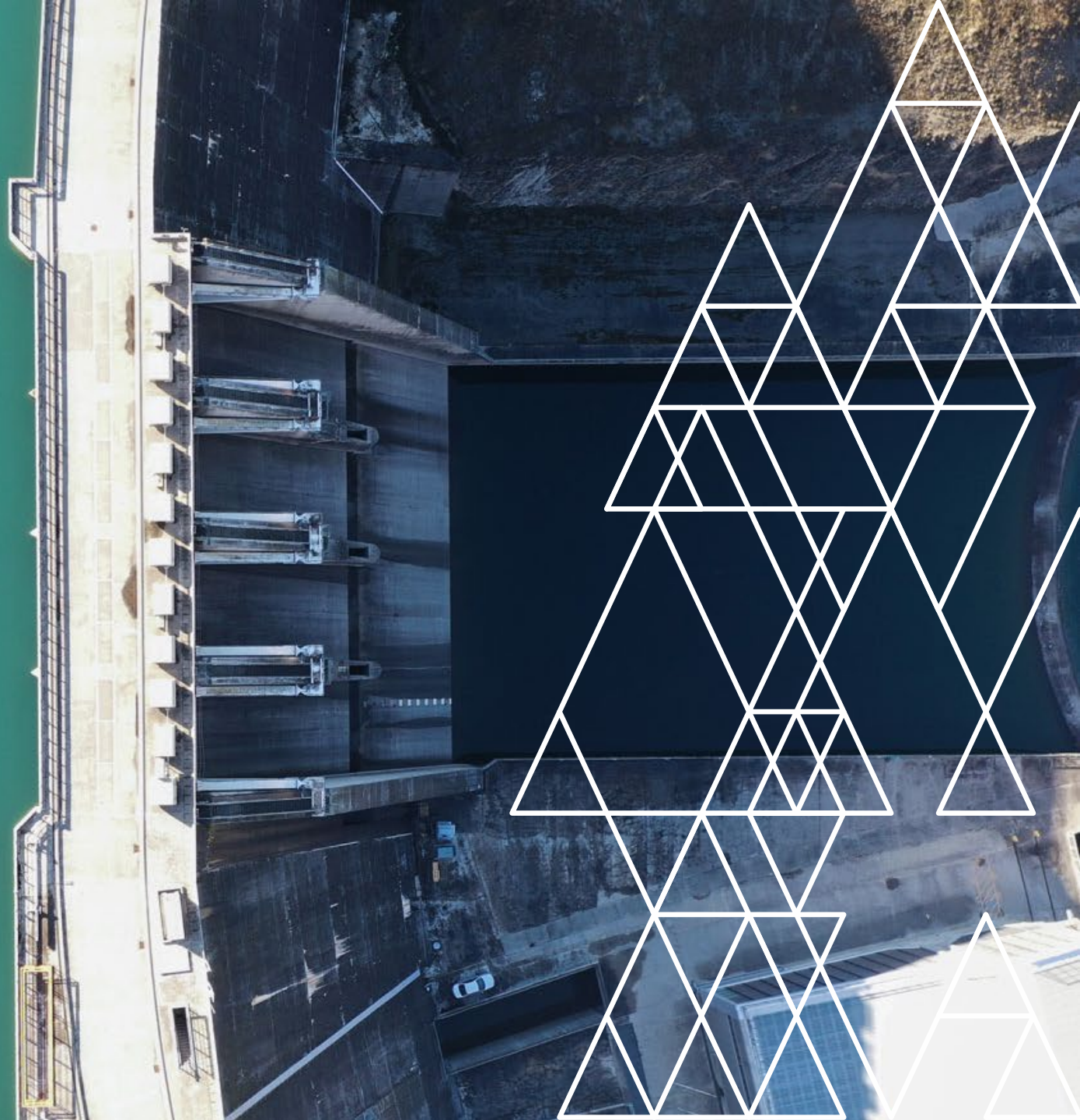


# Renewable Energy in New Zealand

Andrew Caseley, Chief Executive, EECA  
Thursday 12 May 2022



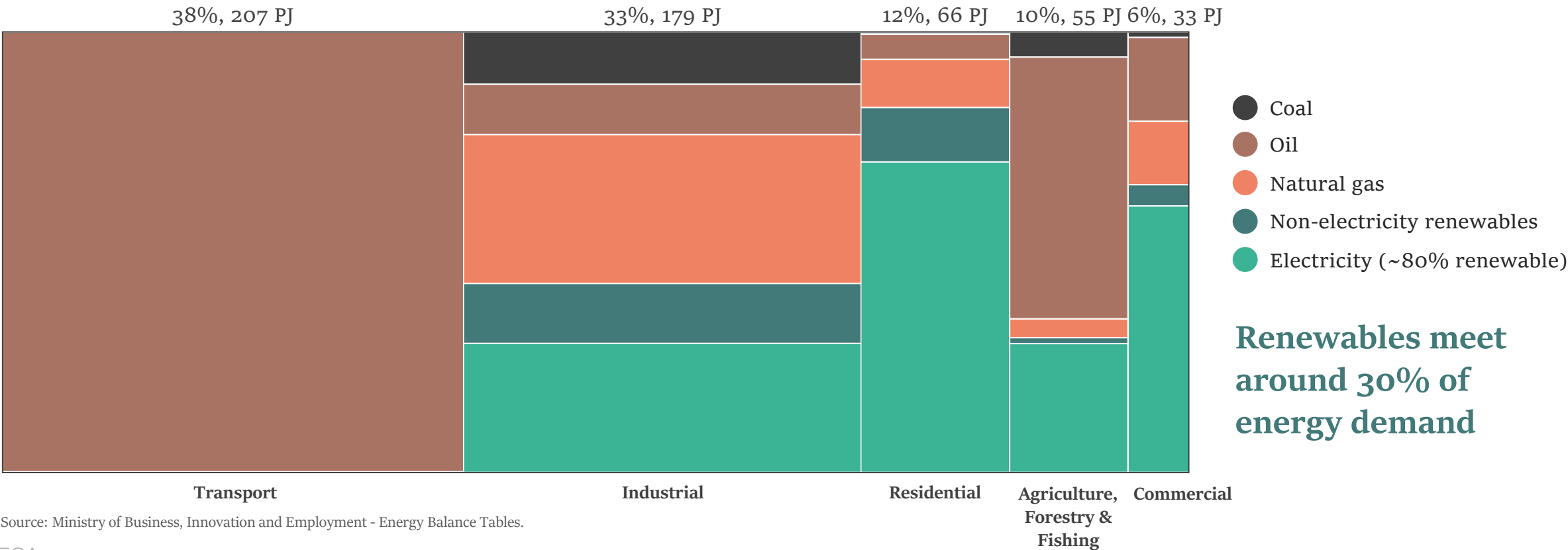
# Who is EECA?

- **EECA** – Energy Efficiency and Conservation Authority
- **Crown agency** – Established under the Energy Efficiency and Conservation Act 2022
- **Function** – To encourage, promote, and support energy efficiency, energy conservation, and the use of renewable sources of energy
- **Purpose** – Mobilise New Zealanders to be world leaders in clean and clever energy use
- **Three levers** – co-investing, regulating and motivating people

# Renewables meet around 30% of New Zealand's energy consumption needs

New Zealand energy consumption by sector and fuel  
2020, gross petajoules, excludes transformation losses

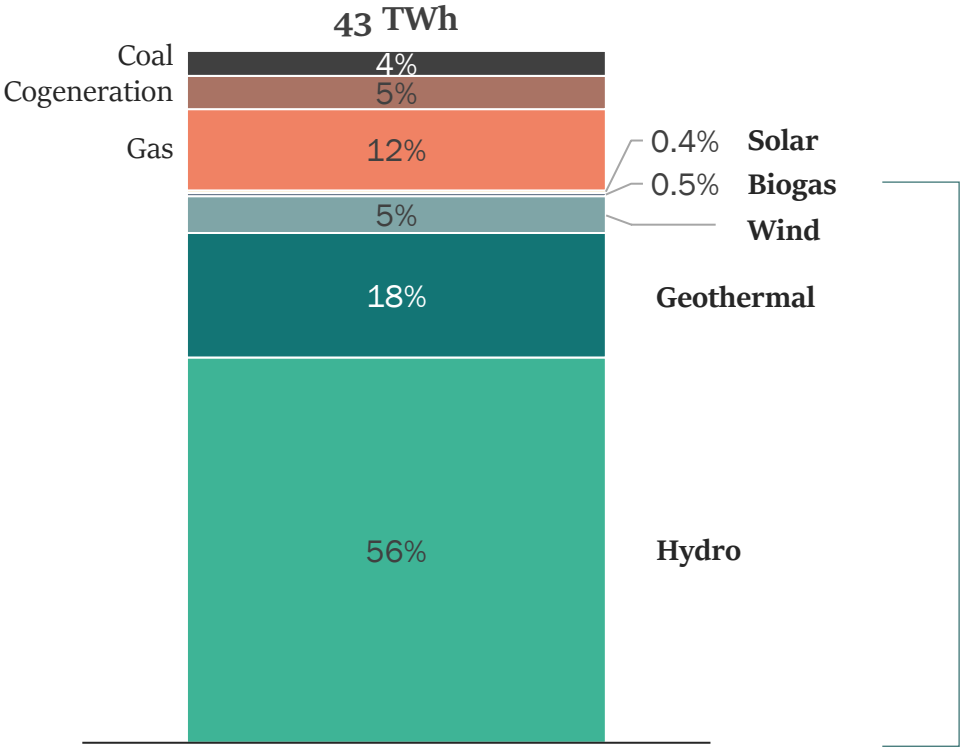
Total: 540 PJ



Source: Ministry of Business, Innovation and Employment - Energy Balance Tables.

# New Zealand's electricity generation is highly renewable

New Zealand electricity generation by source  
2020, Terawatt hours



Around 80% of New Zealand's electricity is generated from renewable sources

Source: Ministry of Business, Innovation and Employment – Electricity Statistics.

# Our Experience to Date

## The Investment in Renewables

- Nation building in development of renewables
  - Hydro 1930's – 1980's
- Initially State funded and then partially privatised in the 1990's and early 2000's
- Renewables now driven by private investors across:
  - Wind, solar and geothermal
  - Hydro but at a smaller scale
  - Biofuels also increasing

# Our Experience to Date

## The Settings

- Electricity pricing essentially unregulated (transmission and distribution regulated) but regulator in place to help ensure an efficient wholesale market
- Stable investment environment for offshore investors
- Accepted place of energy trilemma:
  - Security of supply
  - Affordability
  - Environmental consideration

# Our Experience to Date

## The Settings

- Climate Change Response (Zero Carbon) Amendment Act 2019:
  - Meet Paris Agreement commitments
  - Establish Climate Change Commission (independent advice)
  - Set domestic greenhouse gases budgets (except biogenic methane) to meet net zero target by 2050
  - Government aspiration to be 100% renewable electricity generation by 2030

# Productive and Low Emissions Business

(10% of total emissions)

- Emission reductions will be part of imminent budgets for industry
- Levers will include:
  - Regulation
    - Ban on coal by 2037
    - GHG emissions will require consents
    - Emissions Trading Scheme (currently \$48 USD / tonne)
  - Co-Investment
    - Support for industry to decarbonise (hypothecated ETS revenues)
  - Behaviour Change
    - Consumer expectation
    - Export markets
    - Social license to operate



# Efficient and Low Emission Transport

(20% of total emissions)

- Emission reductions will be part of imminent budgets for transport
- Levers will include:
  - Regulation
    - Clean Car Discount (feebate) scheme on imported vehicles
    - Clean Car Standard (CO<sub>2</sub> emission rating)
  - Co-Investment
    - Clean Car Discount on low / zero emission vehicles
    - Investment in EV charging infrastructure
  - Behaviour Change
    - Mode shift (walking, cycling, public transport)
    - Low / zero emission vehicles



# Questions

