

# Andrew Caseley

# The future NZ energy scene

8 November 2018



# New Zealand's Transition to a Low-Emissions Economy

## What is EECA?

- Core staff of 80
- Annual appropriation of NZD32M
- Additional funding for one-off Programmes e.g. Warmer Kiwi Homes
- Funded from:
  - Levy's (x 3) on energy users (gas, electricity, transport fuels)
  - Core Government revenue



# New Zealand's Transition to a Low-Emissions Economy

## Our Purpose is to:

Mobilise New Zealanders to be world leaders in clean and clever energy use.

## Our objective is behaviour change through:

- Information and education
- Financial incentive support
- Regulation



# EECA's Strategic Focus Areas

**Low Carbon  
Productive  
Business**

**Efficient and  
Low Emissions  
Transport**

**Energy  
Efficient  
Homes**

**Government  
Leadership**

**Engage Hearts  
and Minds**





# Changing operating environment



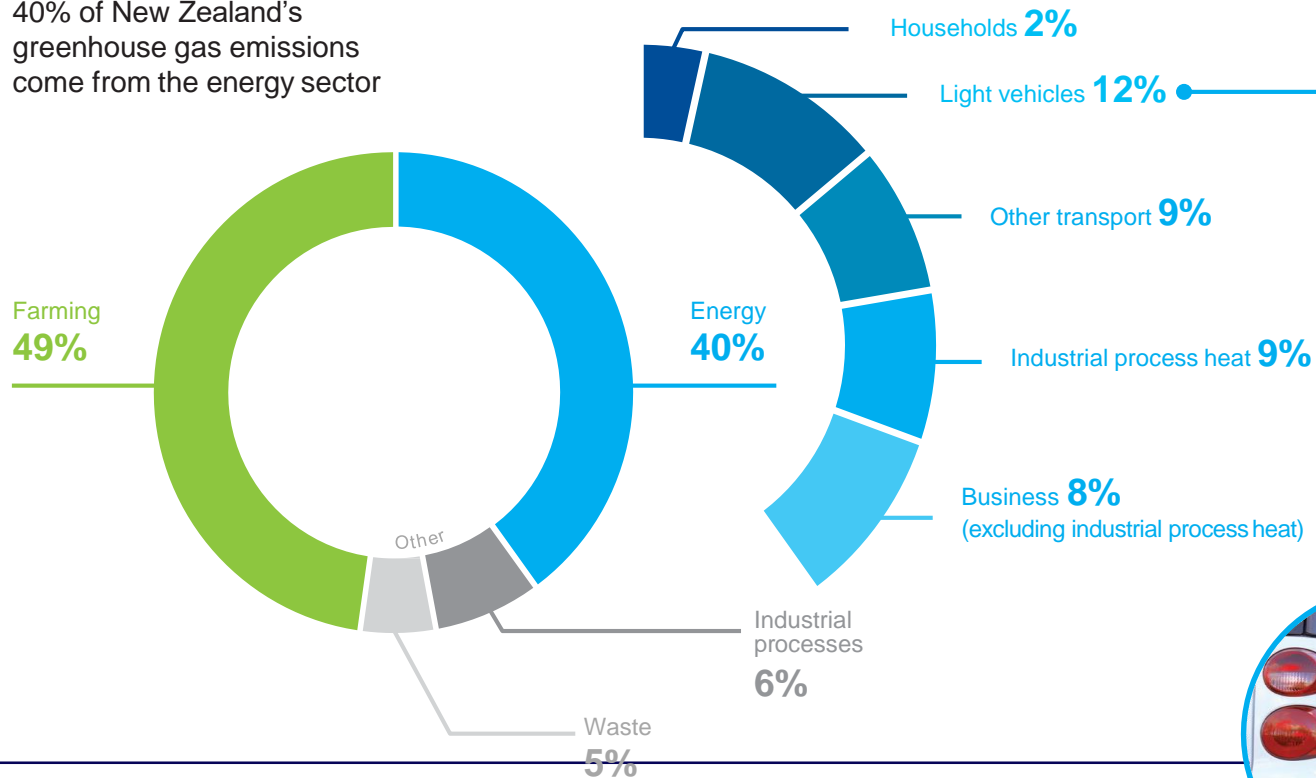
- Government policy on oil and gas exploration
- Zero Carbon Bill
  - Legally binding long term targets
  - Pathway of five year carbon budgets
  - Independent Climate Change Commission to guide the transition
  - Government requirement to produce policy plans to meet budgets
- Emissions Trading Scheme (ETS) review
- New policies for low-emissions transport



# Current state

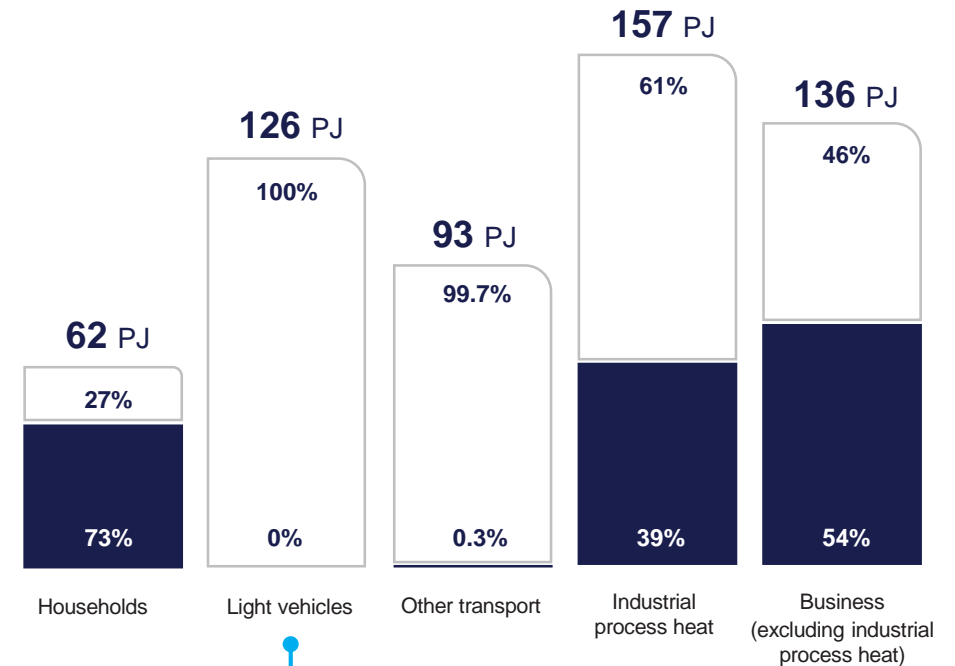
## New Zealand's greenhouse gas emissions

40% of New Zealand's greenhouse gas emissions come from the energy sector



## Energy use in New Zealand

Non-renewable  
Renewable



At the end of September 2018, there were  
**10,248**  
electric vehicles registered in New Zealand.  
Four years ago there were only 250

Source: Greenhouse Gas Inventory 1990-2016, MfE (2018) and the Energy End Use Database 2016, EECA (2018)



## Productive and low-emissions business

Mobilise decision makers and technical experts to accelerate action.

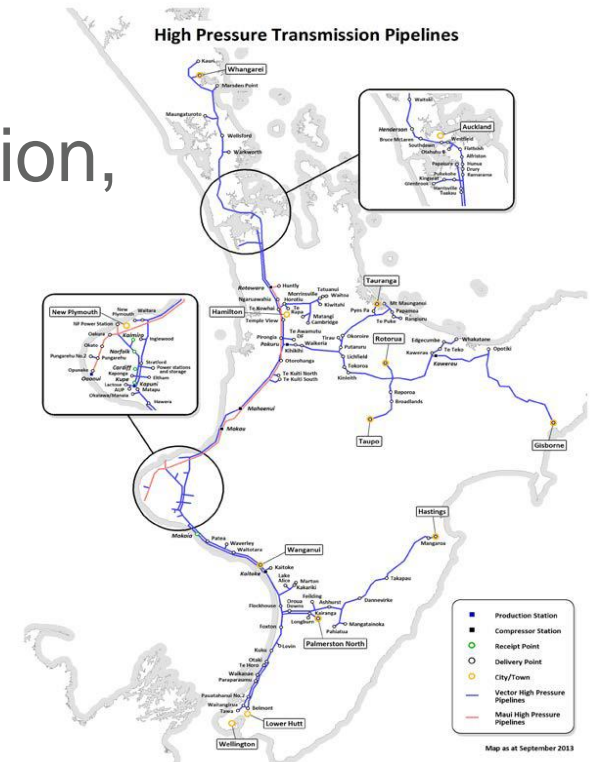


# Energy efficiency for gas system operations and infrastructure



Potential for more efficiency (more for less):

- Production/Processing – fuel switching, optimisation, own operations fuel use efficiency
- Networks – compressors (First Gas)
- Pipeline leakage



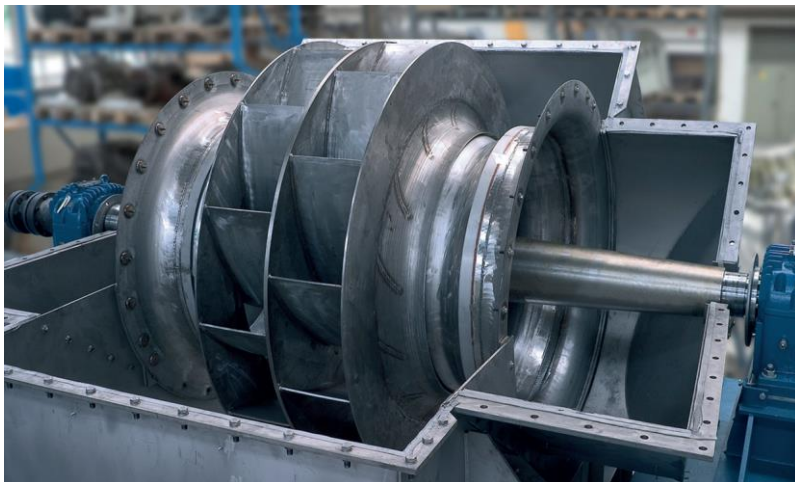


# Efficiency of gas end use



EECA's focus has been:

- Energy Audits (Key Finding - Heat Recovery)
- Boiler Tuning
- Equipment Energy Efficiency (E3) Programme/Regulated standards



Piller –blowers & compressors



# Fuel Switching



Will promote it where we can:

- Asset replacement cycles
- New investment decisions
- Security of supply factors
- When a more attractive cost option

# Gas for Electricity Generation

- Target of 100% renewable electricity generation
- Meeting the energy trilemmum of security of supply, affordability and environmental sustainability.
- Role of thermal fuels in dry/dry-ish years
- Gas vs coal, wood, other fuels



# Innovation and the future



- Utilising existing infrastructure
- Opportunities for hydrogen
- Potential of bio gas
- Carbon capture & storage for NZ
- International developments and technologies and advances





# Gas Safety, Monitoring and Energy Efficiency Levy

Gas levy part-funds:

- E3 equipment programme
- Large energy users engagement
- Technology demonstrations

Consultation document to be released next week

- Is EECA focussing on the right priorities?
- Gas Levy Reductions



# Questions ?

