



Housing Summit

With thanks to our Platinum Sponsor WM New Zealand



€86,000,000,000

1990

2000

2010

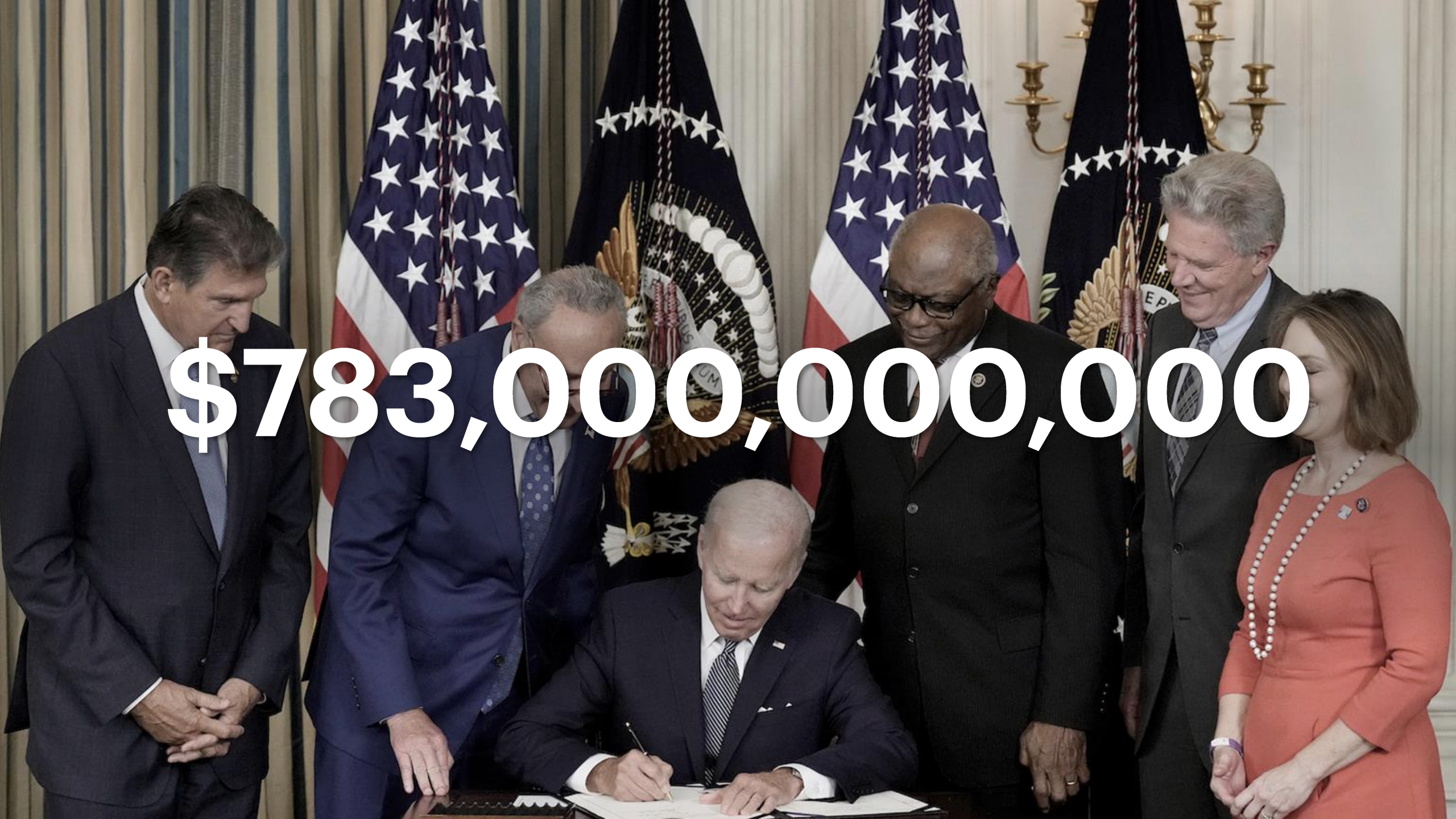
2020

2030

2040

2050





\$783,000,000,000

The image shows a silhouette of an industrial facility, likely a power plant or refinery, against a dramatic sky. Several tall smokestacks are visible, each emitting a thick plume of dark smoke that rises into the air. The sky is filled with large, billowing clouds, and the overall lighting suggests a sunset or sunrise, with a warm, golden glow. The industrial structures are dark and feature various pipes, ladders, and scaffolding. The text '\$650,000,000' is superimposed in the center of the image in a large, white, sans-serif font.

\$650,000,000



2022

2023

2024

2025

2026-2029

2030

2040

2050

2025

ACCELERATING THE SHIFT TO LOW CARBON BUILDING

- Discussion groups with sector representatives to design policy options
- Sector and consumer behaviour relating to building and climate change explored
- Low emissions building examples showcased

IMPROVING THE ENERGY EFFICIENCY OF BUILDINGS

- Technical methodology developed for operational emissions
- Transition period concludes in May 2023 for increase to wall, floor and roof insulation in new homes
- Building Code compliance pathways for operational efficiency requirements consulted on.

REDUCING THE WHOLE OF LIFE EMBODIED CARBON OF BUILDINGS

- Technical methodology developed for embodied carbon
- Building Code compliance pathways for embodied carbon requirements consulted on.

ESTABLISHING THE FOUNDATIONS FOR EMISSIONS REDUCTION

- Carbon Neutral Government Programme reporting requirements begin
- Engagement with Māori to identify new opportunities
- Emissions reporting and caps for new buildings consulted on
- Emissions reporting database and tools designed
- Building Code updated to set foundation for emissions reporting and capping new building emissions
- Amendment Bill passed for Energy Performance Ratings and Waste Management
- Databases and tools: building materials database, carbon calculation tools, resources, and data repository in place
- Mandatory energy performance ratings for commercial, public, and large residential buildings
- Carbon Neutral Government



All buildings built after 2030 have the lowest possible whole of life embodied carbon and operational emissions are near zero.

All buildings built before 2030 have the lowest possible whole of life embodied carbon at the point of upgrade.

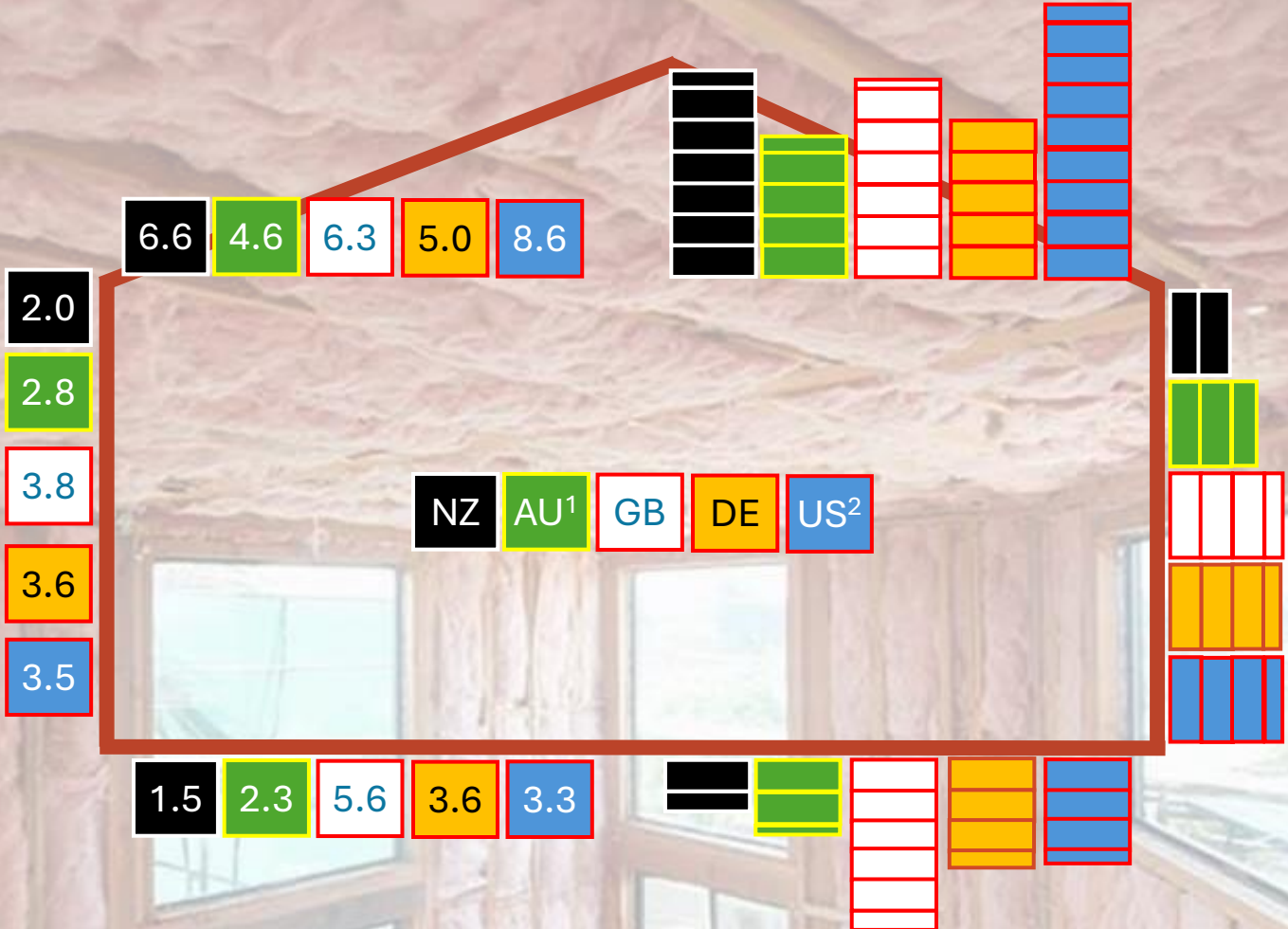
Buildings are resilient to the impacts of climate change.

- Emissions reduction policy measures for operational emissions in existing buildings developed and consulted on
- Final emissions caps for operational emissions in all new buildings

- Review and update of caps for operational emissions
- Operational Emissions reduction measures: phased introductions for existing buildings

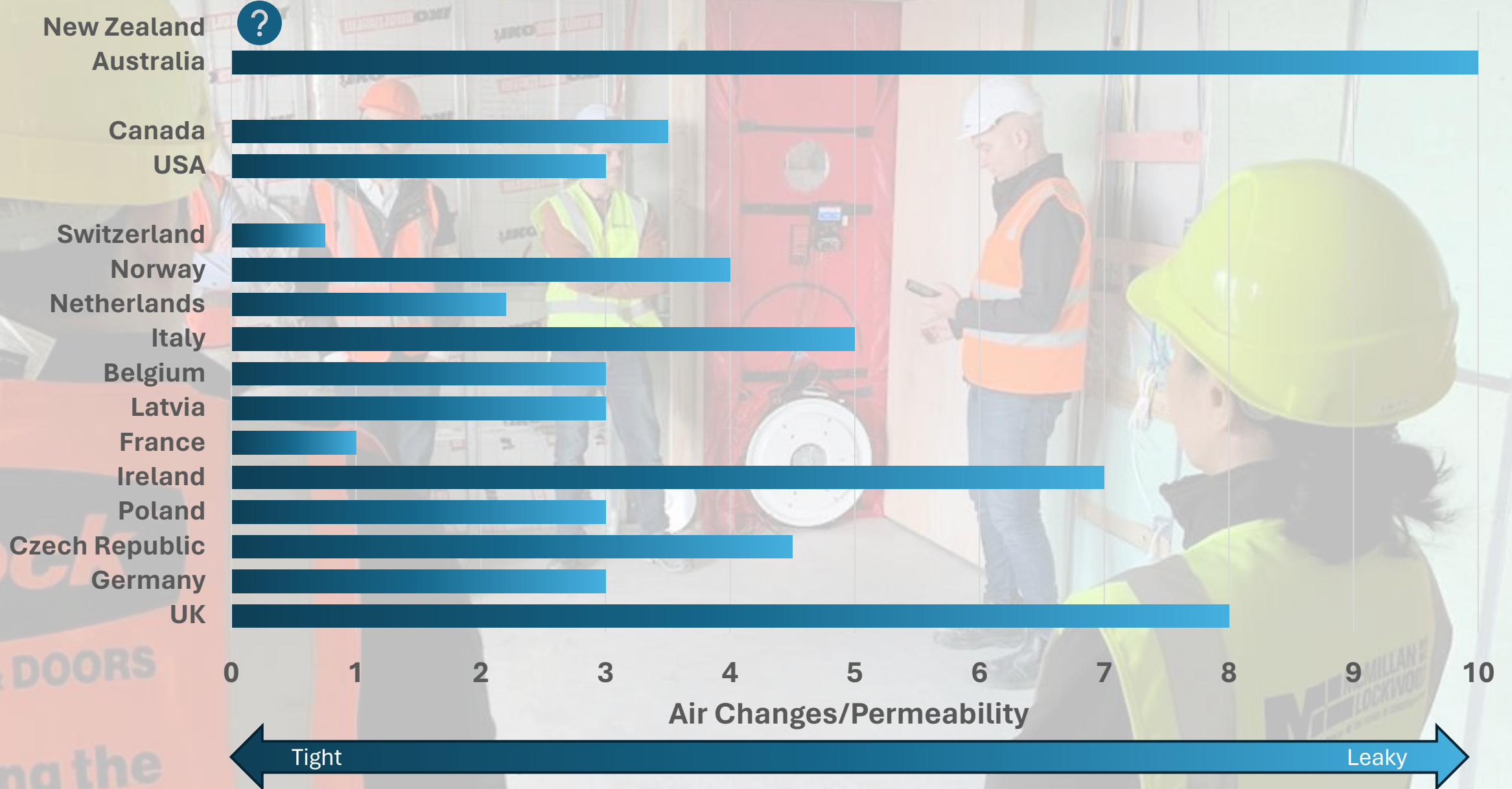
- Emissions reduction policy measures for embodied carbon emissions in existing buildings developed and consulted on
- Final emissions caps for embodied carbon in all new buildings

- Review and update of caps for embodied carbon emissions
- Embodied Carbon Emissions reduction measures: phased introductions for existing buildings

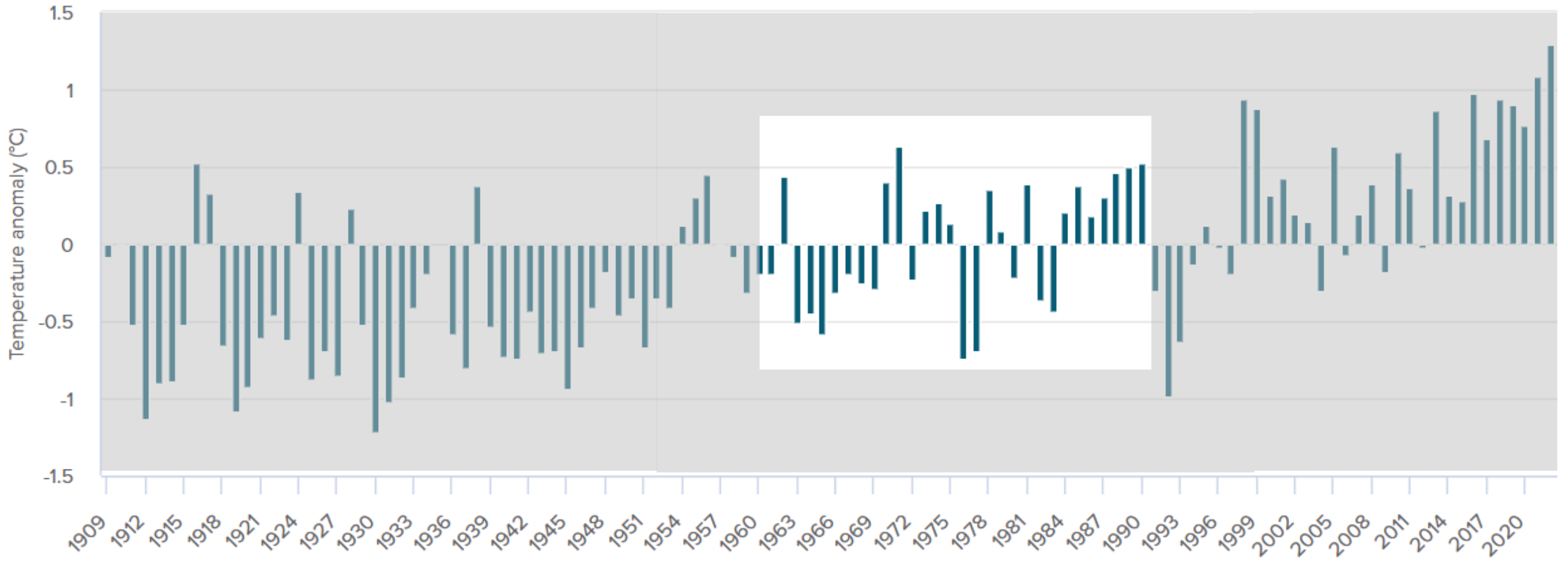


1. AU climate zone 6
2. US climate zone 3

International Airtightness Requirements



Annual temperature anomaly (°C) against a 1961–1990 reference period, 1909–2022





60,000

50,000

40,000

30,000

20,000

10,000

0

2018

2019

2020

2021

2022

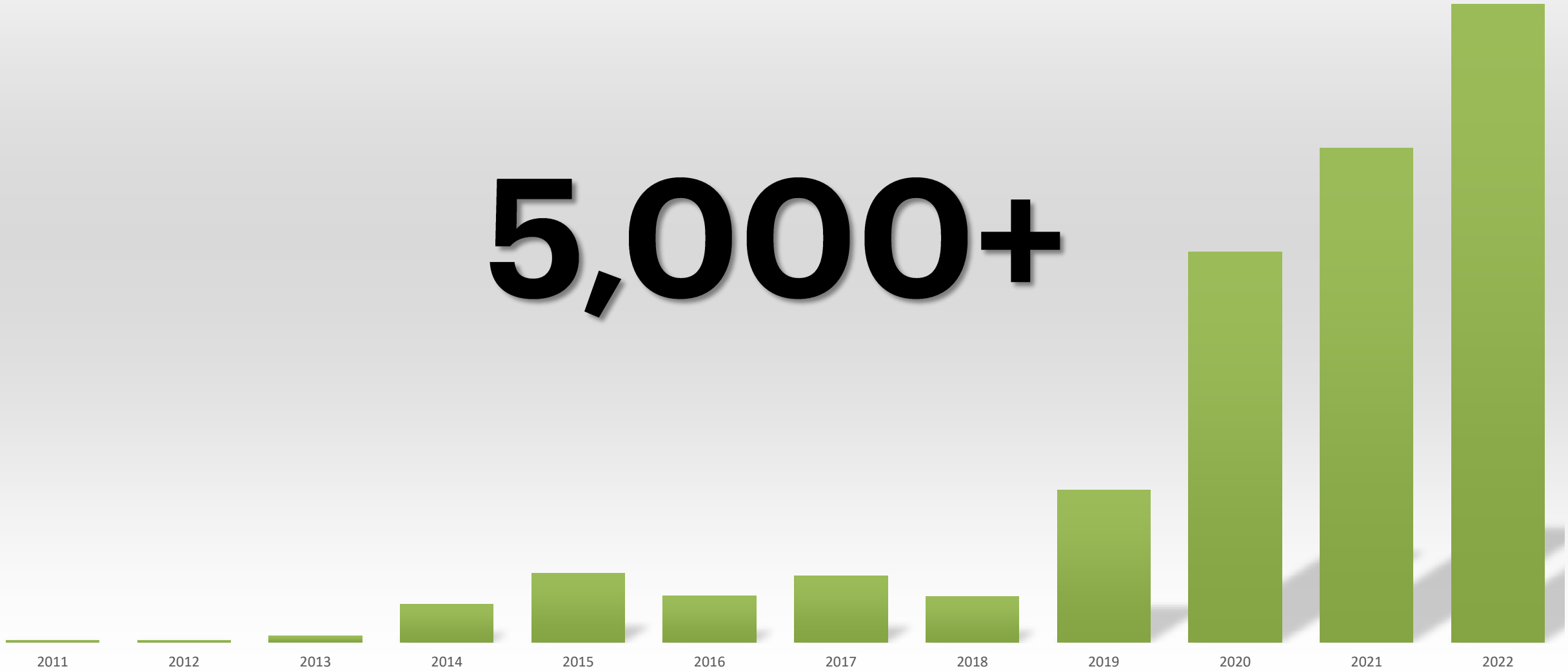
2023

37,239



9,000+





Main menu:

- Instructions
- Projects
- Assemblies
- Areas
- Thermal Bridges
- Windows Doors
- Ventilation
- Systems
- Results
- Heater Sizing
- Variants
- Display:
 - U values
 - R values
- User:
 - Logout
 - Report bugs / suggest improvements

Headline dwelling energy & carbon data

Assuming NO cooling and heating to 20.0°C

Annual space heating demand (kWh/m ² /year)	Annual electricity demand (excluding appliances) (kWh/m ² /year)	Annual on-site fossil-fuel carbon emissions (kg.CO ₂ -e /m ² /year)	Annual TOTAL carbon emissions (kg.CO ₂ -e /m ² /year)
69.0	62.0	1.7	11.5

Additional heating parameters

Assumed occupancy (#)	Total effective air change	Internal heat gain
2.0	0.6	2.1

Cooling and overheating data

Assuming cooling setpoint of 25.0°C

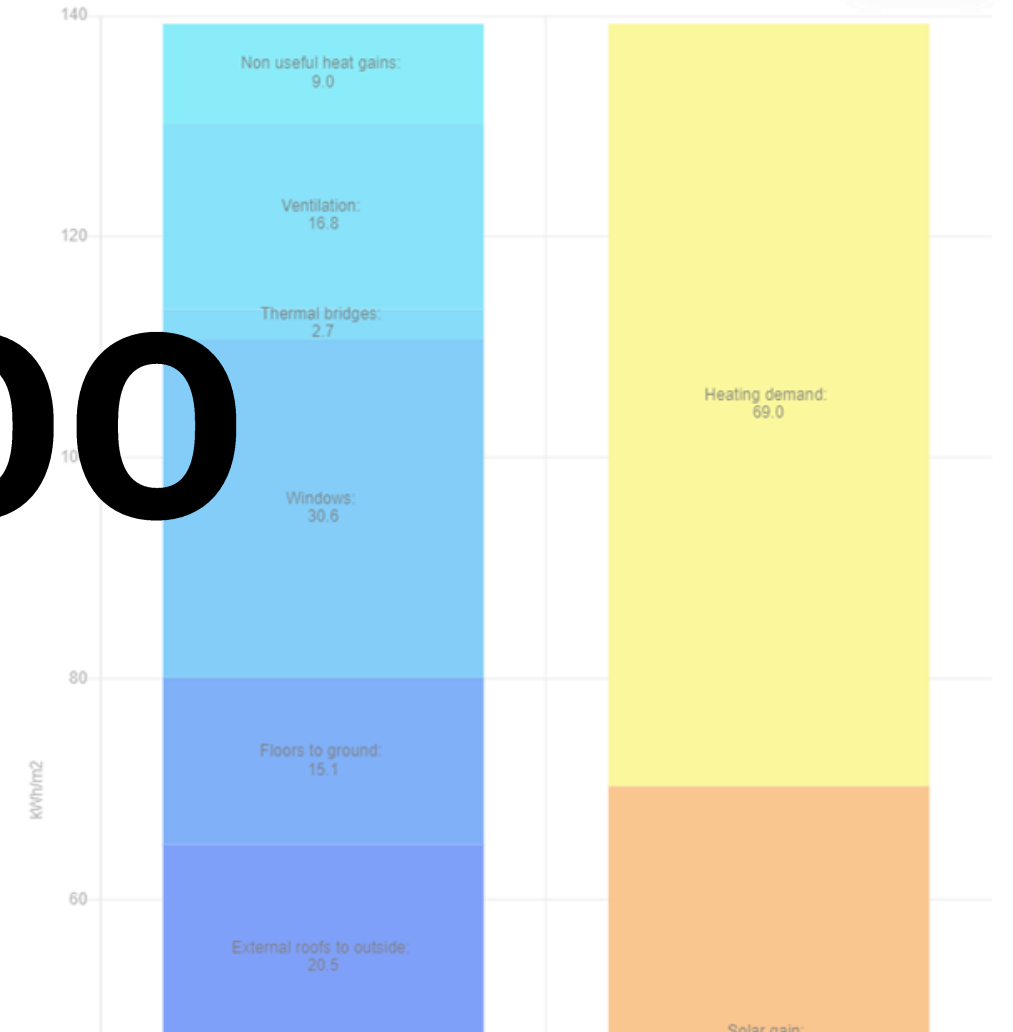
Summer window vent rate (ach/hour)	Percentage time above setpoint (no mechanical cooling)	Annual cooling demand (with mechanical cooling) kWh/m ² /year
0.0	3.6 %	3.2

Additional cooling parameters

Assumed occupancy	Total effective air change	Internal heat gain
2.0	0.6	2.1

Heat balance chart

Data to csv file



10,000

\$508,626



A General Provisions

A1 Classified Uses

A2 Interpretation

A3 Building Importance Levels

B Stability

B1 Structure

B2 Durability

C Protection from Fire

C1 Objectives and Intent

C2 Prevention from Fire Occurring

C3 Fire Affecting Areas Beyond the Source

C4 Movement to a Place of Safety

C5 Access and Safety for Firefighting Operations

C6 Structural Stability

D Access

D1 Access Routes

D2 Mechanical Installations for Access

E Moisture

E1 Surface Water

E2 External Moisture

E3 Internal Moisture

F Safety of Users

F1 Hazardous Agents on Site

F2 Hazardous Agents in Materials

F3 Hazardous Substances and Processes

F4 Safety from Falling

F5 Construction and Demolition Hazards

F6 Visibility in Escape Routes

F7 Warning Systems

F8 Signs

F9 Restricting Access to Residential Pools

G Services and Facilities

G1 Personal Hygiene

G2 Laundering

G3 Food Preparation

G4 Ventilation

G5 Interior Environment

G6 Airborne and Impact Sound

G7 Natural Light

G8 Artificial Light

G9 Electricity

G10 Piped Services

G11 Gas as an Energy Source

G12 Water Supplies

G13 Foul Water

G14 Industrial Liquid Waste

G15 Solid Waste

H Energy Efficiency

H1 Energy Efficiency

0% - 0.5%

Ability to Influence the Success of a Project versus the Cost of Change

