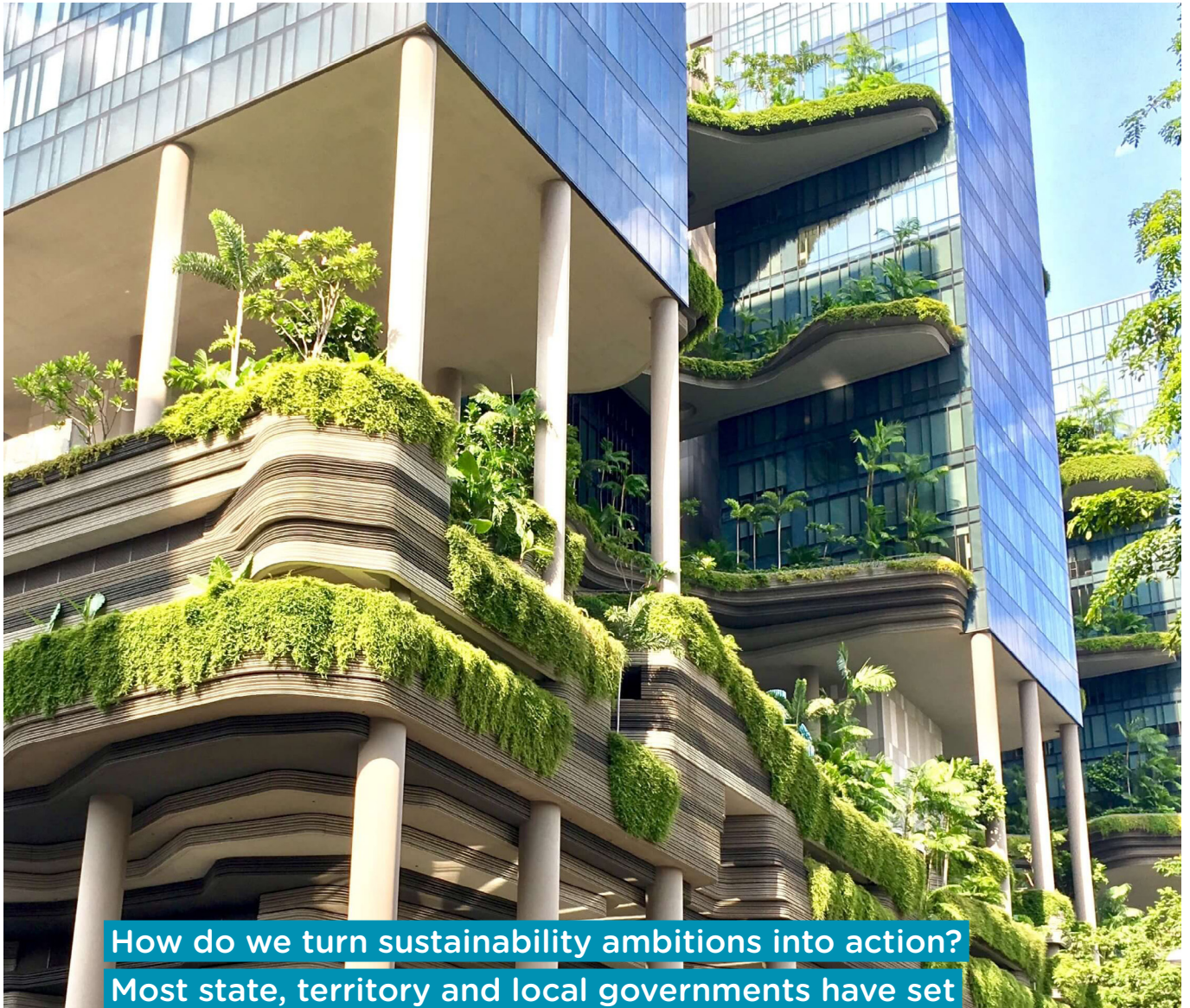


The NSW Sustainable Buildings State Environmental Planning Policy (SEPP): Driving transformation at speed and scale



How do we turn sustainability ambitions into action? Most state, territory and local governments have set net zero targets - but few planning policies ensure buildings are performing as promised. The new NSW Sustainable Buildings SEPP offers solutions that can help Australia's built environment move towards net zero emissions - and support resilient, healthy and efficient places - at speed and scale.



The Sustainable Buildings SEPP is an important milestone for New South Wales.

The state's planning system now has controls governing the performance of energy, water and emissions, and the measurement of embodied carbon, covering new residential and non-residential buildings, and alterations

and refurbishments over certain thresholds.

The Sustainable Buildings SEPP is also an important milestone for Australia. As the policy elevates expectations for the design and delivery of buildings in NSW, it will influence targets, processes, reporting and skills development across the country.

What do planners, developers, designers, consent authorities and other city-shapers around Australia need to know to prepare? And what can other government leaders learn from NSW's approach.

What is the Sustainable Buildings SEPP?

From 1 October 2023, a package of policies will change the way buildings are designed and delivered in NSW.

The new State Environmental Planning Policy (Sustainable Buildings) 2022 - or the Sustainable Buildings SEPP for short - was passed in August 2022.

This policy was developed to help the NSW Government meet its net zero target by 2050, as well as the 70% emissions target by 2035, compared to 2005 levels, outlined in the [NSW Net Zero Plan: Stage 1](#).

The Sustainable Buildings SEPP aligns with the National Construction Code 2022 and the national [Trajectory for Low Energy Buildings](#), which was agreed by federal, state and territory energy ministers in 2019.

The Sustainable Buildings SEPP addresses both residential and non-residential buildings. This fact sheet is focused on non-residential buildings. For more information about how the Sustainable Buildings SEPP influences residential buildings and to download frequently asked questions, visit the [NSW Government Planning website](#).

The policy at a glance



All non-residential developments (unless exempt) must report on emissions. The policy also introduces new requirements for prescribed large commercial buildings, including:

- + Offices with a net lettable area of at least 1,000 square metres
- + Hotels and motels with at least 100 rooms
- + Serviced apartments with at least 100 apartments.

The policy also captures state significant developments like health, education and cultural buildings. Some types of development and land use categories are currently excluded while more work is undertaken to establish an appropriate pathway.

A mission to reduce emissions

The NSW Government estimates that the non-residential requirements of the Sustainable Buildings SEPP will abate more than 700,000 tonnes of emissions from lower energy consumption and offsetting.

Here are the highlights that may influence planning and policy around Australia...



1 A sharper focus on embodied emissions

Addressing embodied emissions – those generated during a building’s whole lifecycle – is inevitable as buildings become more energy efficient and operational emissions fall. Without action, embodied emissions could account for an estimated [85% of the built environment’s carbon footprint](#) by 2050.

To comply with the Sustainable Buildings SEPP, embodied emissions must be disclosed at the development application (DA) and construction certificate stages. This must be certified by a quantity surveyor, a qualified designer, an engineer or NABERS Assessor.

NABERS is currently developing an [embodied emissions framework](#) to help measure, benchmark and certify emissions from construction and building materials. The Sustainable Buildings SEPP will align with the NABERS framework when it is released in late 2023 or early 2024.

In the meantime, the Sustainable Buildings SEPP requires emissions disclosure to be submitted via a simple online template (NABERS Embodied Emissions Material Form). This disclosure is limited to construction materials used in the substructure, superstructure and façade, and draws on calculations that designers already make when preparing a bill of quantities.

Takeaways:

The policy lays a solid foundation for national embodied emissions reporting and action through NABERS. By gathering information on embodied emissions in construction materials, the Sustainable Buildings SEPP will help to build a vital evidence base to inform future benchmarks and targets as the market for low emissions materials matures.

2 All-electric and net zero ready by 2035

Large commercial buildings and certain state significant developments must operate without fossil fuels by 2035. To demonstrate this, project proponents must submit a ‘Net Zero Statement’, verified by an engineer. This either confirms the building is fossil fuel free or explains how the building will be capable of operating without fossil fuels by 2035.

Takeaways:

This requirement encourages project teams to think carefully about the design of future-focused buildings. Will they need to develop a strategy to transition away from fossil fuels from 2035, or is it better to build fossil fuel free from the beginning? When project teams understand how to deliver fossil fuel free projects in New South Wales, they’ll have those same skills to deliver similar outcomes in other states.

The requirements in the Sustainable Buildings SEPP also align with NABERS’ work to incentivise fossil fuel free buildings. NABERS adjusted its star ratings to recognise fossil fuel free buildings in 2021 and further adjustments are scheduled for 2025 and 2030. This means the star ratings of fossil fuel free buildings will increase every five years, as NABERS adjusts its ratings, while those that use on-site fossil fuels, like gas, will decrease.

In June 2023, NABERS also launched the Renewable Energy Indicator. This shows the percentage of clean renewable energy that a building consumes and discloses the amount of fossil fuels used on every NABERS Energy certificate.

To achieve a 5 or 6 Star rating under the Green Building Council of Australia’s (GBCA’s) Green Star Buildings rating tool, all new buildings or major refurbishments must be fossil fuel free. This requirement will apply to 4 Star ratings from 1 January 2026.

3 Closing the energy performance gap

The Sustainable Buildings SEPP allows projects to demonstrate compliance through any Section J pathway of the National Construction Code.

However, an agreement to rate with NABERS can address the building energy performance gap. The performance gap, or the difference between the modelled and actual energy performance, can mean buildings consume up to 250% more energy than predicted during design.

In Australia, we know one way to close this energy performance gap is to sign a [NABERS Commitment Agreement](#). Research undertaken by the [GBCA](#) in 2021 found a NABERS Commitment Agreement is a “critical success factor in translating design intentions into real-world outcomes”. The report found 91% of Green Star rated buildings with NABERS Commitment Agreements met or exceeded their NABERS Energy target.

The NABERS Commitment Agreement process requires project teams to model a range of scenarios that could lead to an energy performance gap, from different weather conditions, times of day, and peaks and troughs of occupancy. A building must perform at its target NABERS rating across all those scenarios and that is verified in operation.

Takeaways:

This policy offers a solution for governments looking to align their net zero targets with planning rules that verify actual performance. With a signed NABERS agreement, all parties involved in the design and delivery of a building can rally around a shared, tangible target – one that is verified in operation.

4 Documentation at several steps

The operational performance standards for large commercial buildings will be checked by consent authorities at multiple stages. This includes: a NABERS agreement at the DA stage; energy efficiency reports when the construction certificate is issued; and NABERS Energy and Water performance ratings within 24 months of an occupation certificate being issued.

Takeaways:

Designs at the DA stage are rarely complete and comprehensive. The Sustainable Buildings SEPP addresses this lack of early documentation by requiring verification at various stages of the process – from design through to post-occupancy.

This will ensure that energy and water efficiency, verified with NABERS ratings, remain front-and-centre and cannot be “value engineered” out. By using NABERS, the Sustainable Buildings SEPP harnesses a well-established, respected and trusted pathway that Australia’s property industry already understands and uses.

5 Clear energy and water performance standards

Prescribed offices must meet a 5.5 star NABERS Energy rating in operation, while prescribed hotels, motels and services apartments must achieve a 4 star NABERS Energy rating. Large commercial developments must also achieve 3 star NABERS Water ratings. These standards also apply to refurbishments with a capital investment value of more than \$10 million.

Takeaways:

Few other jurisdictions assess projects post-occupancy, making the Sustainable Buildings SEPP a policy ‘first’. These new standards are considered a minimum requirement that meet the expectations of NCC2022, while giving local councils the opportunity to introduce complementary standards. NABERS, as a verification pathway, offers a simple star rating that makes it easy for everyone to understand whether these requirements have been met.

6 Disclosure to drive better buildings

Twenty years of data from NABERS tells us that measurement leads to better management. The Sustainable Buildings SEPP will require greater disclosure of energy and water efficiency of buildings. Every building captured under the policy will have its NABERS Energy and Water rating published on the NABERS website.

Takeaways:

We know disclosure drives people and organisations to do better. As investors, consumers, employees and communities demand action on climate, the NABERS ratings of each project captured by the Sustainable Buildings SEPP will encourage the proponent to look more carefully at their energy modelling upfront, because their building’s performance will be publicly available.



7 Gathering new insights to inform future policy

A digital application process will capture valuable data that the NSW Government plans to share with other jurisdictions, and with the Australian Buildings Code Board, to inform future policy. The digital system will introduce consistency to submissions, eliminating variations in formats and style, that has made data capture and analysis a challenge in the past.

Takeaways:

Aligning systems to ensure standard approaches to data capture and information sharing will support everyone working to improve the sustainability of Australia's built environment. NABERS, NSW Government, the Green Building Council of Australia and industry are collaborating to ensure data consistency and sharing. We encourage other governments to join us.

The Sustainable Buildings SEPP will deliver big benefits. How could similar policies support your state?

- + Minimise greenhouse gas emissions
- + Meet energy efficiency and net zero targets
- + Reduce water consumption and strengthen water security
- + Ensure accountability and eliminate "value engineering"
- + Assure asset owners that designs are delivered
- + Enhance thermal design and deliver comfortable, productive and safe buildings
- + Reduce pressure on energy and water infrastructure
- + Improve air quality
- + Boost the climate resilience of the built environment
- + Safeguard communities against rising energy prices
- + Future proof buildings for an all-electric future
- + Uncover innovation opportunities
- + Create new markets for local products, jobs and economic prosperity.

Big benefits for a small cost

The nominal costs incurred to certify compliance, enter an agreement with NABERS and offset emissions will be outweighed by the economic benefits.

An independent cost-benefit analysis undertaken by Acil Allen found the policy for non-residential buildings will result in a total benefit cost ratio of 2.8 to 1. This includes a positive net economic benefit to the NSW economy of \$38 million.

2.8:1 Total benefit-to-cost ratio

\$38 million

Economic benefit to NSW

700,000 tonnes

Greenhouse gas emissions saved

What can you do next?

The Sustainable Buildings SEPP is new. But the systems and processes that are used to verify compliance – like NABERS – are well known, respected and trusted by Australia’s property and construction industry.

The Sustainable Buildings SEPP commences on 1 October 2023. The development standards within the SEPP will be reviewed in 2025 and, then again, every three years. Every jurisdiction has its own policy framework – but the process of coming together as a team to work through the challenges, identify the available policy levers and forge a new pathway forward is something that every state and territory can replicate.



To find out more about how you can use NABERS to get the best outcomes from your buildings, get in touch with the NABERS team. We’re here to help.
