

CARBON ZERO BUILDINGS

CITY OF MELBOURNE ENGAGEMENT

Buildings are the main carbon emissions source for the City of Melbourne, accounting for 66% of carbon emissions. Of this, commercial buildings make up 60%.

Like many other organisations around the world, we have been trying to increase the rate of building retrofits. City of Melbourne's 1200 buildings program was high impact, but it still did not create the momentum needed to meet our Paris commitments.

The council is now creating a Zero Carbon Building Plan to outline how we will reach the retrofit rate needed to meet our target of zero carbon by 2040. This consultation asks commercial and residential stakeholders how we can work together to create the momentum we need to retrofit 77 buildings per year.

PARTICIPATE MELBOURNE SURVEY – COMMERCIAL OUTCOMES

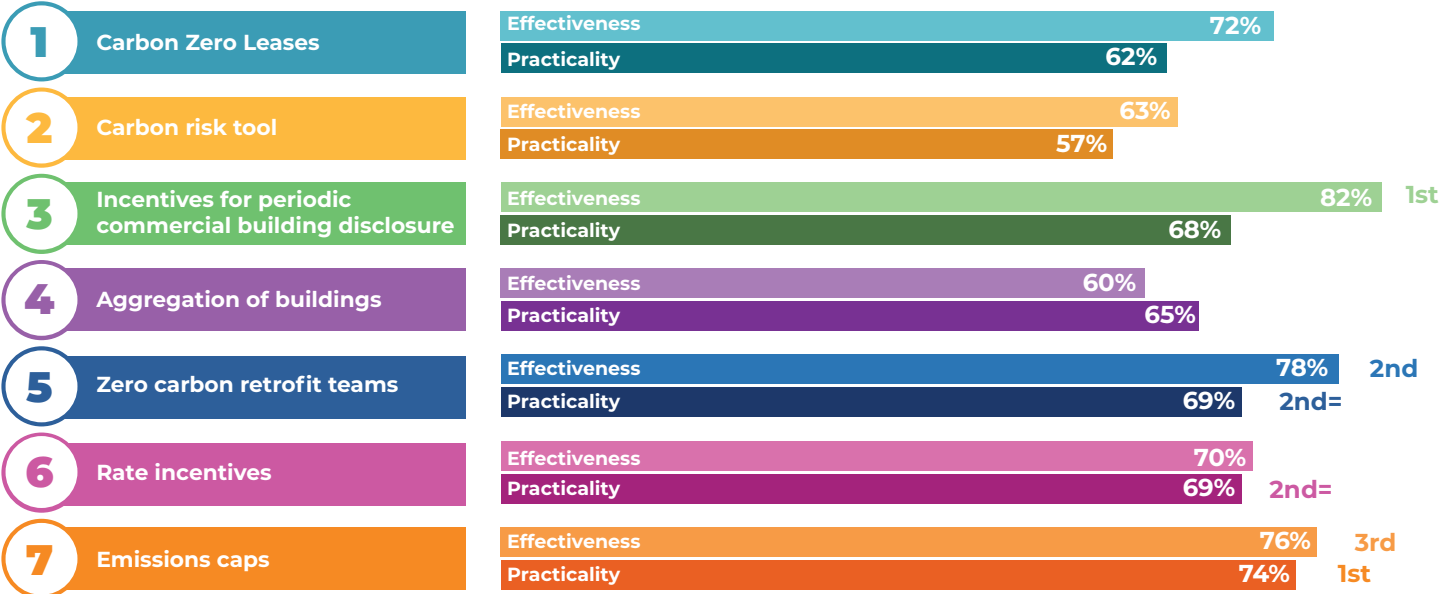


CARBON ZERO BUILDINGS OVERVIEW

CoM proposed 7 initiatives to help the city reach its carbon zero building goals. Commercial respondents were asked:

- How effective do you think this initiative will be in supporting your organisation in making their buildings zero carbon ready by 2040?
- How practical do you think this initiative will be for your organisation to use or enact?

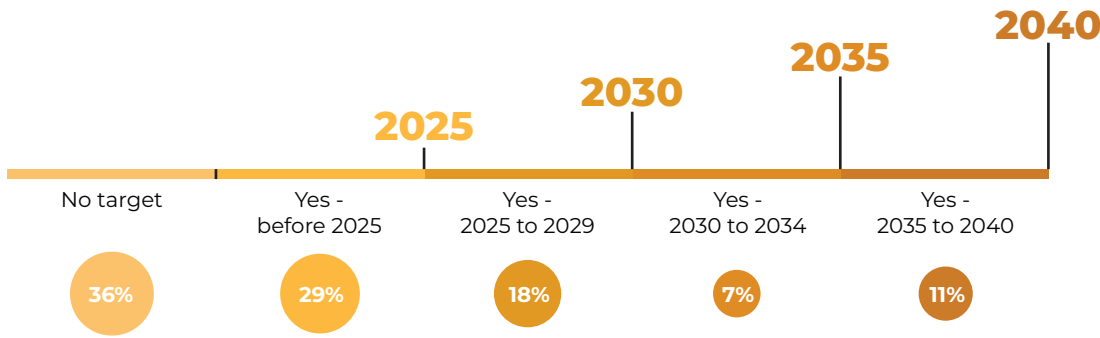
The following proportions of the 27 commercial respondents rated initiatives either a 4 or 5 out of 5:



COMMERCIAL RESULTS

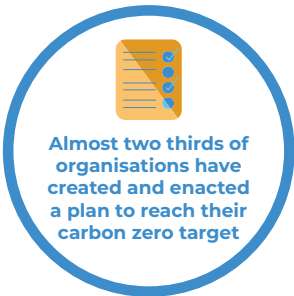
ZERO CARBON TARGETS

Does your organisation have a zero carbon target?



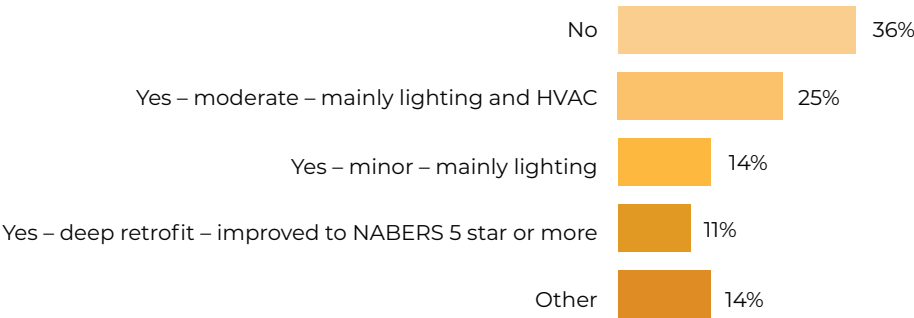
TARGETS

Has your organisation created and enacted a plan to reach this zero carbon target?



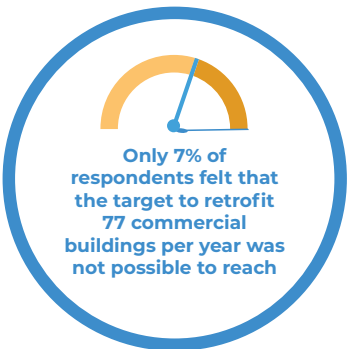
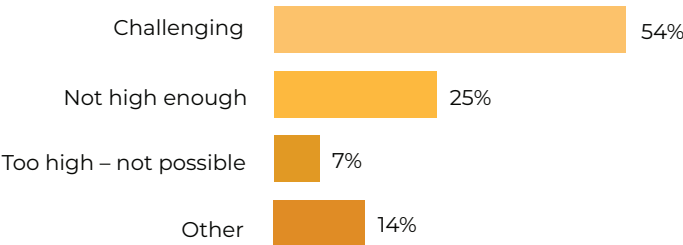
RETROFITTING

Has your building(s) been retrofitted in the last 10 years?



OPINION ON CITY OF MELBOURNE TARGET

What is your opinion of the target to retrofit 77 commercial buildings per year?

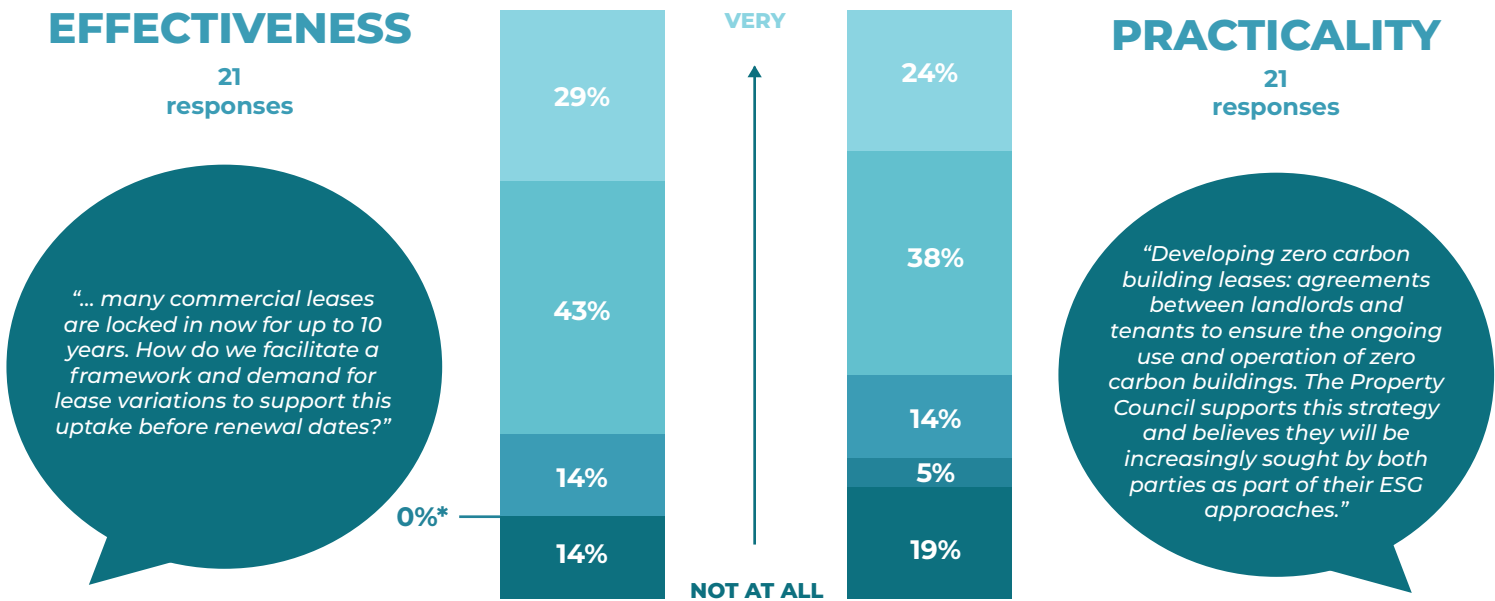


INITIATIVE 1 - ZERO CARBON LEASES

Developing and promoting zero carbon building leases

This initiative will take the learnings from the Green Lease, first developed in Melbourne 20 years ago, which now has a 94% uptake in the premium office market.

This level of market buy-in could be harnessed to create a simpler and clearer product – a Zero-Carbon Building Lease. This will provide a mechanism for tenants to demand zero-carbon space, as well as ways for building owners to ensure tenants do what is needed to produce whole of building zero-carbon outcomes.



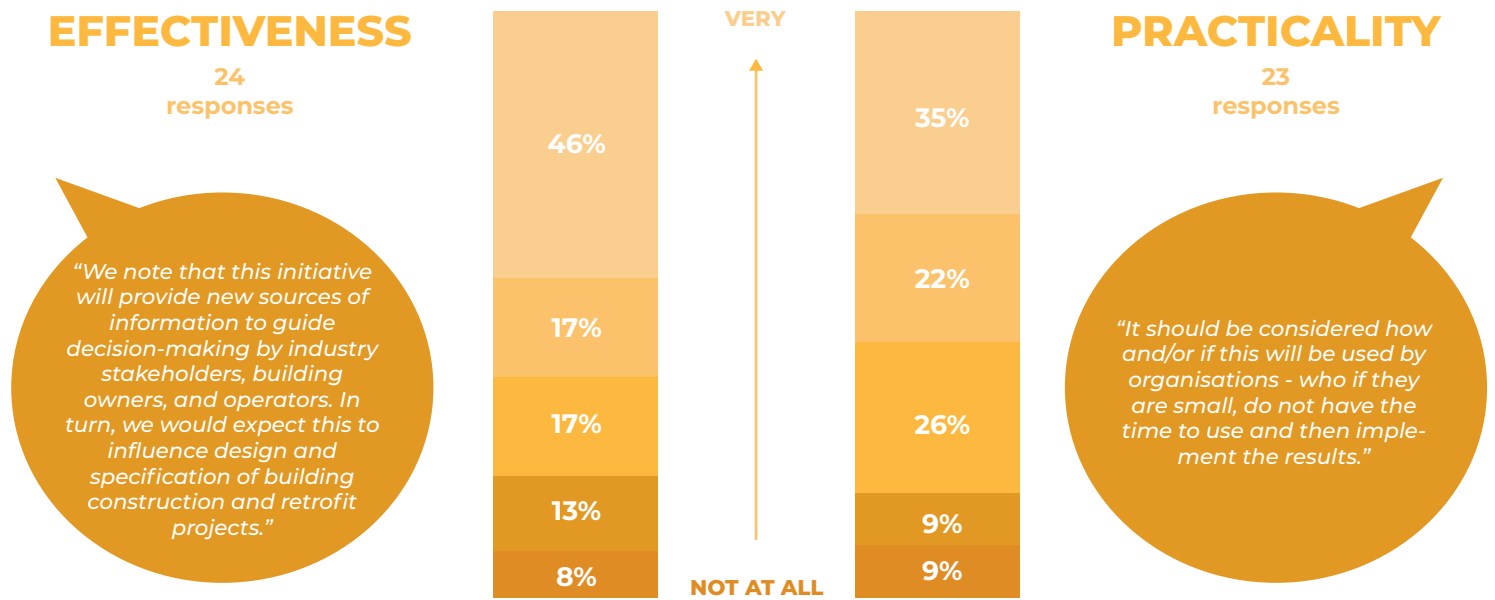
INITIATIVE 2 - SIMPLE CARBON RISK TOOL

Developing and promoting carbon risk assessment tool

This initiative will work with industry to develop a simple carbon risk tool to provide decision-supporting data for building owners simply, quickly and effectively.

This will help building owners and investors to understand the future risk of carbon of their buildings and support retrofit decision making. It will enable investment decisions to be made around the impact on building value of its carbon footprint.

We envisage a ten minute tool that could include looking at aspects of regulation, ESG requirements, climate risk and carbon pricing. CRREM is a tool from Europe as an example.



*Note that 0% means no respondents selected this option

INITIATIVE 3 - INCENTIVES FOR PERIODIC ENERGY USE REPORTING

Incentivising periodic commercial building disclosure

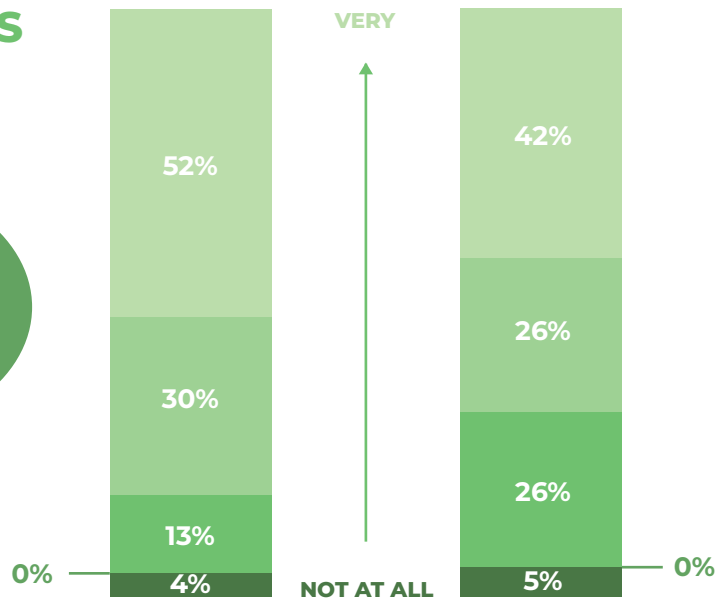
Commercial Building Disclosure (CBD) is a national regulatory program that requires sellers and owners leasing commercial office spaces over 1000m² to provide energy performance using the NABERS energy rating system.

This initiative proposes a program for City of Melbourne to incentivise voluntary periodic reporting. Incentives and support will assist new starters in overcoming hurdles, such as the cost of assessors, in their uptake of NABERS. This will help building owners be of the front foot as the CBD program broadens.

EFFECTIVENESS

23
responses

"It's not relevant unless size of buildings captured is much reduced. It would be a good idea to do this so smaller buildings are captured"



PRACTICALITY

19
responses

"Periodic disclosure – good initiative and will support ISPT on its roadmap."

INITIATIVE 4 - COLLABORATION OF LIKE BUILDINGS

Facilitation of aggregation of buildings for joint procurement

The City of Melbourne has led Australia in bringing together business and government to decarbonise through joint procurement of renewable energy through the Melbourne Renewable Energy Project (MREP).

This initiative proposes to bring together like buildings, to enable them to build capacity and carry out retrofits together.

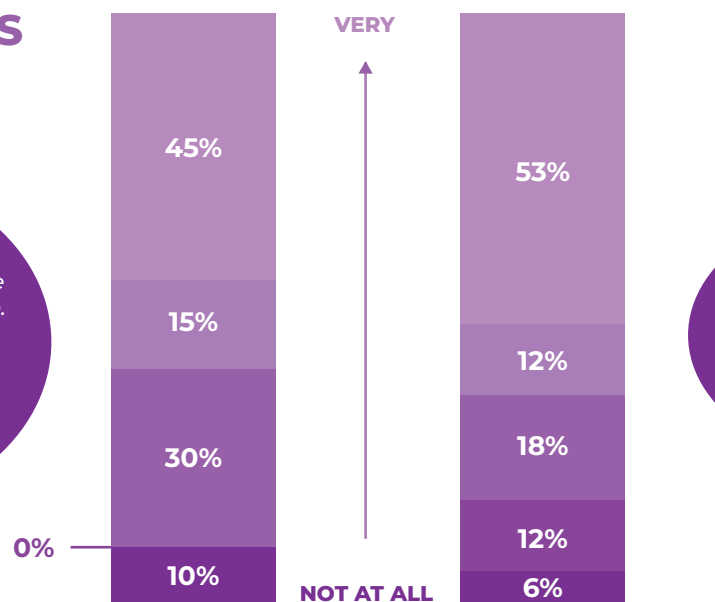
It addresses the problem of smaller buildings' capacity to access professional services, advice and capital to retrofit their buildings. Aggregating buildings into similar categories – hotels, storage, parking, and unrated office buildings, 1970s brutalist, etc. – could help them to solve issues together.

In addition, a group of buildings undergoing lighting, HVAC, insulation and electrification works jointly will lead to economies of scale for investment and purchasing.

EFFECTIVENESS

20
responses

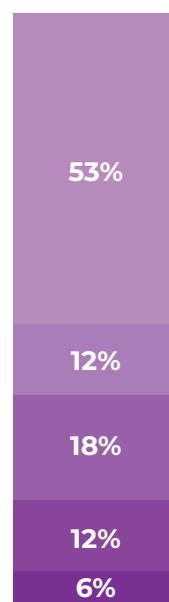
"Joint procurement of zero carbon retrofitting for multiple buildings is a positive initiative. Addressing the issues of smaller buildings through an aggregated approach may help to overcome some low and mid-tier barriers."



PRACTICALITY

17
responses

"Add teeth to the program and make buildings zero carbon before 2040. Incentivise earlier adoption of the program"



INITIATIVE 5 - BUILDING RETROFIT TEAMS

Convening zero carbon building retrofit teams

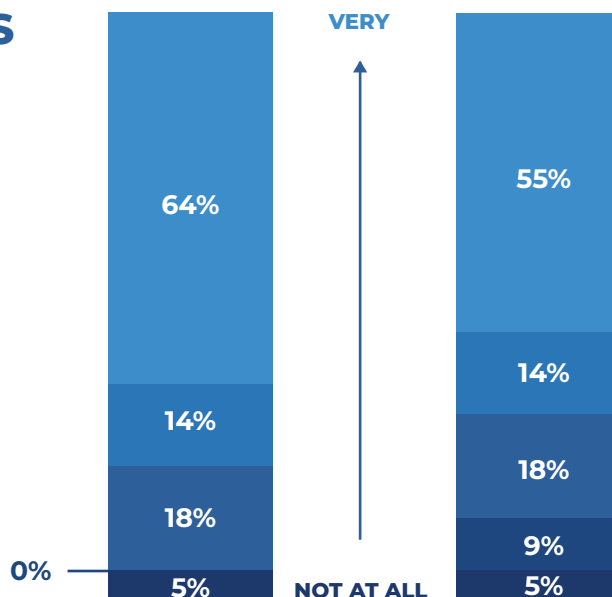
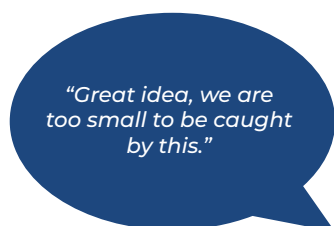
The concept of building teams is that a building owner sets up a team tasked with looking after the building over a defined period of time. A building team could be a consortium of experts from different parts of the industry, and could include owners, tenants and managers of the building with a dedicated planner from council, engineers, architects, etc.

Together the building team determines a trajectory over that time to achieve zero carbon, and beyond. This trajectory maps asset replacement plans, ensuring a steady rate of investment into the building. In addition, the team builds a relationship with the building and its stakeholders. The team will be more agile and responsive to change, monitor and learn from initiatives, and respond more quickly and effectively to adaptation needs.

EFFECTIVENESS

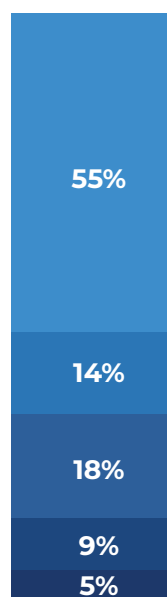
22
responses

VERY



PRACTICALITY

22
responses



INITIATIVE 6 - RATES REDUCTION

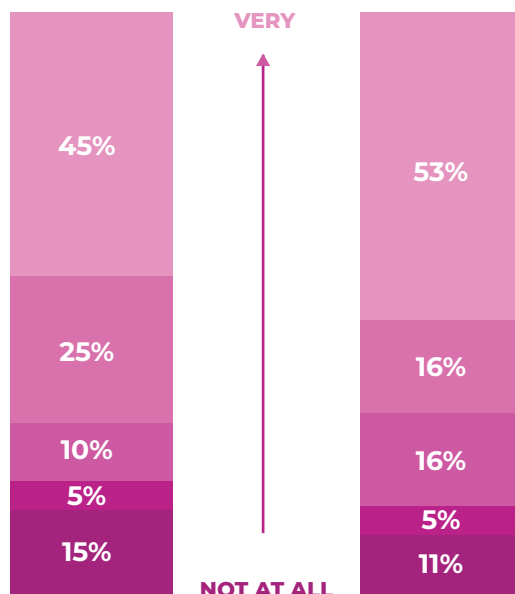
Incentivising performance through rates

The City of Melbourne could use its rate charging ability to encourage emissions reduction, leveraging from anticipated future expanded Commercial Buildings Disclosure requirements, as demonstrated by improvements in NABERS energy ratings. An economic and emissions analysis was carried out demonstrating that differential rates can drive emissions reduction from the mid-tier office sector.

This would mean targeted rate-in-the-dollar reductions (over 10 years) for buildings that undertake upgrades to increase their NABERS ratings. This is funded by maintaining - or in some scenarios increasing - the rate-in-the-dollar applied to buildings who do not participate, rather than reducing this rate as property and rental values increase.

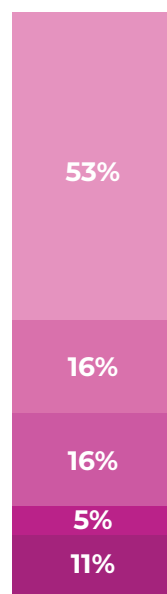
EFFECTIVENESS

20
responses



PRACTICALITY

19
responses



INITIATIVE 7 - EMISSIONS CAP

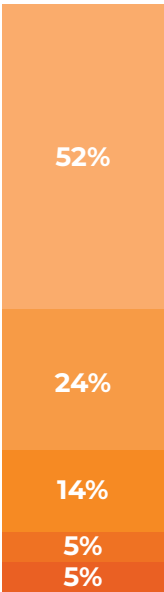
Introduction of an emissions cap through a local law

To encourage building owners to reduce emissions, an emissions ceiling could be set. Buildings exceeding their emissions target will pay an emissions fee that could be used to support the upgrade programs.

EFFECTIVENESS

21 responses

"It is vital to give industry a clear target and a clear pathway and timeframe to drive investment. This aspect of the package does all these things. It also rewards leaders and provides an effective stick to laggards."



PRACTICALITY

19 responses

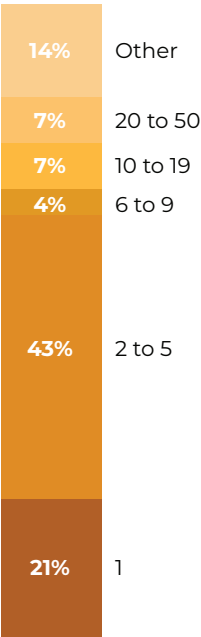
"We do not see the rates incentive along with an emissions cap working alongside each other and of the two options, our very strong preference is for an incentive-based approach."



INFORMATION ABOUT ORGANISATIONS WHO CONTRIBUTED

NUMBER OF BUILDINGS OWNED OR OCCUPIED

Number of buildings organisation owns, manages or occupies:

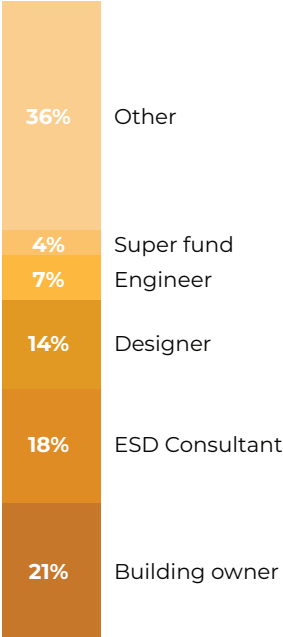


'Other' responses included:

- 96
- "Numerous"
- 0 (x2)
- N/A

TYPE OF ORGANISATION

Organisation represented:



'Other' organisation types included:

- Builder, Developer, Asset Manager and Owner
- Tenant and Climate Change Solutions Business
- Architecture, Engineering and Infrastructure
- Multidisciplinary engineers, building performance services experts and sustainability consultants
- Supplier of Building Materials (glass)
- Government
- Developer and Investor
- University

Along with the 27 commercial survey responses, written responses were received from 18 industry and key sector groups representing over 2100 individuals, members and organisations from the property sector, and 3.2 million m2 of Melbourne commercial property. There was also a response from C40, which represented 98 cities around the world.