



# AUSTRALIAN ECONOMY IN FOR AN ELECTRIC SHOCK

# Agenda: The Preposterous Australian Energy Shock

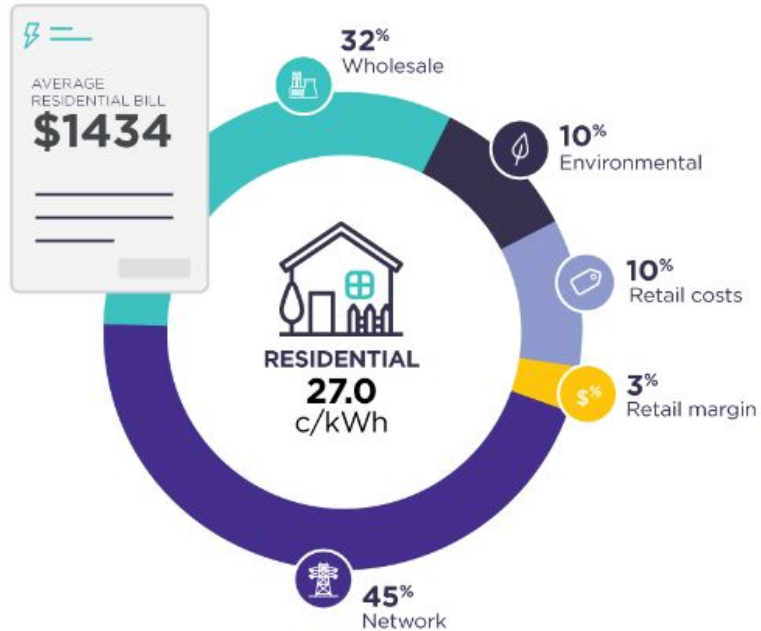
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- Global prices for key energy inputs hit home
- A brief history of gas markets
- Why Australia is different
- What to do about it
- Investment implications

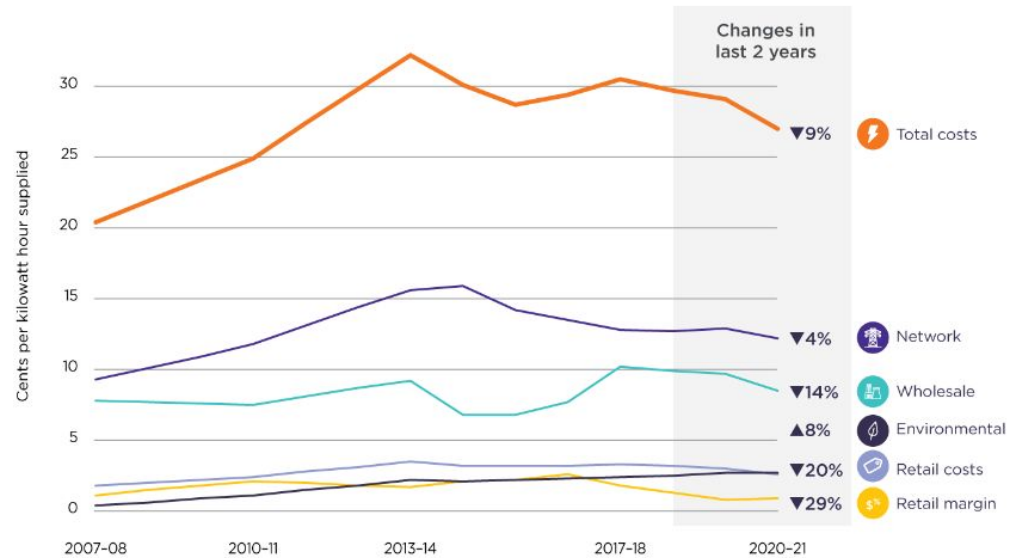
# ACCC celebrating a little too early...

Cost of supplying electricity to households at an eight-year low

## BREAKDOWN OF ANNUAL COSTS 2020-21



## RESIDENTIAL ELECTRICITY SUPPLY COSTS OVER TIME





# A brief history of gas prices

- Traditional gas of \$3-4Gj
- Post-GFC LNG build-out
- Santos said it had enough gas. Third party purchases
- Gas is cheap
- LNG overbuilt
- Shell buys LNG trains and Arrow energy plus reserve consolidation. ACCC failure
- RSPT tax legacy
- 2014 begins the crisis

Figure 5 Actual and forecast total annual gas consumption, all sectors, Step Change scenario, 2015-41 (PJ)

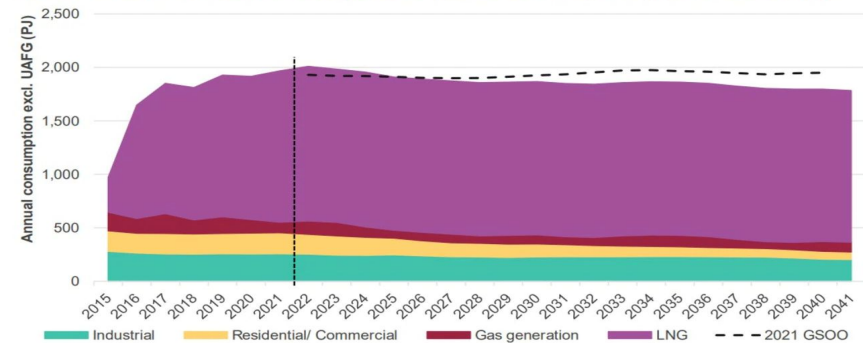


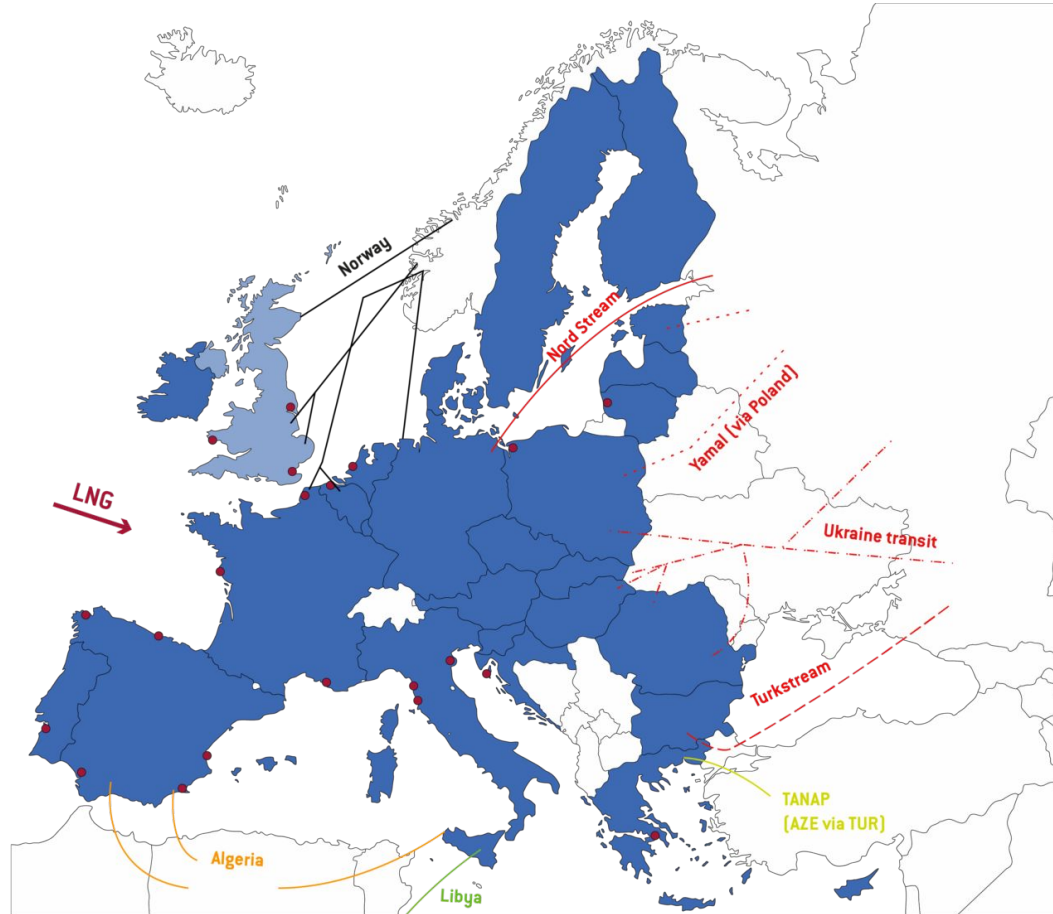
Table 3.8 Comparison of delivered costs by LNG value chain component to China's south

Export origin	Gas production (US\$/mmbtu)	Liquefaction (US\$/mmbtu)	Shipping (US\$/mmbtu)	Total cost (US\$/mmbtu)
Malaysia Borneo ( <i>Asia Pacific</i> )	1.84	4.20	0.38	6.42
PNG ( <i>PNG LNG</i> )	2.62	4.23	0.81	7.66
Australia West ( <i>Gorgon</i> )	3.70	5.64	0.64	9.98
Australia East ( <i>APLNG</i> ), CSG				
low gas cost	3.54	5.15	0.85	9.54
medium gas cost	5.72	5.15	0.85	11.72
high gas cost	8.22	5.15	0.85	14.22

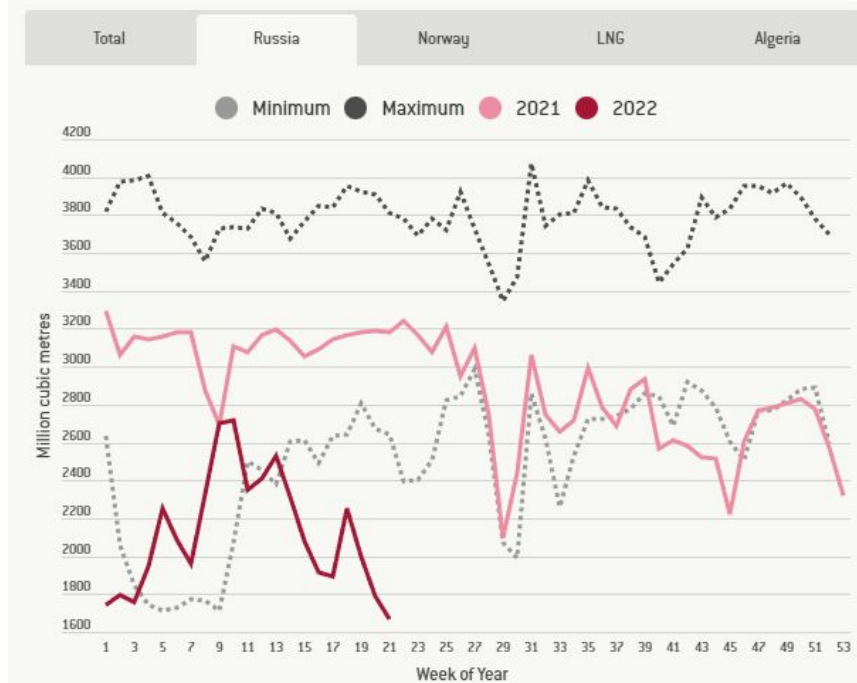
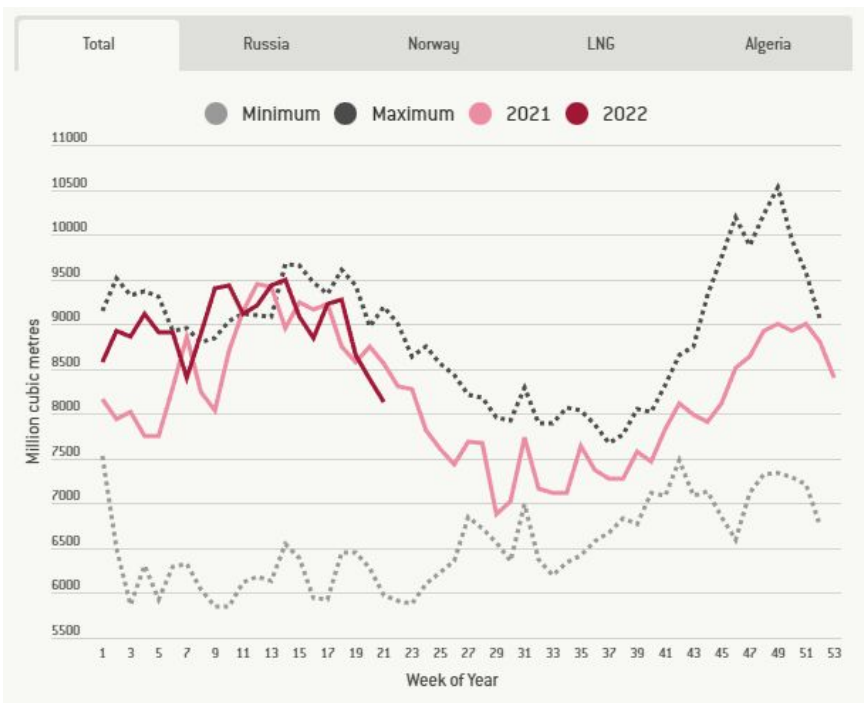
Source: The WGM and author's calculation.

Note: The shipping cost is estimated as LRMC in 2020. There could be an additional cost of US\$1.50 a mmbtu for infrastructure in PNG LNG, which would increase total cost to US\$9.16 a mmbtu, slightly lower than the total cost of LNG from Australia East with low gas cost for CSG.

# European Gas Imports



# European Gas Imports



Source: ENTSO-G, <https://transparency.entsog.eu/#/map>

Note: Minimum and Maximum values are calculated from the period 2015-2020.

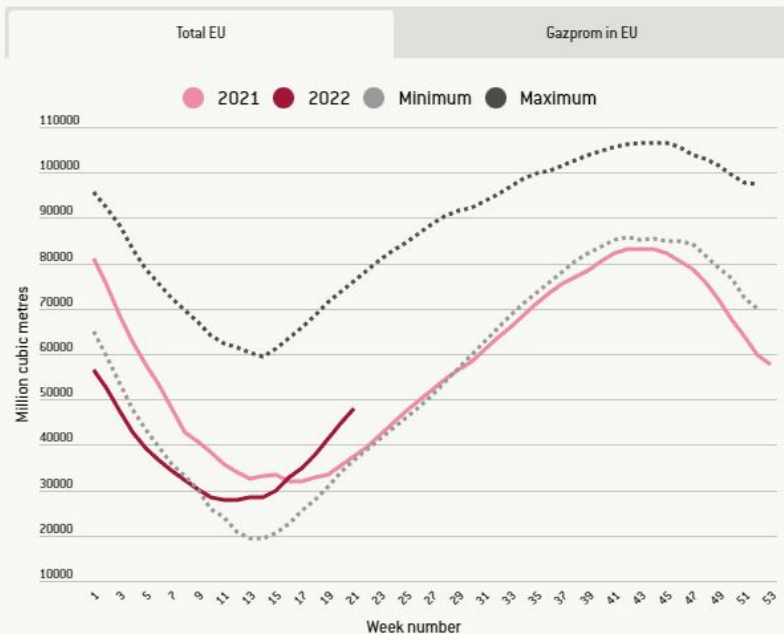
Data for the last week may be changed following updates to ENTSO-G points. As of 25/12/22, Norway imports at Emden were updated and Krik Croatian LNG was included resulting in changes to underlying data. On 01/04/2022, weeks 10,11,12 LNG data were revised downward due to a double-counting of Spanish LNG imports which arose as a result of changes to the reporting at the ENTSO-G transparency platform.



# European Gas Storage

Figure 5: EU Gas Storage

Last updated: 31/05/2022 (updated every Tuesday)



Source: AGSI: <https://agsi.gie.eu/#/>

Note: Minimum and Maximum values are calculated from the period 2015-2020.

Note: On 15 December 2021 we improved the methodology for the aggregation of Gazprom storage and revised the data accordingly

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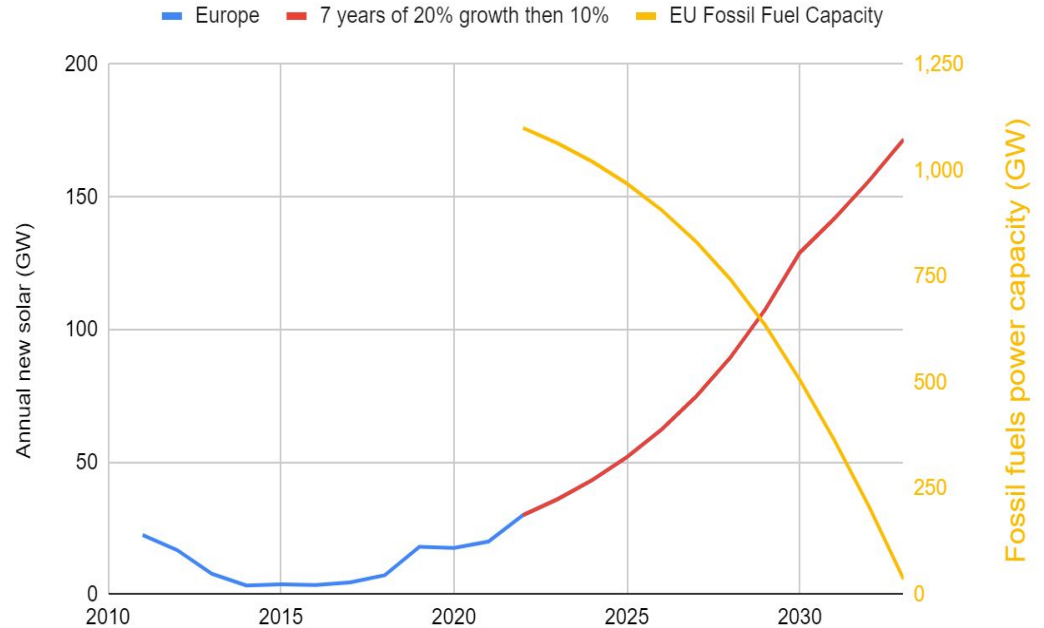
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# Global Implications

- No global energy price solution without European solution
- US have promised more gas. Prices have tripled in US (but still 70% lower than Europe). More LNG to come.
- Europe setting a path to renewables. Short term economics not the priority.
- China somewhat insulated. Vast coal reserves, increased Mongolian and Russian imports, rapid renewable growth.
- Australia (without reservation) at the mercy of world prices

Europe path to renewables



# What to do about it

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- More domestic production will fail
- LNG imports will fail
- 100% export levy?
- WA gas reservation & ADGSM?
- Must be expanded to coal for NSW and QLD
- Easy economically, hard politically (RSPT)
- Massive carbon tax versus carbon price



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### Effective

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Investment fees start at 0.11%, administration fees reduce the more you invest.



## Viewer question of the week:

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**Should Australia intervene in the energy markets?**

**Drop your answers in the comments**

# Investment implications

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- Just the beginning if no action
- Europe marginal price setter
- RBA cornered but already priced
- Possible yield accident
- AUD and recession (house prices)
- Policy will determine earnings

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