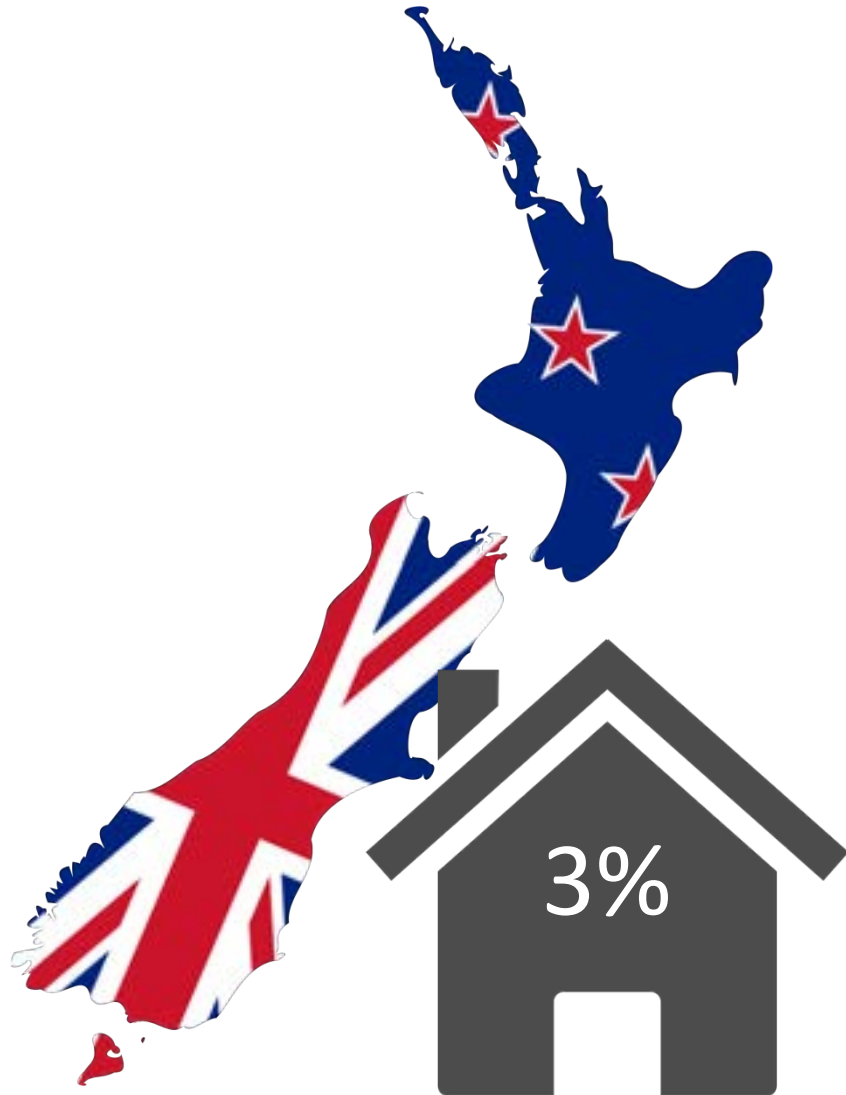


Energy performance of New Zealand's housing stock

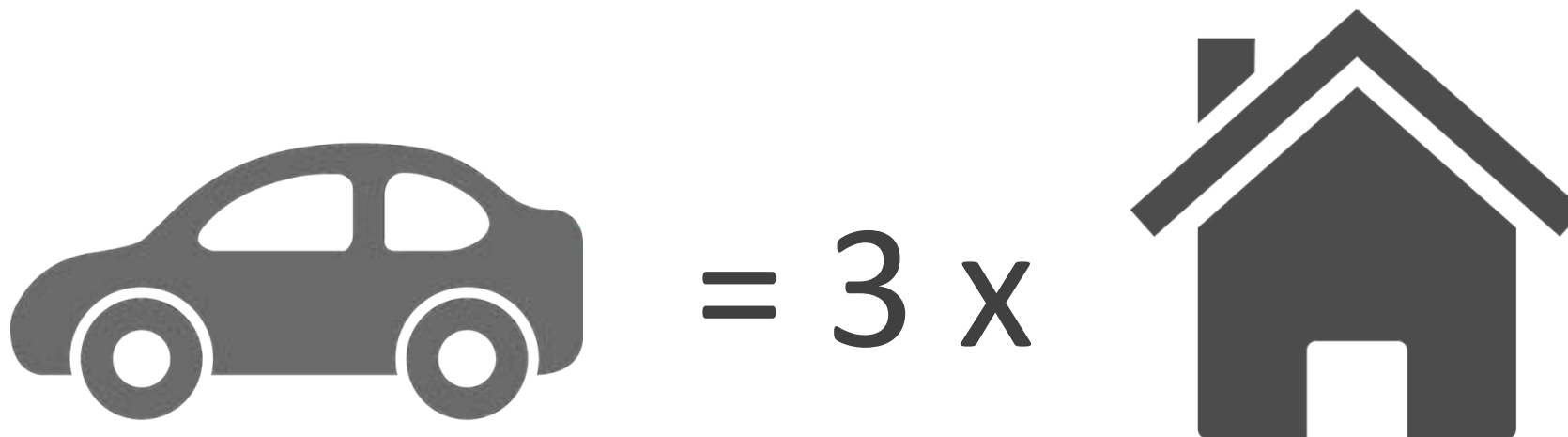
Christian Hoerning, EECA



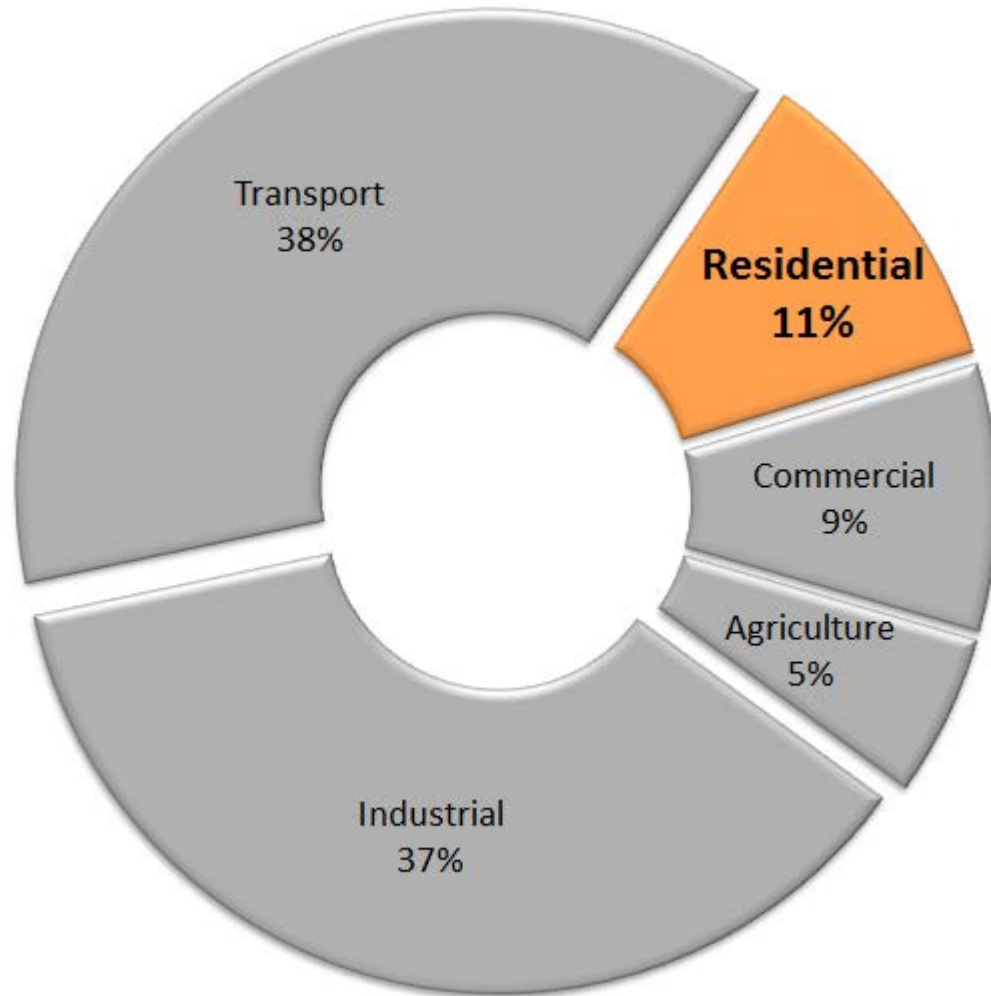
Contribution to New Zealand's total greenhouse gas emissions



Contribution to New Zealand's total greenhouse gas emissions



Residential energy use



- 70% electricity (> 80% renewable)
- 14% renewables (mostly firewood)
- ca. 70% renewable overall

Energy hardship

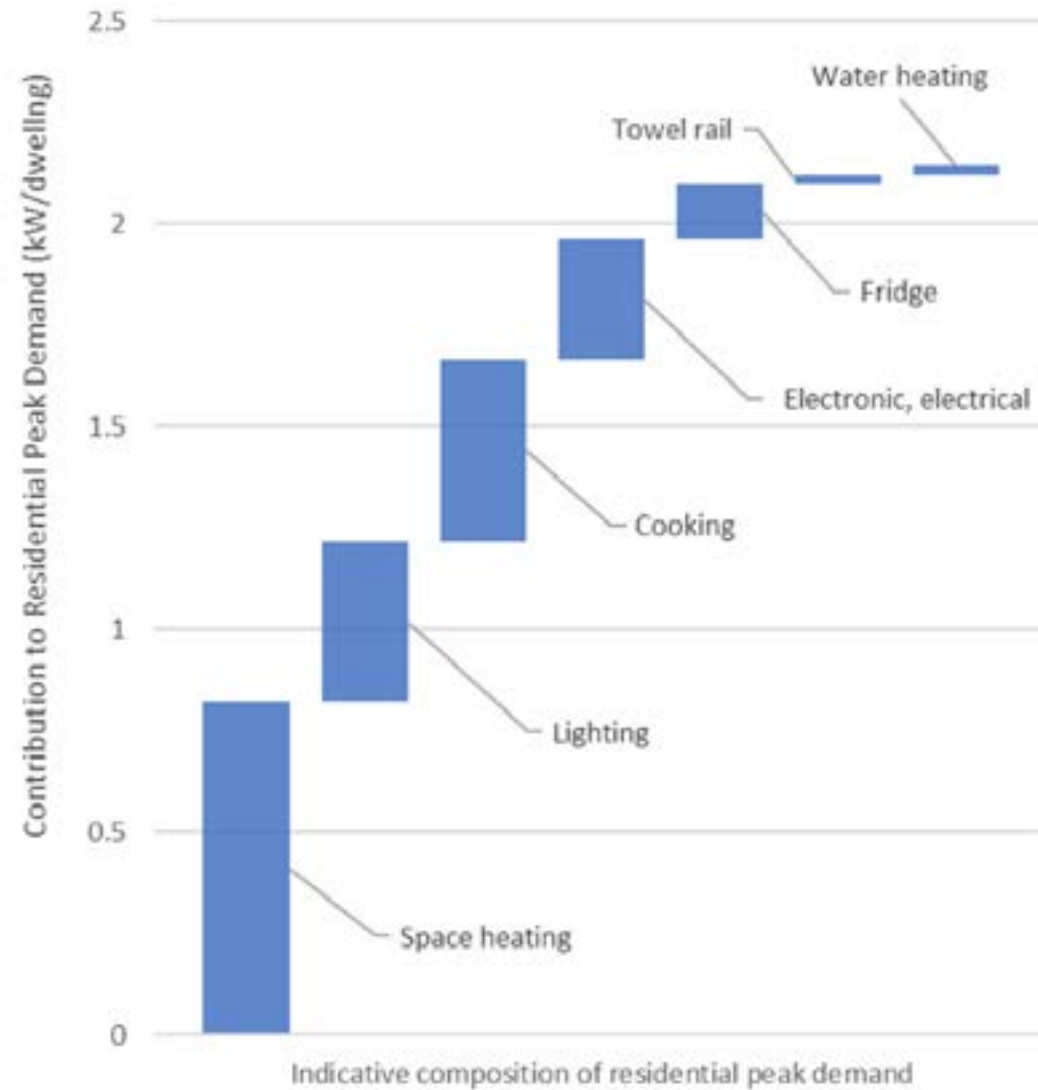
“Just under one-third of households experienced one or more energy hardship indicators.”

Stats **NZ**
Tatauranga Aotearoa

Investigating different measures of
energy hardship in New Zealand

New Zealand Government

Household electricity peak demand



Value of electricity efficiency in homes

Potential realisable economic benefits estimated at \$300 million in net terms over 10 years.



State of our homes

- ½ of homes have suboptimal ceiling and/or underfloor insulation
- ½ of homes have no wall insulation
- >80% of homes single-glazed
- ½ of households don't heat their bedrooms
- 15% of households use unflued gas heaters
- 1/5 rentals have no fixed heating
- ½ of bathrooms and kitchens have no mechanical extract ventilation to outside
- ½ of homes have visible mould





 EECA
energywise[™]

Warm Up New Zealand:
Heat Smart



Warm Up New Zealand:
Healthy Homes



Evaluation of Warm Up New Zealand: Heat Smart



- benefit-cost ratio 3.9 to 1
- 99% of benefits health related



3

**Essentials for
a healthy home.**



Warm it up ●
Dry it out ●
Air it out ●







3 Essentials for
a healthy home.

www.energywise.govt.nz



New Zealand Government



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3

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New Zealand Government

Rental home regulation



Residential Tenancies (Smoke Alarms and Insulation) Regulations 2016

Jerry Mateparae, Governor-General

Order in Council

At Wellington this 7th day of June 2016

- insulation
- smoke alarms

Rental home regulation

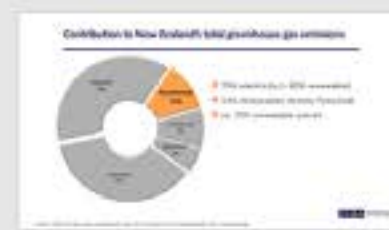


Healthy Homes Guarantee Act 2017

Public Act	2017 No 46
Date of assent	4 December 2017
Commencement	see section 2

- heating
- insulation
- ventilation
- moisture ingress
- draught stopping
- drainage

Energy performance of New Zealand's housing stock
October 2014



Energy hardship

How many households are experiencing energy hardship?

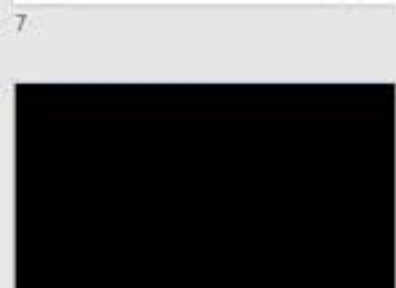


Value of electricity efficiency in homes

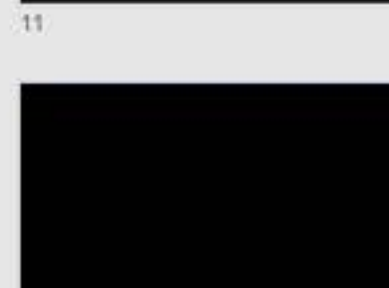


State of our homes

- 1 in 10 homes have poor energy efficiency
- 1 in 10 homes have poor energy efficiency
- 1 in 10 homes have poor energy efficiency
- 1 in 10 homes have poor energy efficiency
- 1 in 10 homes have poor energy efficiency
- 1 in 10 homes have poor energy efficiency



Evaluation of Warm Up New Zealand Heat Smart



3 Essentials for a healthy home.

Warm it up
Dry it out
Air it out



3 Essentials for a healthy home

www.energy.govt.nz

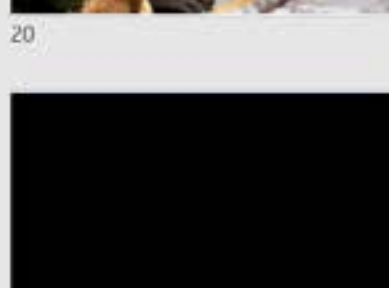
3 Essentials for a healthy home

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3 Essentials for a healthy home

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Rental home regulation

Rental home regulation

