



**MINISTRY OF BUSINESS,  
INNOVATION & EMPLOYMENT**  
HĪKINA WHAKATUTUKI

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# MBIE's perspective on offshore wind potential for New Zealand and the current regulatory regime

Phillippa Fox,  
Deputy Secretary - Buildings, Resources and Markets

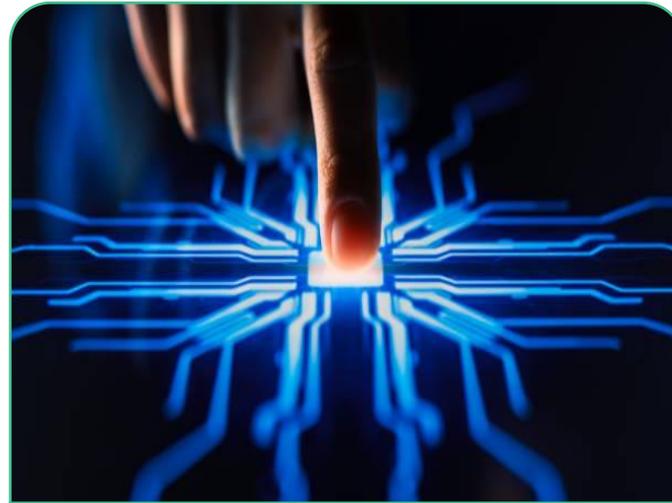
Offshore future energy forum  
November 2021



The energy system is on the verge of unprecedented change driven in part by the “three D’s”



**Decentralisation**



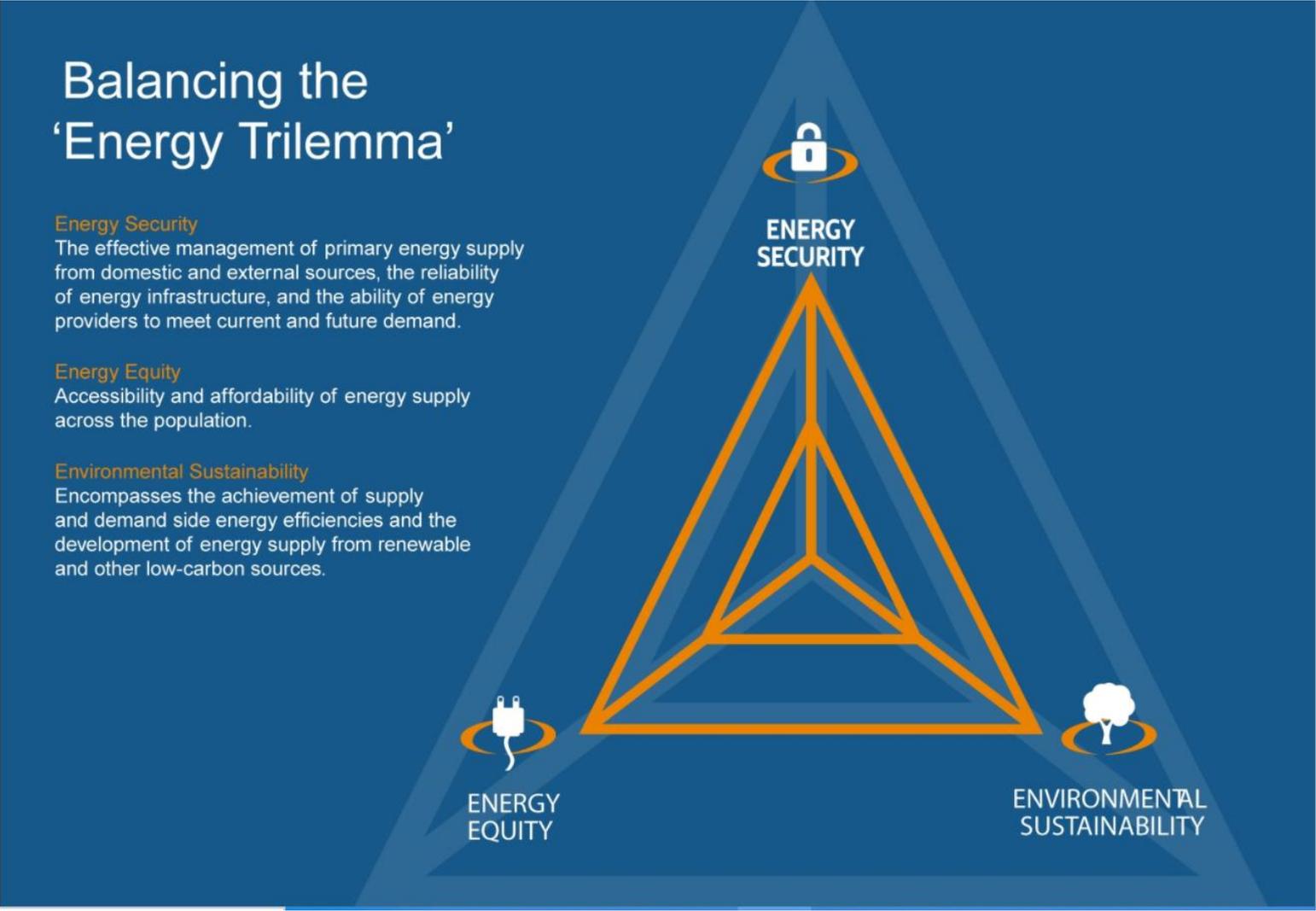
**Digitisation**



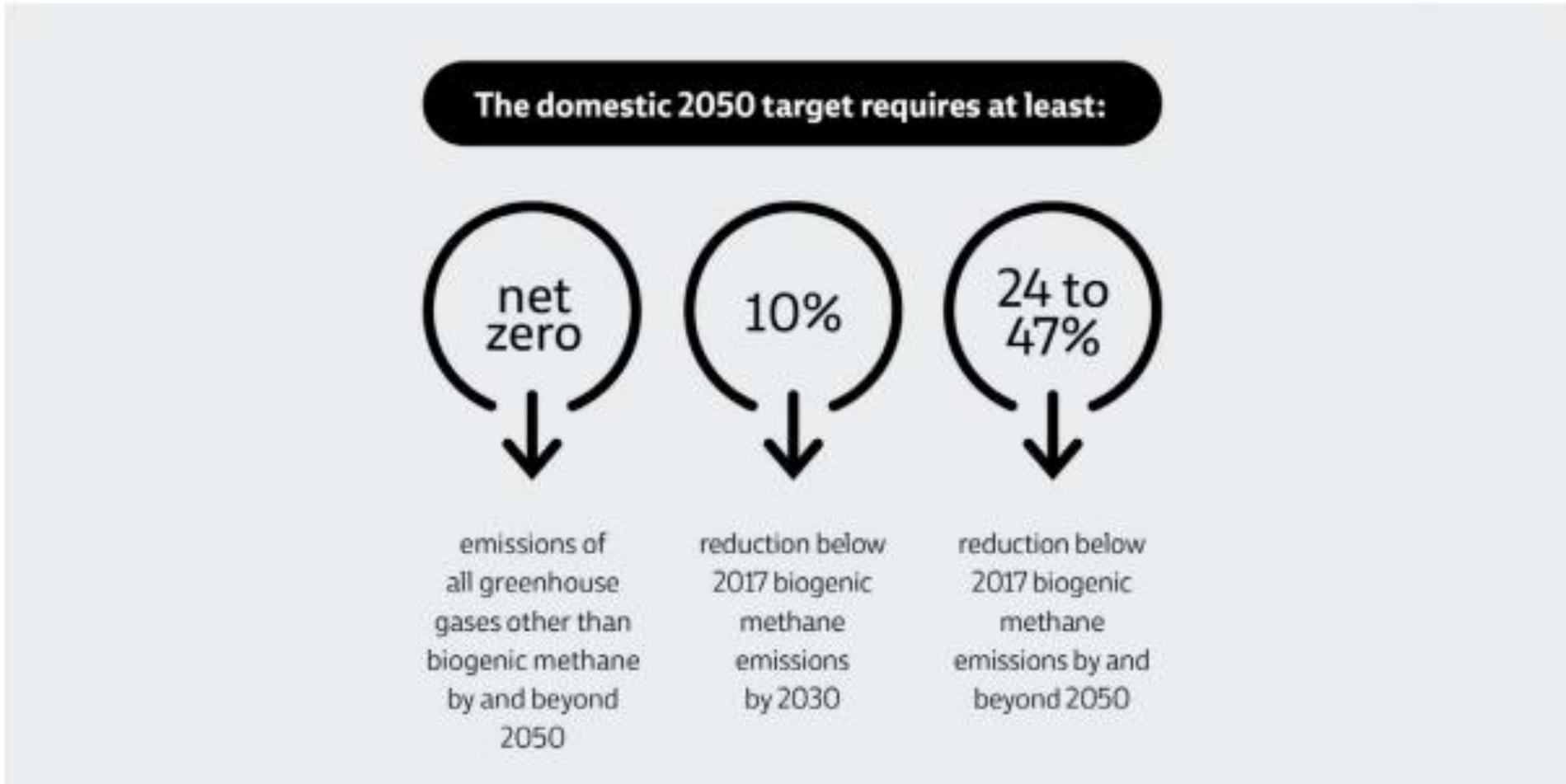
**Decarbonisation**



...and our advice on responding to these trends is guided by the Energy Trilemma.



# Decarbonisation and the Climate Change Response (Zero Carbon) Amendment Act sets important strategic context for the energy sector

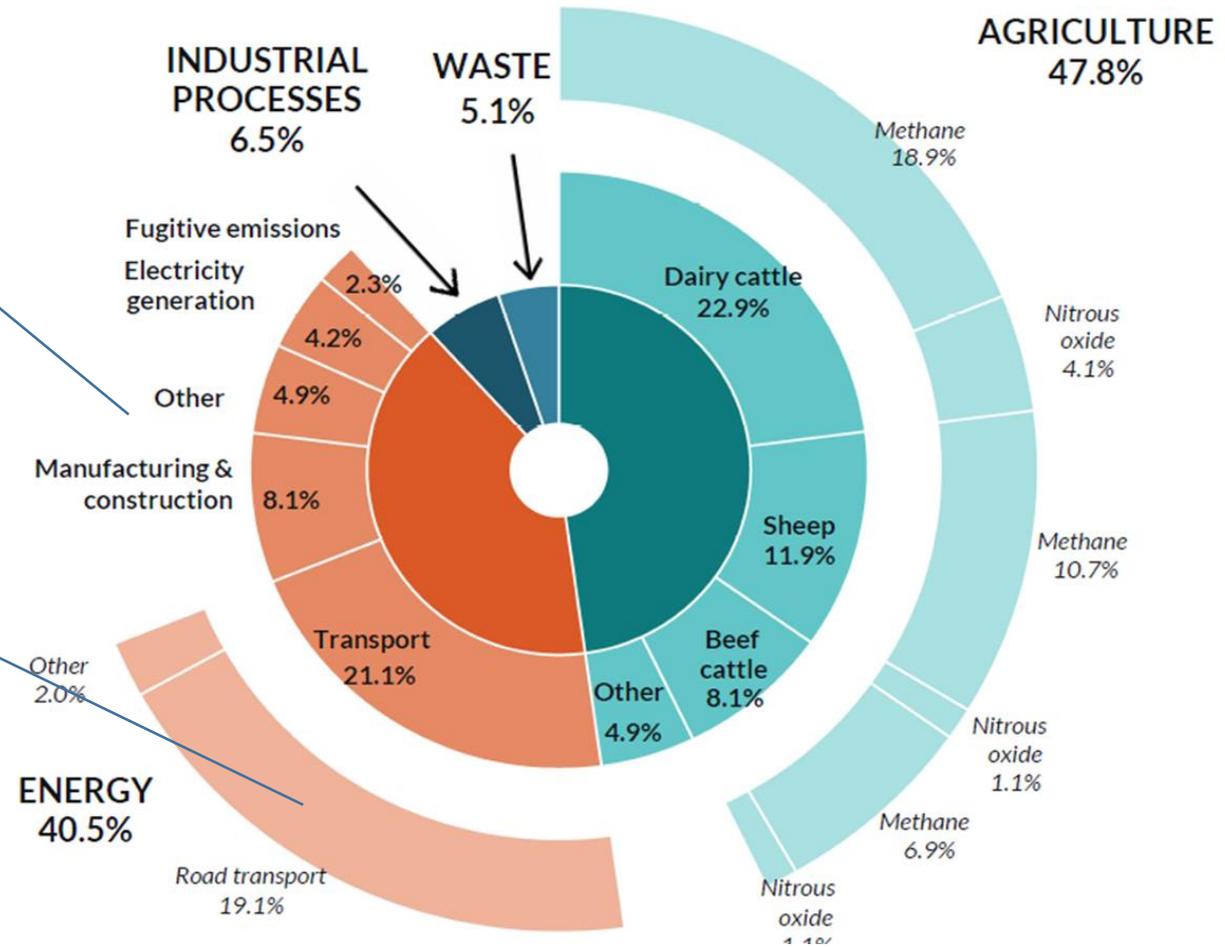


# Energy sector emissions make up about 40% of NZ's gross emissions...

About half of NZ's energy emissions are from electricity, industry, residential and commercial

...and the other half are from transport

...but there are strong links between the two.

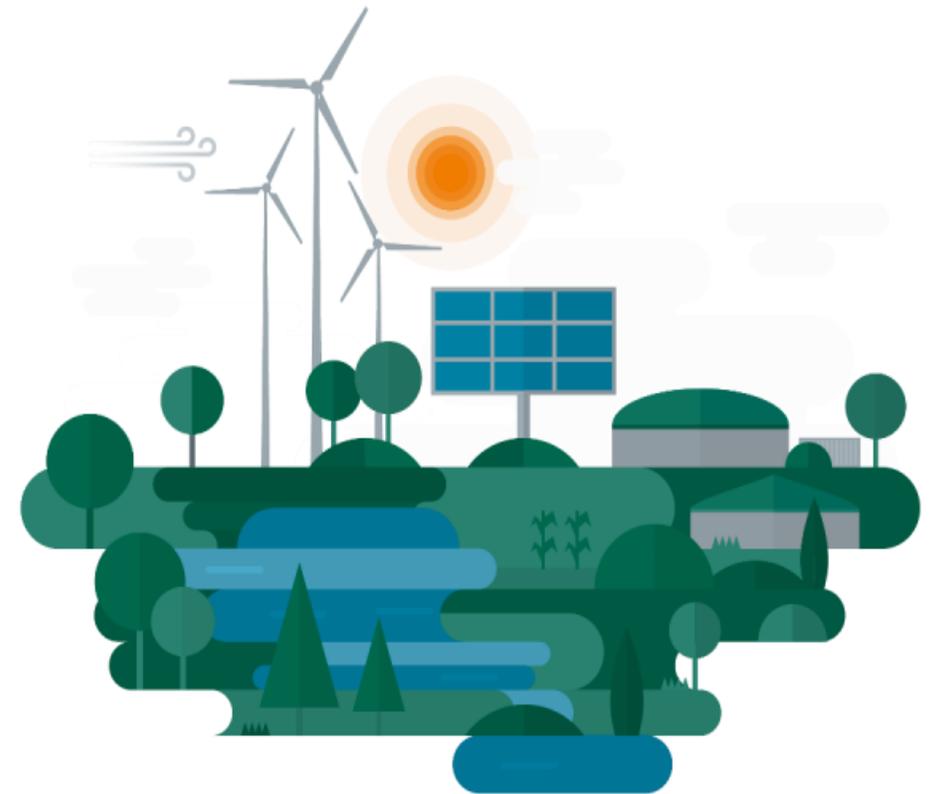


...and the Climate Change Commission has laid out its recommended pathway to Net Zero Emissions.

For **energy and industry**, the key recommendations for energy by the Climate Change Commission are to (in partnership with iwi and Māori):

**(rec 20) Developing an energy strategy to decarbonise the energy system and ensure the electricity sector is ready to meet future needs, including:**

- Supporting development and deployment of low-emissions fuel options such as bioenergy and hydrogen
- Enabling fast paced build of new renewable generation and phasing out coal
- Ensuring the electricity system is capable and technology ready



MBIE is developing the Emissions Reduction Plan (ERP) for Energy and Industry...



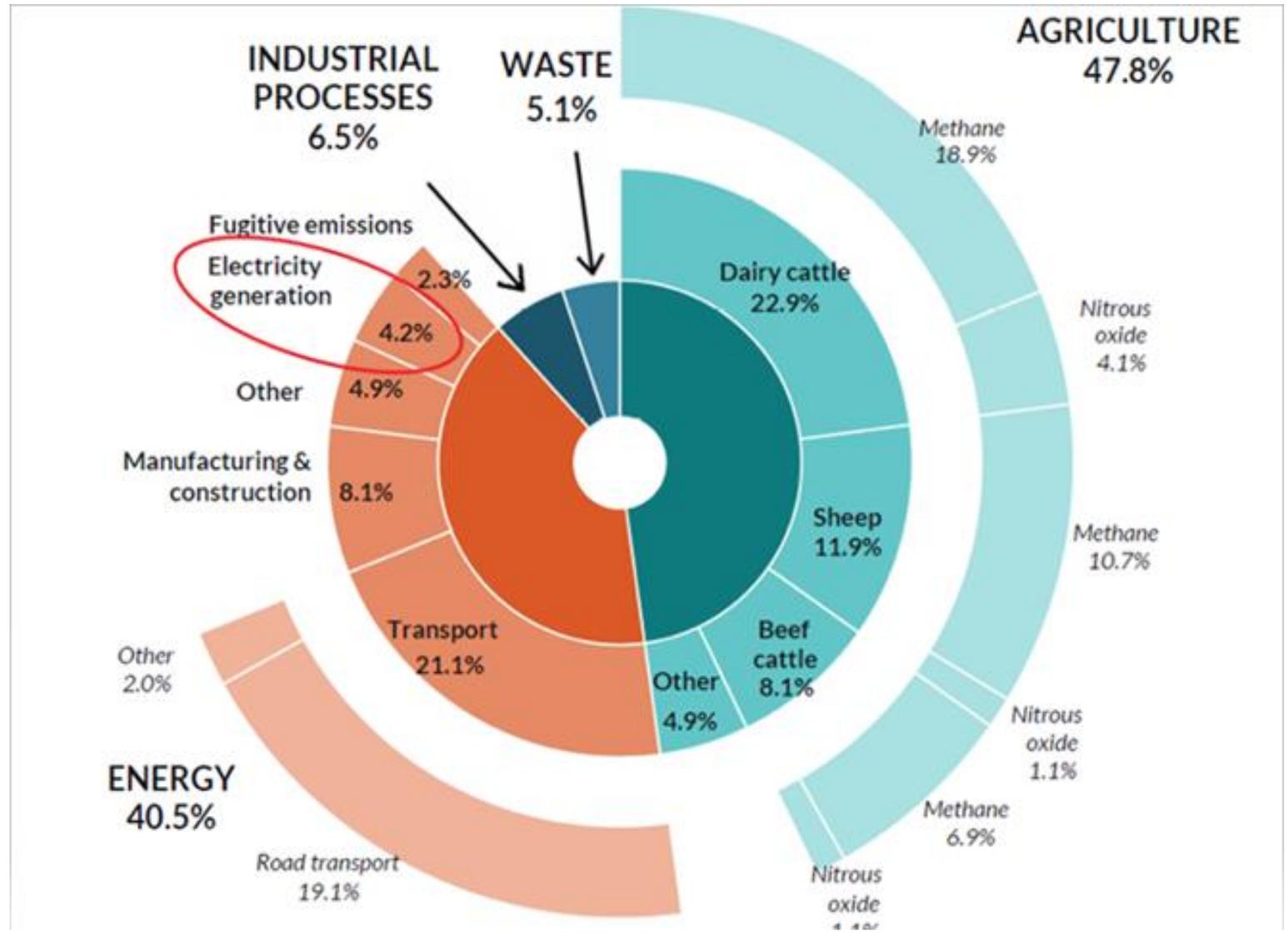
**Te hau mārohi ki anamata**  
Transitioning to a low-emissions and  
climate-resilient future  
Have your say and shape the emissions reduction plan

 Ministry of the  
**Environment**  
Ministry of the Environment

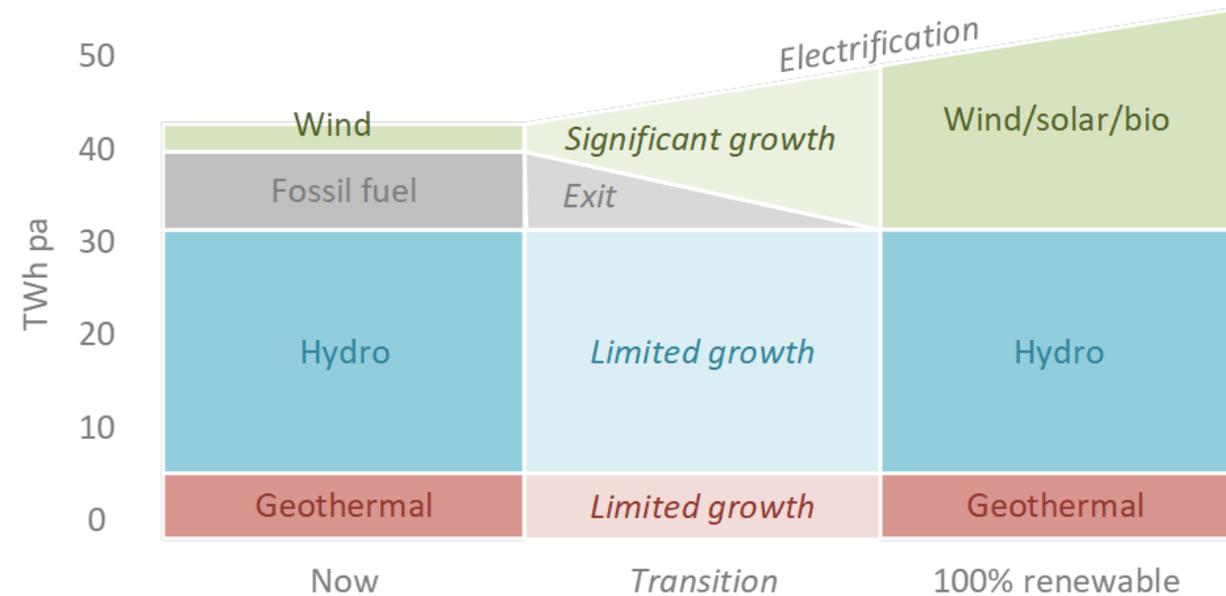
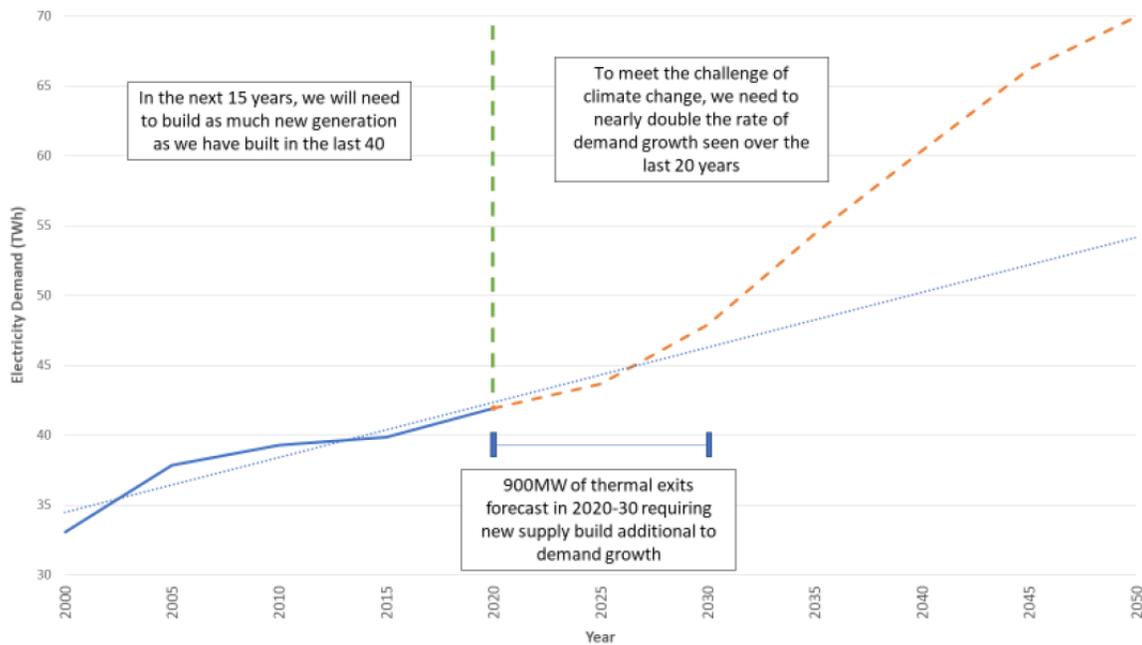
[New Zealand Government](#)

# We are accelerating renewable electricity

The Government has a target of 100 per cent renewable electricity generation by 2030.



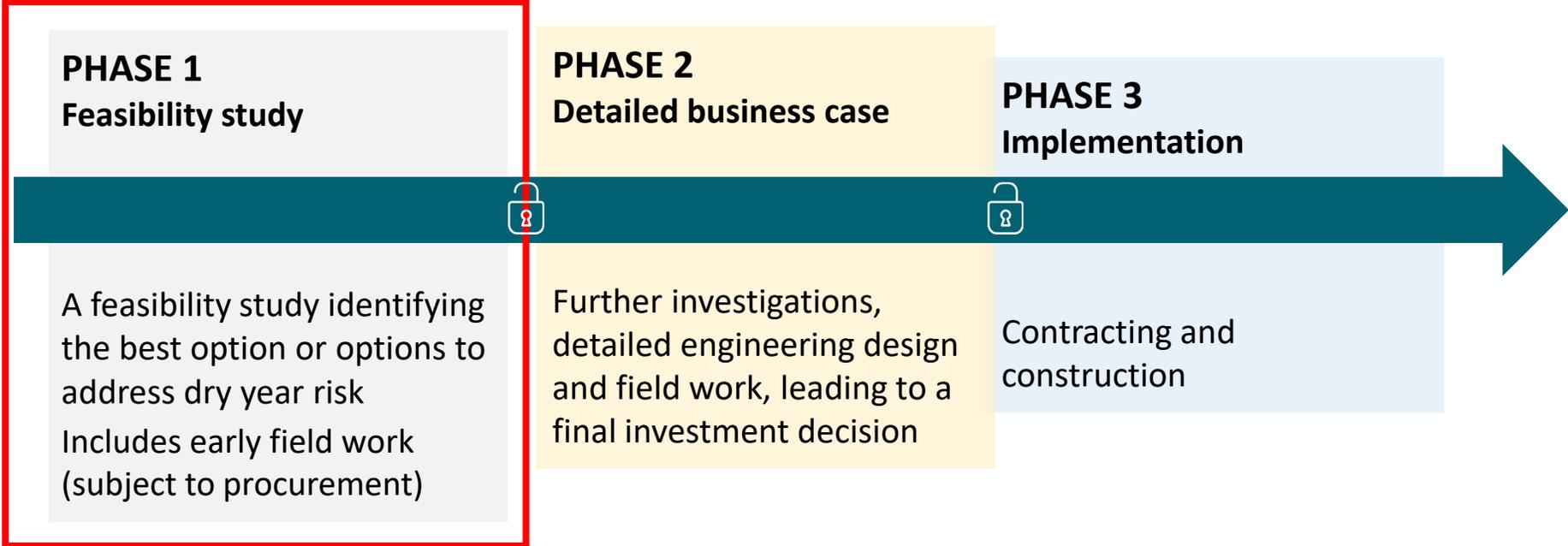
# Working out how a transition to 100% renewable electricity could work...



# The New Zealand Battery project could address one of the main obstacles to 100% renewable electricity...



*Investigating options to resolve New Zealand's 'dry year risk' problem in a highly renewable electricity system, with the aim of identifying the best option, or combination of options, to address this risk and support the move to 100% renewable electricity.*



# Offshore wind has great potential in Aotearoa New Zealand

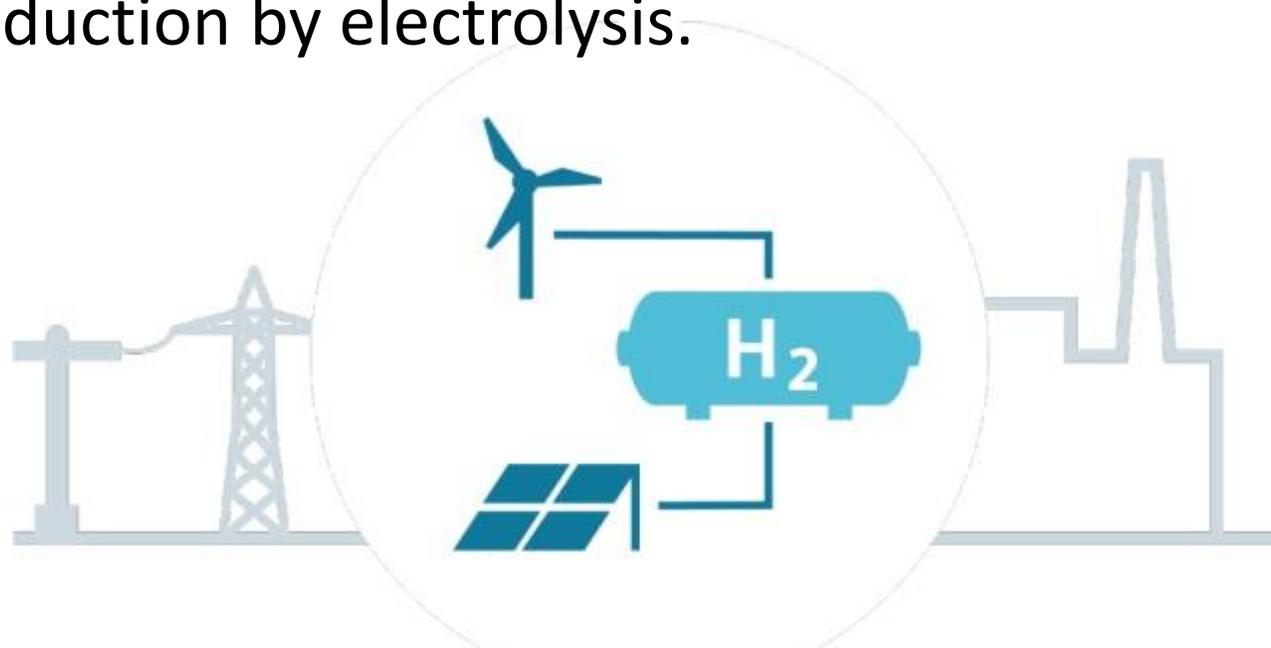
This is illustrated in the following studies:

- A 2019 study by the **University of Canterbury**.
- Analysis done by the **International Energy Agency** in 2020
- The **Roaring 40s** 2020 wind generation stack report prepared for MBIE.



...to unlock Power-to-X applications...

- Offshore wind has the advantage of providing a significant amount of energy at one location and can support investment in new energy intensive industry which can create highly skilled regional jobs.
- This scale and on-going technology cost improvements make it ideal for large-scale production and **Power-to-X** technology, including green hydrogen production by electrolysis.

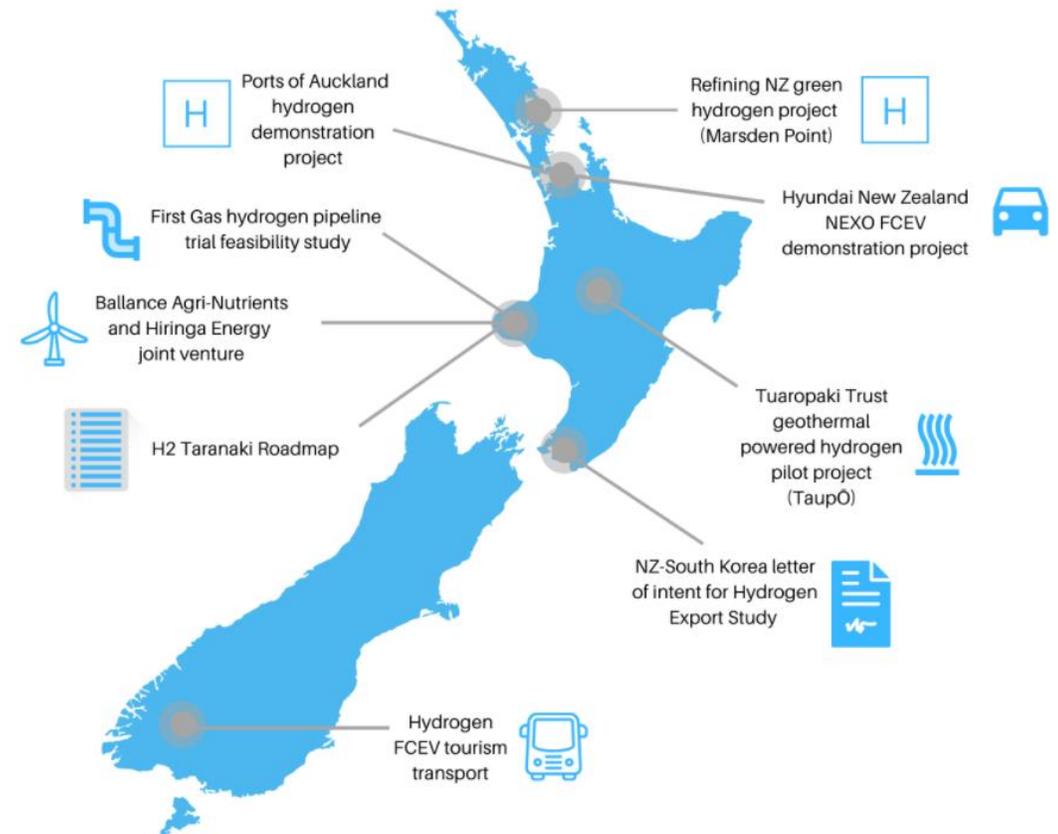


# ... and opportunities for hydrogen production...

Our work programme focuses on developing the hydrogen market, including hydrogen production, transport, use in New Zealand and potential export. It concentrates on the following key objectives:

1. Removing regulatory and other barriers to hydrogen development and production
2. The first phase of a hydrogen roadmap, and
3. Liaison with local and international business, community and research interests in hydrogen.

## Current Hydrogen Projects in New Zealand



...and support the Taranaki economy.

- **Venture Taranaki** released a report on the Taranaki offshore wind opportunity in 2019.



Te Waihanga released a Draft Infrastructure Strategy for New Zealand that recommends establishing an offshore regulatory framework.

- Te Waihanga (New Zealand Infrastructure Commission) 30 year Draft Infrastructure Strategy recommends New Zealand establishes an offshore regulatory framework to explore and develop low emission energy resources in territorial waters, in the years 2027 to 2031.





# New Zealand's existing offshore regulatory environment

- Offshore renewable energy development and the development of a regulatory framework in New Zealand could be affected by existing regulatory regimes, including:
    - the Resource Management Act (to be replaced)
    - Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act
    - the Marine Mammals Protection Act
    - the Electricity Industry Act
  - The interaction with Te Tiriti o Waitangi (in particular Article 2) and the Marine and Coastal Area Act will also need to be assessed.
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# Australia's offshore wind regulatory regime

- The **Offshore Electricity Infrastructure Bill 2021** was introduced to the federal parliament in September.
  - The Bill will empower the Minister for Industry, Science, Energy and Resources to declare areas that are suitable for offshore renewable energy infrastructure, as well as to issue licences for private industry participants to undertake different types of offshore infrastructure-related activities.
  - The Bill has passed through the Lower House and will now proceed to the Senate for consideration.
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# MBIE will begin work on offshore renewable energy regulatory settings

- MBIE plans to ramp up work in the second half of 2022 on settings for offshore renewable energy
- This will include identifying regulatory gaps and options for balancing impacts on other values such as Māori rights and interests, marine life protection and fisheries



# Hydrogen has possible synergies with offshore wind



MBIE will continue to work with experts and industry on the low carbon energy transition.

- MBIE is thankful for the input many of you have provided into developing the Emission Reduction Plans and the RMA reform programme, and we look forward to hearing your views on a National Energy Strategy as we plan for New Zealand's transition to net zero together!





# Thank you!

## **Contact us**

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