



Australia country update

IEA Task 39 Meeting

15-17 May 2019

Ispra, Italy

Latest Scalp in Australian Climate War

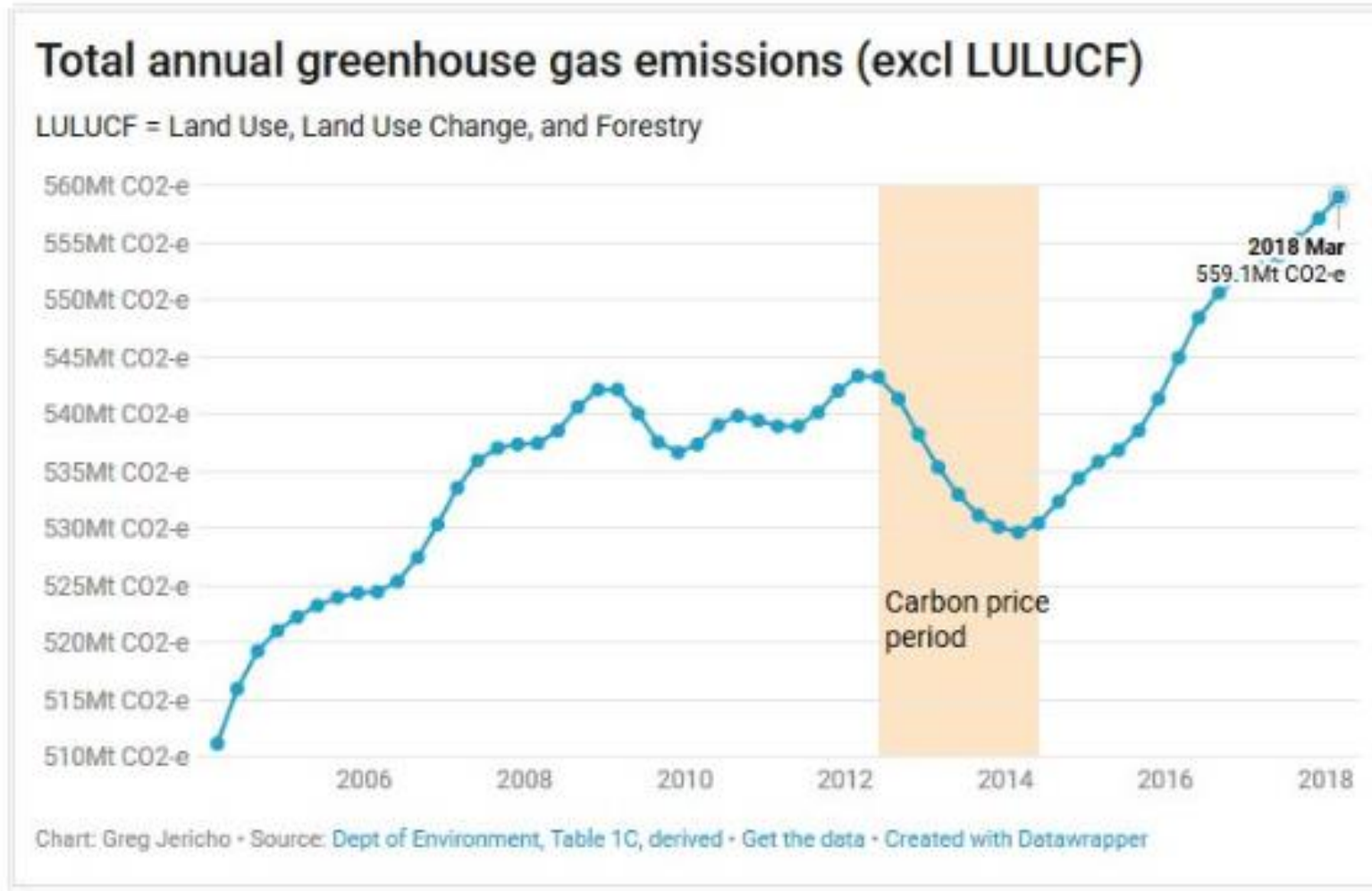


24 Aug 2018 <https://www.theguardian.com/australia-news/live/2018/aug/24/liberal-spill-malcolm-turnbull-peter-dutton-scott-morrison-liberal-spill-politics-parliament-live>

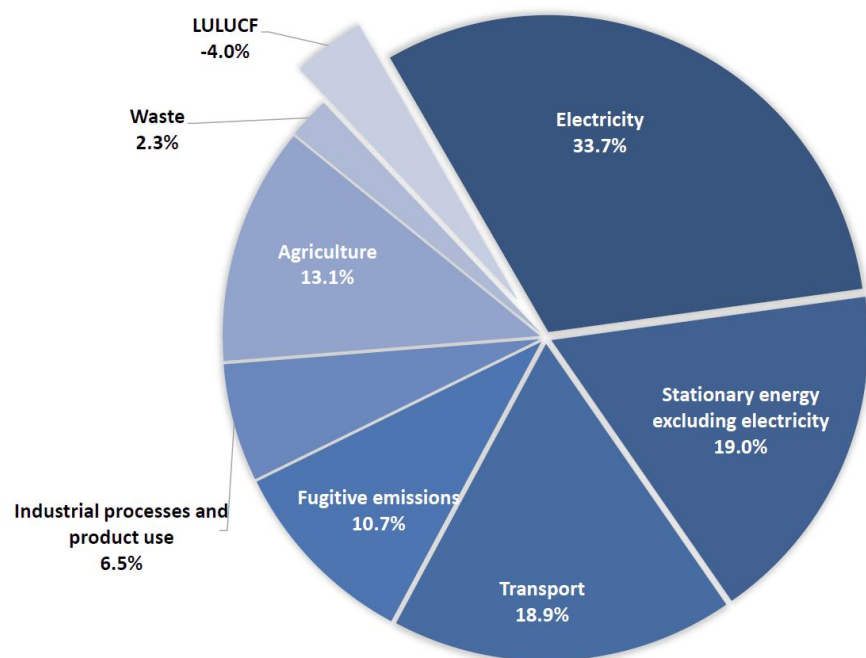


<https://www.abc.net.au/news/2019-03-04/scott-morrison-holds-a-lump-of-coal-in-parliament-1/10866170>

Australian GHG increasing



Australian GHG increasing



Source: Department of the Environment and Energy

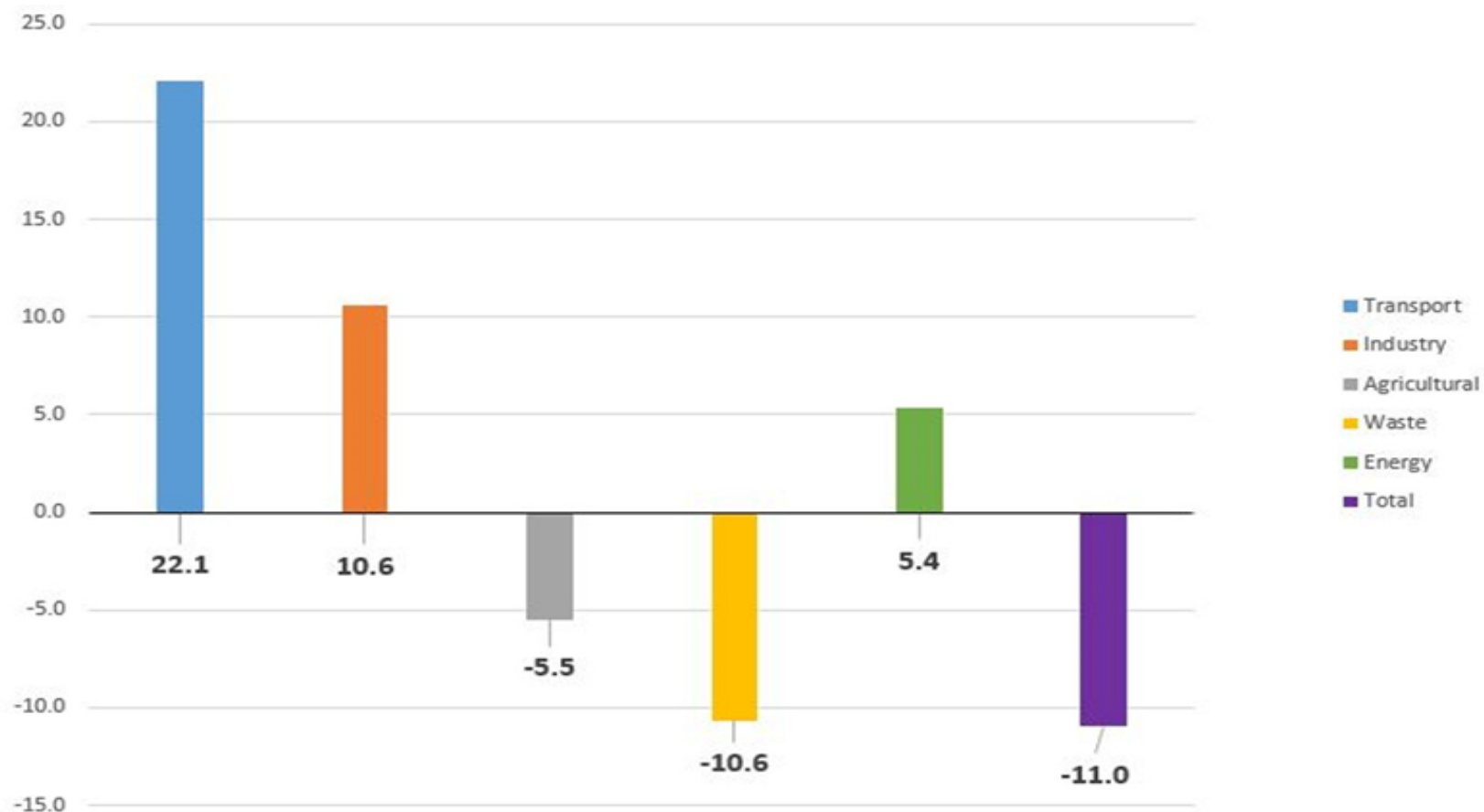
Sector	Annual emissions (Mt CO ₂ -e)		
	Year to September 2017	Year to September 2018	Change (%)
Energy – Electricity	186.3	180.4	-3.2
Energy – Stationary energy excluding electricity	96.0	101.6	5.8
Energy – Transport	99.3	101.3	2.0
Energy – Fugitive emissions	53.4	57.3	7.3
Industrial processes and product use	33.6	34.7	3.2
Agriculture	72.4	70.3	-3.0
Waste	11.9	12.1	1.7
Land Use, Land Use Change and Forestry	-21.6	-21.7	-0.3
National Inventory Total	531.4	536.0	0.9

Transport emissions increased 2%, reflecting an 8.4% increase in diesel consumption

Emissions contribution by sector, year to September 2018

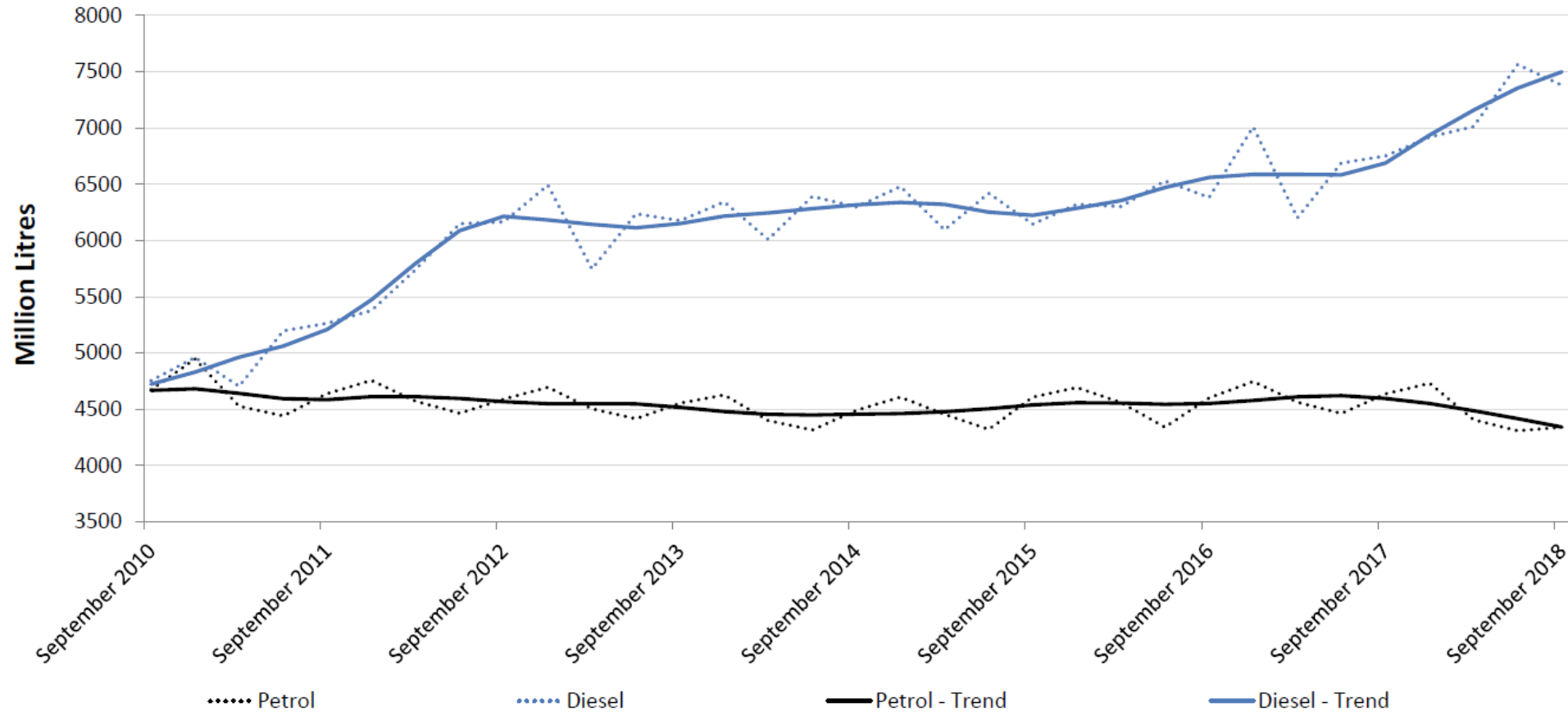
<http://www.environment.gov.au/system/files/resources/4391288e-fc2b-477d-9f0b-99a01363e534/files/nggi-quarterly-update-sept-2018.pdf>

Transport emissions up 22% - 2005-2017



<http://www.environment.gov.au/system/files/resources/c2a05f9f-b95b-4a0a-b10c-21b5eda91ced/files/nggi-quarterly-update-nggi-september-2017.pdf>

Australian Transport GHG increasing

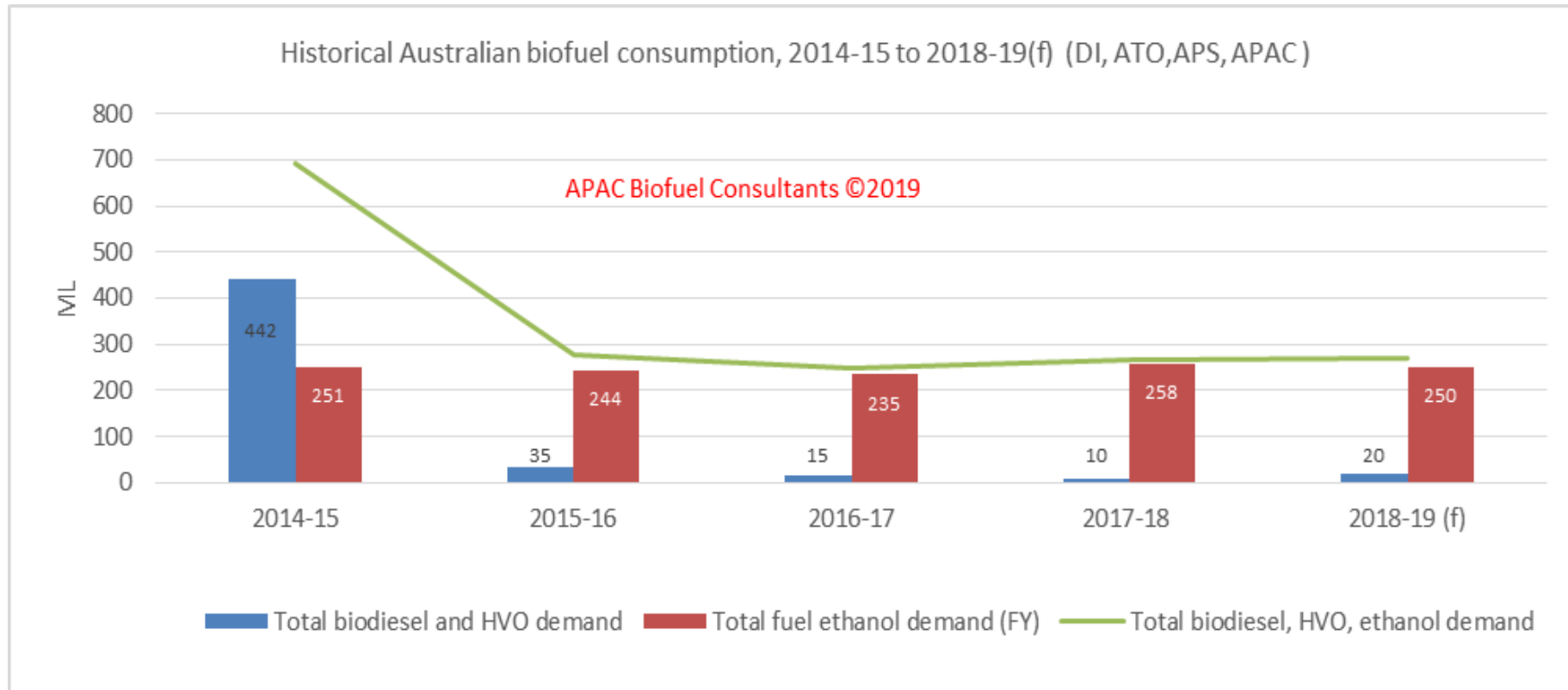


<http://www.environment.gov.au/system/files/resources/4391288e-fc2b-477d-9f0b-99a01363e534/files/nggi-quarterly-update-sept-2018.pdf>

Still no National Renewable Fuels Target

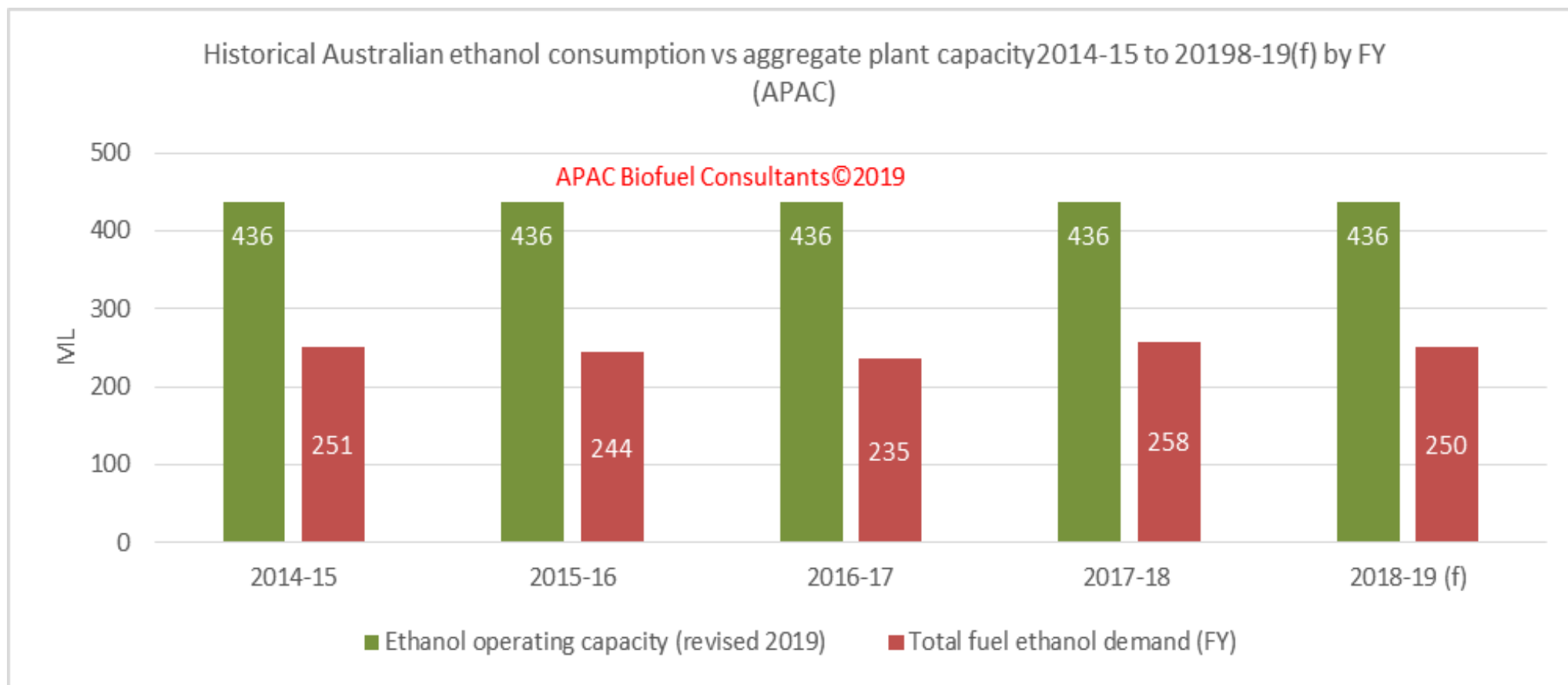
State/ Territory	Target	Target Date	Net zero Emission Target	Current % Renewable Energy	Biodiesel Mandate %age	Ethanol Mandate %age
ACT	100%	2020	2050	22		
SA	50%	2050		47		
VIC	40%	2025	2050	12		
Queensland	50%	2030	2050	7	0.5%	4%
NSW	No target		2050	17	5.0% (achieving 0.1%) *	6% (achieving 2.5%) *
Tasmania	100%	2022	2050	92		
WA	No target		No	7		
Northern Territory	50%	2030	No	2		
National	26%	2030				

Australian Biofuels Consumption



<https://www.eccoaustralia.com/biofuels.html>

Ethanol consumption compared to current installed capacity



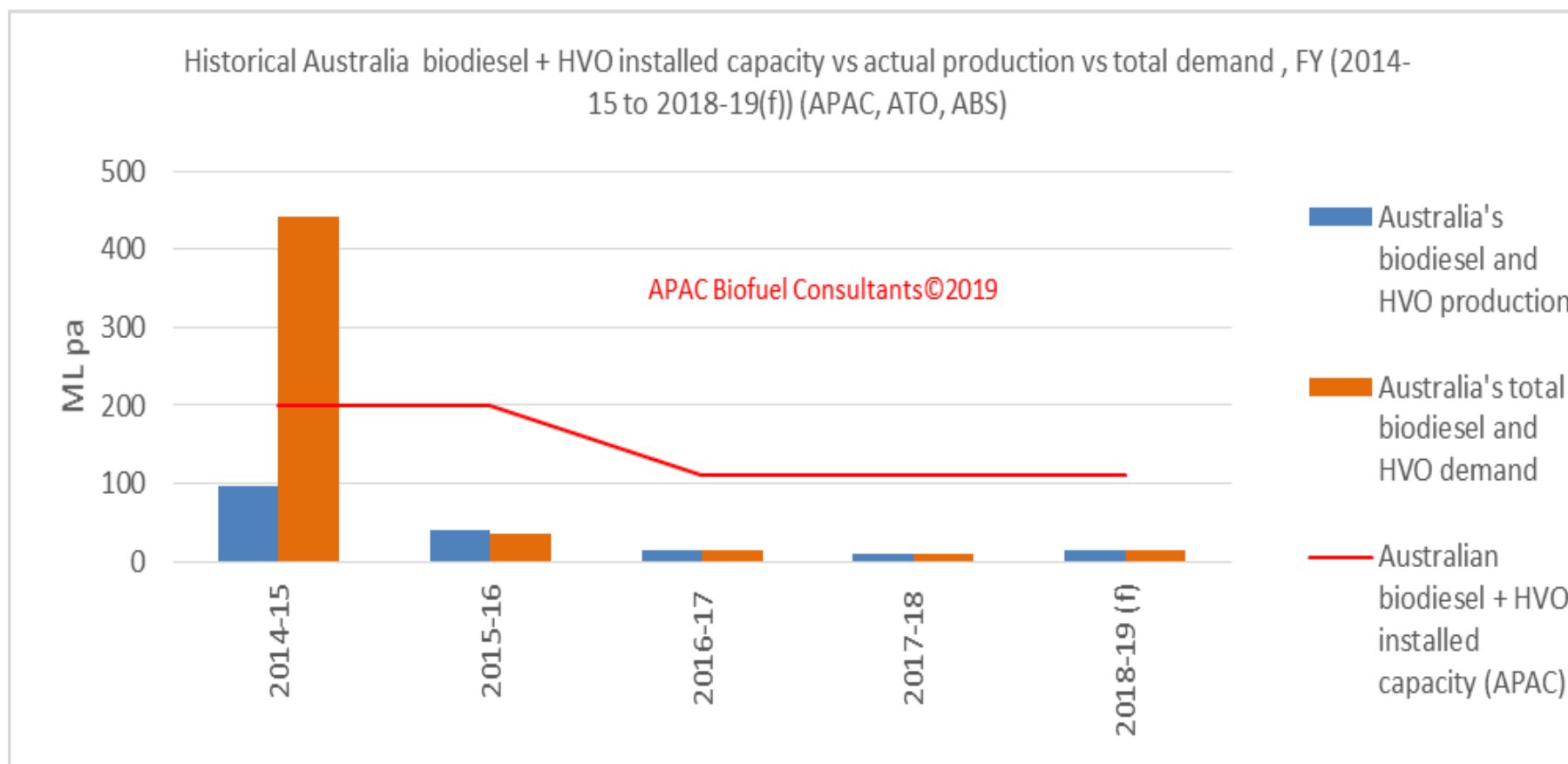
<https://www.eccoaustralia.com/biofuels.html>

Australia's operating ethanol plant, capacities and feedstocks - 2019

Australia's current operating ethanol plants and capacity 2019 (ML pa)(APAC)			
Plant	Location	ML	Feedstock
Manildra	Nowra, NSW	300	Waste wheat starch from gluten and food starch manufacture
Wilmar Bioethanol	Sarina, Qld	60	Molasses from sugar refining
Dalby Bio-Refinery*	Dalby, Qld	76	Greenfield plant - mainly sorghum
Total currently operating		436	

<https://www.eccoaustralia.com/biofuels.html>

Historical Australian biodiesel, HVO demand and production compared with plant capacity



<https://www.eccoaustralia.com/biofuels.html>

Australia's operating biodiesel plant, capacities and feedstocks - 2019

Australia - installed capacity of operating biodiesel /HVO plants, 2019 (ML pa) (APAC)

Operating	Location	ML	Feedstock	Status comment
Biodiesel Industries, NSW	Rutherford, NSW	15	UCO, tallow	Operating below capacity
Eco Tech (Gull), Qld	Narangba, Qld	30	UCO, tallow	Operating below capacity
Just Biodiesel	Barnawartha, Vic	60	tallow	Recommissioned April 2019
BioWorks, WA	Henderson, WA	4	UCO, tallow	Supplying local market
Eccofuels	Echuca, Vic	2	canola	Producing for self or local industry
Total operating		111		

<https://www.eccoaustralia.com/biofuels.html>

Federal Biofuel Incentives

- Reduced Excise

- Ethanol

ethanol means denatured ethanol:

- (a) for use as fuel in an internal combustion engine; and
- (b) complying with the applicable fuel standard for such fuel.

- Bio Diesel

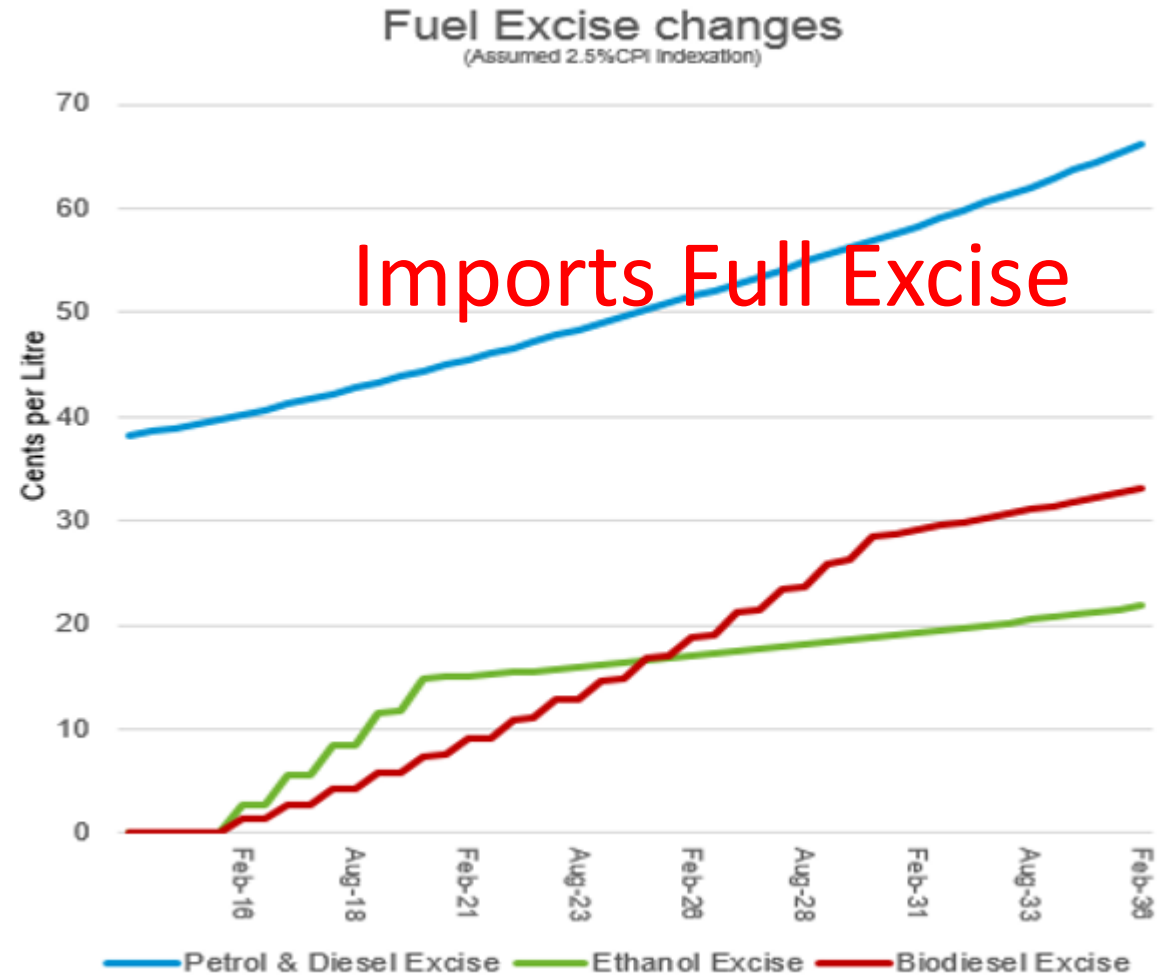
biodiesel means fuel that:

- (a) is manufactured by chemically altering vegetable oils or animal fats (including recycled oils from these sources) to form mono-alkyl esters; and
- (b) complies with the applicable fuel standard for such fuel.

- Renewable Diesel

(1) For the purposes of this Act, *renewable diesel* means liquid fuel that:

- (a) is manufactured by chemically altering vegetable oils or animal fats (including recycled oils from these sources) through a process of hydrogenation (whether or not that process was part of some other process); and
- (b) complies with the applicable fuel standard for diesel.



Labor



- **Develop a Bioenergy Strategy** to boost the development of this important industry in Australia (\$2 million over the forward estimates). Bioenergy has significant potential in helping Australia meet its emission reduction goals, help reduce waste, improve energy security and boost regional development.

LABOR'S CLIMATE CHANGE ACTION PLAN

Labor (Left) Policy



- 3) Boosting Clean Transport and Infrastructure through Australia's first National Electric Vehicle Policy and implementing vehicle emissions standards
- 5) Kickstarting Australia's Hydrogen Economy with a \$1 Billion plan to create new jobs, support new businesses and supercharge Australia's renewable energy industry

A Shorten Labor Government will take real action on climate change by:

1. Making Australia a Renewable Energy Superpower by ensuring that 50 per cent of the nation's electricity is sourced from renewable energy by 2030, and empowering households and businesses to take advantage of cheap, clean renewable energy and storage.
2. Supporting the Transition to Cleaner and Cheaper Power by implementing Labor's National Energy Plan and ensuring an orderly transition for industries, communities and workers.
3. Boosting Clean Transport and Infrastructure through Australia's first National Electric Vehicle Policy and implementing vehicle emission standards.
4. Building Jobs and Industry by partnering with industry to help businesses find innovative solutions to bring down pollution, support trade exposed industries, and build the new jobs and industries of the future.
5. Kickstarting Australia's Hydrogen Economy with a \$1 billion plan to create new jobs, support new businesses and supercharge Australia's renewable energy industry.
6. Cutting Pollution by Extending the Safeguard Mechanism to bring down pollution from Australia's biggest polluters, in line with our international obligations, while supporting jobs and competitiveness.
7. Reducing Pollution on the Land by reinvigorating the Carbon Farming Initiative to supply carbon offsets and reduce pollution on the land, and taking action to deal with broad-scale land clearing.
8. Increasing Energy Efficiency by implementing a comprehensive Energy Productivity and Efficiency Review and through measures like our Manufacturing Energy Efficiency Accelerator program, harmonising state energy efficiency schemes and allowing ARENA to invest in energy efficiency projects.
9. Reviving International Engagement on Climate Change by reinstating an Australian Climate Ambassador, reengaging constructively in the UNFCCC process and supporting our Pacific neighbours.
10. Restoring Australia's Climate Change Institutions by restoring and reforming the Climate Change Authority and implementing triennial Climate Change Assessments.

Forecasts for Electric Vehicles

EV sales take off in 2021 in the Moderate Intervention scenario

Energeia finds that EV sales grow slowly for the next decade in the No Intervention scenario and do not take off until 2027. But in the Moderate Intervention scenario, EV sales take off in 2021 and reach 50 per cent of new car sales by 2030, taking EVs to over 90 per cent of Australia's fleet by 2050.

**EV's over 90%
by 2050!**

FIGURE 4: EV SHARE OF SALES

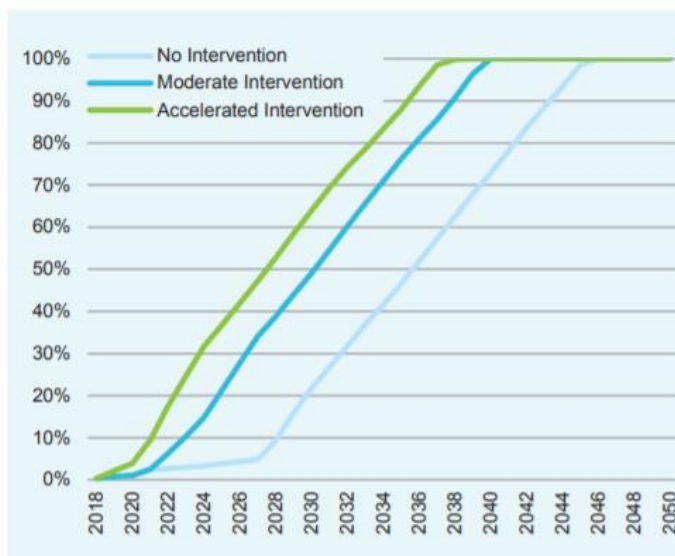
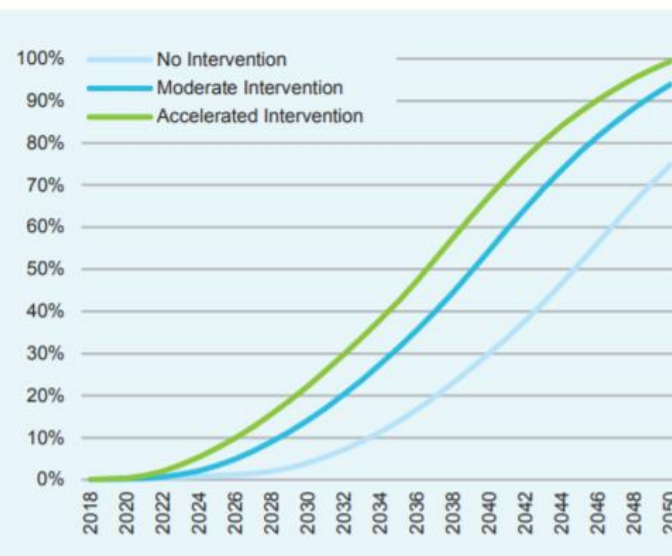


FIGURE 5: CUMULATIVE EV UPTAKE



Source: Energeia

<https://www.cefc.com.au/media/401922/cefc-snapshot-electric-vehicles-jun2018.pdf>

Australian Biofuel – Future Strategy & Policy

Please tell us your views on what works and what doesn't