

# Collective action for co-benefits: a systems approach

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new zealand centre for

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te pokapū rōnaki tāone-nui

# Importance of collective action for co-benefits on the built environment

- NZ Context Zero Carbon Act
- Energy efficiency in built environment
- Urgency of need to reduce carbon emissions
- Importance of keeping track of carbon reductions
- Need collective policy champions
- Learning from others New York city

# Co-benefits of residential energy efficiency

- Retrofitting houses reduces demand for energy
- Reduces energy poverty
- Improves occupants' respiratory health & wellbeing
- Lowers housing-related hospitalisations especially for children and older people
- Creates considerable employment
- Reduces carbon emissions

# Carbon emissions

- Critical urgency of reducing CO<sub>2</sub> to prevent irreversible damage
- Importance of embodied carbon and operational costs in the built environment
- Carbon emissions from residential sector are dropping

# Changes in carbon emissions for residential & transport sectors: New Zealand

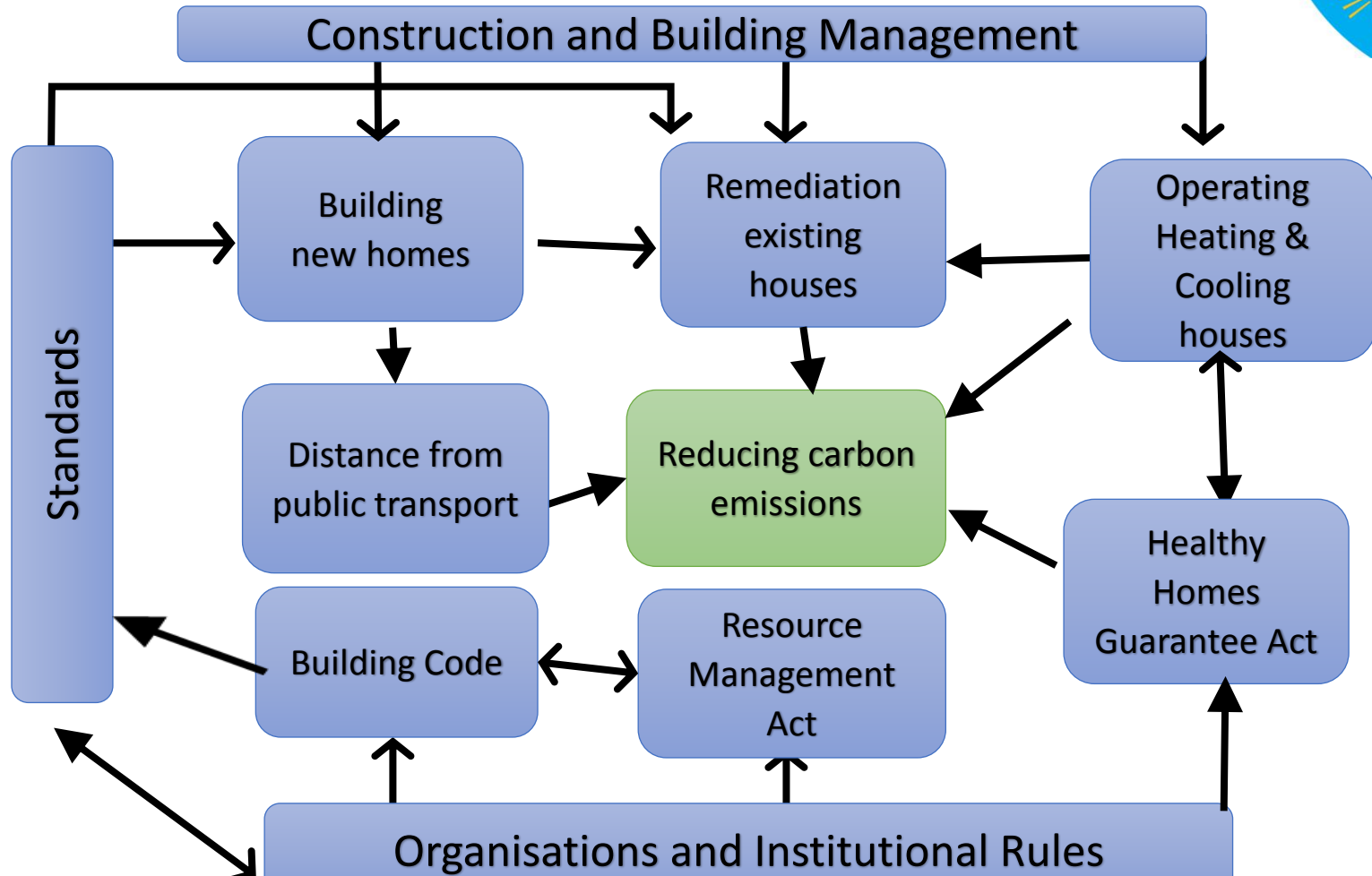
	kt CO <sub>2</sub> e		Change (%)
	1990	2016	1990-2016
<b>Residential</b>			
Total (excl elect'y)	774	633	-18
<b>Transport</b>			
Total (excl elect'y)	8,679	14,968	72

# Learning from New York

- *Retrofitting to scale: 50,000 Buildings in 10 years*
- Local Law 97 of 2019 “most ambitious climate legislation for buildings in any city in world” - incorporates stiff penalties if 2030 target missed
- Law skyrockets need for retrofit work next decade
- \$16.6b to \$24.3b “energy retrofit market opportunity”
- Requires major job transformations in building sector, trades, architects, developers



# Collective action for co-benefits



# Collective action

- Requires concerted political will at all levels
- Needs sector champions willing to step out of 'business-as-usual'
- Needs clear commitment to monitoring effectiveness and equity
- Needs you to support call to action!