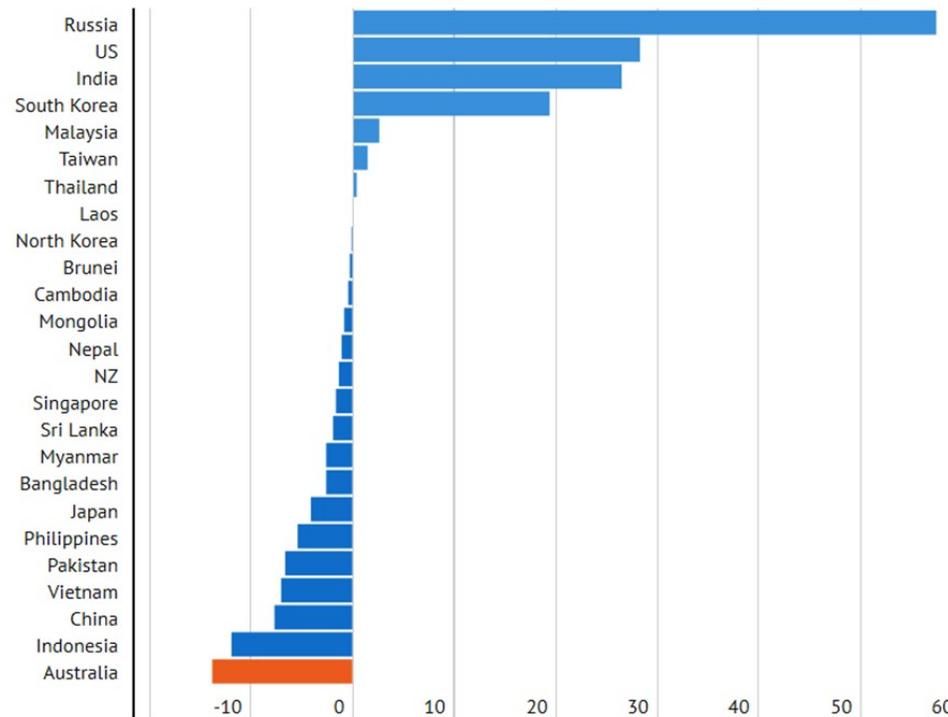


## Australia is now the most oil dependent importing nation in Asia

- Australia's net imports of refined petroleum increased 34% between 2016 and 2017.
- Net imports are now the highest in the Asia Power Index.

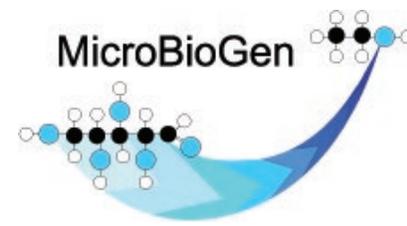
### Net exports of refined petroleum\* (\$b)

Among the 25 countries in the Lowy Institute Asia Power Index, Australia has the highest net imports of refined petroleum



\* Current dollars, 2017

Source: Lowy Institute Asia Power Index



## Australia has the lowest reserves of the IEA's 30 member states

- Australia has a total of 55 days of oil product reserves
- It has just 27 days of petrol, 21 days of diesel and 23 days of jet fuel and 31 days of crude in storage
- By contrast, Japan has 183 days of fuel reserves
- All other IEA countries are meeting their obligations – except Australia

## The development of a domestic bioenergy/biofuel industry would help alleviate this problem

- Diversity fuel sources
- Increase renewables and energy resilience
- Expand job opportunities outside of the major cities



## CEFC continues to deliver value and projects in Australia

- Through 2018/19, the CEFC committed over A\$1.4B to various projects around Australia
- The greatest commitment was in NSW at close to A\$400M.
- Over 50% of the funds went towards renewable energy with only a small % going to low emissions technologies
- Energy efficiency which is often considered the “low hanging fruit” received about 45% of total funds.

New commitments by geographic location 2018–19

	CEFC commitments	Total value
ACT	\$66.9m	\$258.0m
NSW	\$397.7m	\$782.8m
QLD	\$0.7m	\$2.9m
SA	\$194.9m	\$589.8m
TAS	–	\$301.3m
VIC	\$250.3m	\$1,750.0m
WA	\$222.2m	\$1,093.4m
National	\$330.0m	\$1,529.8m
<b>TOTAL 2018–19</b>	<b>\$1,462.8m</b>	<b>\$6,307.9m</b>

**Renewable energy**  
2018–19  
**\$940M**  
Portfolio  
**53.1%**

**Energy efficiency**  
2018–19  
**\$494M**  
Portfolio  
**44.5%**

**Low emissions technologies**  
2018–19  
**\$30M**  
Portfolio  
**2.4%**