



What is the issue? What are we doing about it?

We are proposing changes that give cost-effective, fuel and technology neutral ways for buildings to reduce emissions and move towards a net zero future. They also support the ongoing uptake of electric vehicles (EVs).

Three levels of change were developed, all including EV charging.

- Option 1 = Improvements to the energy efficiency of building and its services
- Option 2 = Option 1 plus mandatory on-site photovoltaics (PV)
- Option 3 = Option 2 plus electrification readiness and offsetting for gas appliances

Why are these changes proposed?

- To support the <u>Trajectory for Low Energy Buildings</u> and <u>National EV Strategy</u> in
- reducing greenhouse gas (GHG) emissions and improving EV charging options Reduce energy costs
- Reduce energy costs

Cost benefit analysis

All options show significant overall benefits, moving Australia closer to its emission reduction targets, with some variances by climate and building type. We have recommended Option 3 because it will make our new schools, workplaces and other commercial buildings net zero ready in one step and generate a massive economic benefit. Given the rapid development of market support for EVs, expanding regulatory measure for EV charging shows a net cost. This is likely due to the substantial benefits already attributed to earlier NCC changes ('rough in' for apartment buildings). *The benefits and costs of Option 3 – Net Zero Ready – are set out below.*

BENEFITS Reduced emissions & energy use

Emissions reduced

Electricity use saved

COSTS Energy efficiency building costs Approximate costs • \$2.7 billion - Option 3 - Net Zero Ready

• 175.2 TWh - Option 3 – Net Zero Ready

Overall benefits

There are huge benefits for the environment and economy.

Option 3 – Net Zero Ready = \$16.8 billion

23.3 Mt CO₂-e - Option 3 – Net Zero Ready

More than \$10 billion net benefit – even with further EV support included!

EV charging costs Overall costs \$3.4 billion (including maintenance)

\$4,000 per charger (including installation)

The technical stuff

The proposed technical changes are in the NCC 2025 Public Comment Draft in Section J (Volume One). The changes cover common areas of apartment buildings and commercial buildings. The options build on each other starting with improvements to energy efficiency of the building fabric and services, adding PV then moving towards full electrification (with gas offsets).

What we want feedback on

• Have we considered all the impacts and benefits of the PV requirements?

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- Have we considered all the impacts and benefits of the EV charging requirements?
- Are the cost estimates reasonable?

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