

NABERS CELEBRATES



25
YEARS
OF GAME
CHANGERS

25 | N★
YEARS
NABERS

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NABERS TURNS 25 IN 2024

With a quarter of a century of history to mine, and an army of people behind its success, the NABERS story is long and layered. To cut to the chase, we asked a few instrumental people to reflect on the ‘gamechangers’ that transformed Australia’s property market.

Cover image: Sustainable apartment block, Sydney.



One Central Park,
Sydney.

NABERS celebrates 25 years of game changers

25 years of NABERS timeline

- 1999** Launch of the Building Greenhouse Rating in NSW. The scheme becomes national and is renamed the Australian Building Greenhouse Rating (AGBR).
- 2006** Launch of NABERS Water rating.
- 2007** Energy Efficiency in Government Operations policy introduced, requiring 4.5 star minimum NABERS Energy ratings for Australian Government tenants.
- 2008**
 - AGBR is renamed NABERS.
 - Launch of NABERS for Hotels.
- 2009** Launch of NABERS for Shopping Centres.
- 2010** Commercial Building Disclosure (CBD) program introduced and NABERS ratings become mandatory for office buildings over 2,000 m².
- 2011** Rating scale increases from 5 stars to 6 stars.
- 2012** NABERS New Zealand launches.
- 2013** Launch of NABERS for Data Centres.
- 2015** Launch of NABERS Indoor Environment rating.
- 2017**
 - CBD threshold drops to 1,000 m² for mandatory NABERS Energy for Offices ratings.
 - Launch of NABERS for Public Hospitals.
- 2018**
 - Launch of NABERS for Apartment Buildings.
 - Launch of NABERS Co-Assess.
 - Launch of NABERS Waste tool.
 - Launch of NABERS Carbon Neutral certification.
- 2020** Launch of NABERS UK.
- 2021** Launch of NABERS for Retirement Living and Residential Aged Care.
- 2022** Launch of NABERS for Warehouses and Cold Stores.
- 2023** Launch of Renewable Energy Indicator.
- 2024** Launch of NABERS for Schools and Retail.

EARLY CHAMPIONS

What we know today as NABERS, the National Australian Built Environment Rating System, was launched in 1999, first as the Building Greenhouse Rating (BGR) and then the Australian Building Greenhouse Rating (ABGR).

When Gavin Gilchrist, author of *The Big Switch* and Program Director for the NSW Government's Sustainable Energy Development Authority (SEDA), commissioned energy efficiency expert Alan Pears to explore a "path forward" for a rating system for non-residential building environmental performance, the case for change was clear.

On a "whirlwind global consultation trip" Alan found wide agreement about the "big gap" between design intent and real-world energy performance. Alan framed a system that, if effectively implemented, could save NSW businesses around \$125 million and slash two million tonnes of greenhouse gas emissions each year. The key was to focus on real world performance, not good intentions or marketing claims.

"However," Alan wrote in his 1998 report, "the market such a scheme aims to penetrate is a very tough one." Success depended on "effective promotional and marketing support... model contracts and leases, financial incentives, disclosure of past energy costs to prospective tenants or purchasers, etc."

The "etcetera" was not daunting for SEDA's then executive director Cathy Zoi. She had managed energy programs in the United States and had made the Clinton White House an exemplar of energy efficiency. In response to Cathy's request for a rating scheme, Dr Paul Bannister developed a methodology, based on operational building energy performance. With the support of the Property Council of Australia, a voluntary benchmarking program was born.



NABERS ratings displayed on a For Lease sign, Sydney.



"I dreamed of 'for lease' hoardings on office buildings declaring a current rating along with the tenancy size and other relevant specs."

Sue Salmon
Former NABERS program manager

83 Pirie Street, Adelaide, Cbus Property. Image courtesy of Trevor Mein 2022.

Bruce Precious was at the launch of the scheme. "We mused about every office building having a star rating," he says. "At the time, energy efficiency, if it was a topic of discussion at all, was left to the facilities teams and technicians. These people knew their megajoules from their kilowatt hours. But to drive change we needed energy efficiency to become a conversation topic in corporate boardrooms."

Sue Salmon, a successful environmental campaigner, was charged by Cathy to transform Australia's property sector.

Sue was the program manager from July 2002 to May 2004. During that time, she put in the place all the policy instruments needed to drive NABERS' successful market transformation.

"I dreamed of 'for lease' hoardings on office buildings declaring a current rating along with the tenancy size and other relevant specs. I also dreamt of new office buildings designed to achieve a high level of energy performance once operational and settled," she says.

IGNITING COMPETITION

In 1999, energy was relatively cheap and the science of climate change still up for debate. Convincing building owners to commission an assessor to rate the greenhouse performance of their office portfolio was Sue Salmon's Herculean task.

171 Collins Street,
Melbourne, Charter Hall.



Carlos Flores, NABERS
+ CBD Conference 2018.

“To drive change we needed energy efficiency to become a conversation topic in corporate boardrooms.”

Bruce Precious
Principal Consultant,
Six Capitals Consulting

Governments were yet to establish tenant policies, and without a demand side driver, building owners “risked the possibility they would find out they had a portfolio of buildings with 0, 1 and 2 stars at a time when no one was asking questions about the greenhouse impacts of energy use in office buildings,” Sue says.

But Chris Luscombe, then with Mirvac, gave Sue some advice that every property professional knows well. “Property companies were really just like footy teams – super competitive – and I understood if I could get one to move then the others wouldn’t want to be left behind. And so it proved. But, still, there were many, many business cards, many, many meetings and many follow-up contacts.”

A key factor was that the Property Council of Australia, the major industry body, had a spectrum of members, from developers and designers to building owners and managers. Many building owners were sceptical of claims from developers – they wanted evidence of real performance. ABGR offered that.

SETTING THE PLAYBOOK

When Matthew Clark was appointed to drive the rating tool's adoption in 2002, it was "a great idea with very little structure around it," he says. The scheme had three accredited assessors, all trained engineers, who worked independently.

Highpoint Shopping Centre,
Melbourne, GPT.



1 William Street, Brisbane,
Cbus Property.

"Within a few years, portfolio and fund managers, property and operation managers, leasing agents and designers, builders and service technicians were using the language of NABERS."

Matthew Clark
Former director of water and energy programs, NSW Office of Environment

"We had no audit or review of ratings. We trusted that, because the information was simple, there was little room for errors or inconsistency."

Part of the power of the NABERS rating was its simplicity. "Ratings were easy to do and gave information that building owners could understand and act on," Matthew says. "But that was only half of the equation. The industry also needed to trust that the rating was right. We needed a robust administration system so that everyone could have confidence that ratings were reliable."

Matthew made it his mission to establish that robust administration system. He led the development of the accredited assessor process, established a clear set of rules for rating calculations and a rigorous audit system.

Within a few years, portfolio and fund managers, property and operation managers, leasing agents and designers, builders and service technicians were using the language of NABERS. Why? "Because new value had been created in more energy efficient buildings," Bruce Precious reflects. "It doesn't matter if it's a green premium or a brown discount, everyone in the food chain knew that better NABERS ratings gave you the best opportunity to attract and retain tenants and investors."



30 The Bond, Sydney
Image courtesy of Dexu

SEEING STARS

The NABERS rating system, initially capped at 5 stars, posed a theoretical challenge for existing buildings. But 30 The Bond emerged as a beacon of innovation, pushing boundaries and transforming energy efficiency from a technical concern into a symbol of leadership.

The NABERS rating scale was originally 5 stars, based on historic performance data for the office sector. Average performance was set to 2-2.5 stars, with 5 stars an aspirational target for “well-designed and perfectly managed buildings,” Matthew says. “We thought 5 stars was theoretically possible but unlikely for any existing building.” Alan Pears had done the numbers and knew 5 stars was feasible.

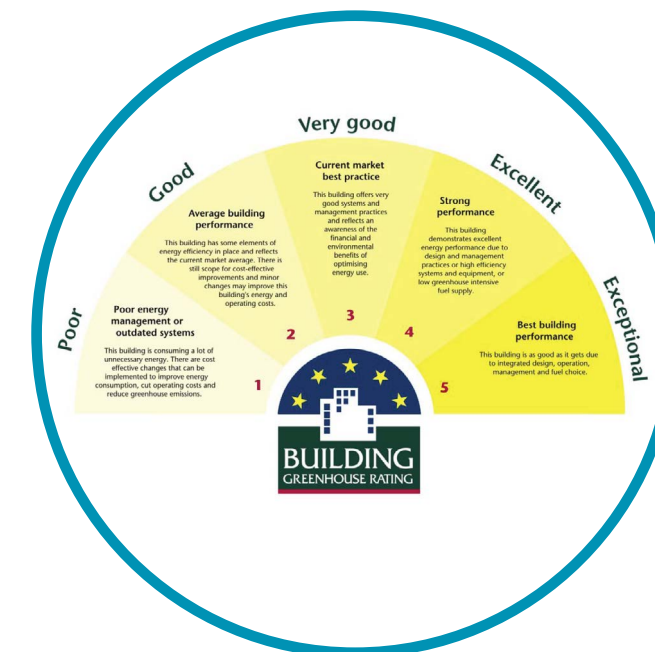
Australia’s property industry took up the 5 star “theoretically possible” challenge and building ratings began moving beyond 4 stars.

The first 5 star NABERS Energy building was Lendlease’s headquarters at Sydney’s 30 The Bond. This building, featuring the nation’s first chilled beam technology in place of conventional air-conditioning, wasn’t just energy efficient. 30 The Bond was a true gamechanger that set sustainability benchmarks for years to come. Stretching 100 metres along a convict-hewn sandstone wall, the building boasted high rates of fresh air, green walls and roof gardens, sustainable timber, smart metering, and the first 5 Star Green Star rating for completed construction.

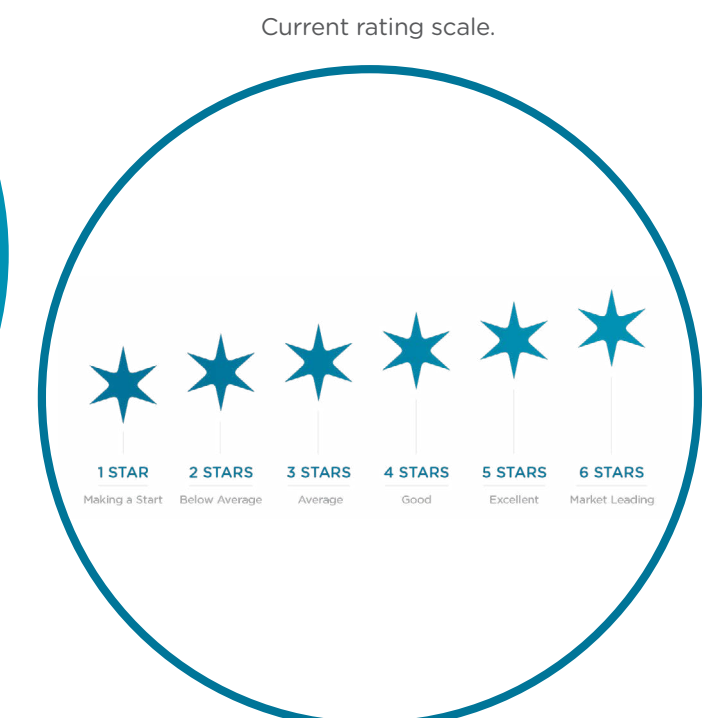
For the Green Building Council of Australia’s Chief Executive Officer Davina Rooney, 30 The Bond was a “lighthouse” that showed how sustainable design, verified by NABERS and Green Star, could be a “beacon for talent, tenants, capital and competitive differentiation.”

The desire to break through that 5 star barrier gave building designers a license to innovate and experiment with alternative technology and technical solutions. But within a few years, existing buildings were also reaching 5 stars. “What we had thought close to impossible was achieved through minor alterations and careful building management,” Matthew Clark notes.

NABERS gave Australia’s property companies a clear target, and a way to actively promote their climate credentials. It brought energy efficiency “out from the shadows,” Matthew says. “It was no longer a technical issue involving complex back-of-house systems only understood by building engineers. The ratings now took pride of place in building foyers, and on company annual reports. Board rooms were actively engaged in driving improvements to their buildings. Investors and building occupants could set clear expectations for building owners, and in turn report on their own climate performance.”



Original rating scale.



Current rating scale.

Francesca Muskovic, Director of National Policy, Property Council of Australia; Dr Paul Bannister; Jonathan Cartledge, CEO of Consult Australia.



A LOUD SIGNAL

In 2007, new Australian Government procurement guidelines changed the game again. As one of Australia's largest office tenants, with a national footprint of more than two million square metres of space around the country at the time, the Australian Government sent a loud market signal with a 4.5 NABERS Energy mandate.



83 Pirie Street, Adelaide, Cbus Property. Image courtesy of Trevor Mein 2022.

“The simple act of disclosing a NABERS Energy rating was linked with a 0.5 star improvement in energy performance.”

Dr. Paul Bannister
Low Energy High Rise Research Report

This not only drove an immediate uplift in the number of rated buildings. It also required more property management specialists to understand the ABGR system.

“Suddenly, leasing and sales teams needed to understand if the buildings they represented would satisfy savvy tenants asking for a rating. Funds managers needed to know how their buildings fared. Facility managers were required to explain to fund managers how they were improving building performance. The star rating became the common language of energy performance,” Bruce Precious says,

“and fortunately there were some bold fund and portfolio managers that took up the challenge.”

The following year, 2008, was a big year for NABERS. ABGR was relaunched with its new name and was embedded in national legislation. In 2009, the groundbreaking *Low Energy High Rise report*, authored by Dr Paul Bannister with Sue Salmon sourcing the industry data, found the simple act of disclosing a NABERS Energy rating was linked with a 0.5 star improvement in energy performance. This was yet another influential demonstration of what was to become the NABERS mantra: measurement leads to better management.

A NEW ERA KICKS OFF

In 2010, NABERS Energy ratings began cropping up on advertising billboards, and hoardings in record numbers around the country, thanks to the introduction of the Australian Government's Commercial Building Disclosure program. This required building owners selling or leasing more than 2,000 sqm of office space to disclose their NABERS rating.



CBD Team at 2016 NABERS + CBD Conference.



Apartment building with NABERS rating plaque.

It was a move that sent “ripples” through the property market as it “empowered tenants, for the first time, to understand the performance of the space they occupied,” reflects Ann Austin, Lendlease’s Head of Sustainability in Australia.

For Stanford Harrison, Director of Commercial Buildings Policy Section at the Department of Climate Change, Energy, the Environment and Water (DCCEEW) this mandate “changed everything” for NABERS. “The CBD program made energy use transparent to the market. In this sector, reputation matters and owners improved their buildings, reducing their energy use by an average of 35% over nine years.”

The CBD program unquestionably accelerated the adoption of NABERS. However, the CBD program was also fortified by a robust system that had already gained broad market acceptance.

The successes of NABERS and the CBD program reinforced each other. In 2017, the threshold for disclosure was reduced to 1,000 sqm. This captured a broader segment of the commercial office market.

“The CBD program, underpinned by NABERS, is Australia’s most successful energy efficiency policy and the envy of our global peers,” reflects Francesca Muskovic Director, National Policy Property Council of Australia. “We must now go bigger and bolder so that the CBD program covers more building types, drives electrification, procurement of renewable electricity and low carbon embodied energy. These are the next frontiers and will ensure we remain at the forefront of global leadership in sustainable buildings.”

“The CBD program, underpinned by NABERS, is Australia’s most successful energy efficiency policy and the envy of our global peers.”

Francesca Muskovic
Director, National Policy
Property Council of Australia

A STRATEGIC PLAY

Once NABERS Energy ratings had established their presence in the market, they became a powerful marketing tool for the property industry. But this enthusiasm brought new challenges. Statements varied from vague ‘targets’ to bold claims without evidence. If practices were left unchecked and promises unfulfilled, NABERS’ reputation could be at risk.

The response, part of the original program design, was the NABERS Commitment Agreement. This contract struck between program administrators and developers set a specific NABERS Energy rating target to be met after construction, and required owners of new buildings to prove intentions were being met in the real world. Developers could market that rating, provided they designed, built and commissioned to meet it.

The independent design review process, which assesses the energy modelling of the development, has over time elevated energy efficient design. Research undertaken by the Green Building Council of Australia in 2021 found more than 90% of buildings with a Commitment Agreement have achieved or exceeded the targeted performance.

For the GBCA’s Davina Rooney, this report provided “positive proof” that NABERS ratings influence building design and that “policies encouraging the uptake of NABERS shift behaviour, raise awareness and drive down energy use and emissions in our buildings.”

“Policies encouraging the uptake of NABERS shift behaviour, raise awareness and drive down energy use and emissions in our buildings.”

Davina Rooney
Chief Executive Officer,
Green Building Council of Australia

‘Every Building Counts’ event 2023, hosted by Green Building Council of Australia and Property Council of Australia.



EXPANDING THE FIELD

The success of NABERS Energy in the office market drove demand for additional ratings for water, waste, indoor environment quality and carbon neutrality. The rating scheme has expanded in scope to assess more types of buildings: shopping centres, hotels, apartments, data centres and hospitals. NABERS now has an international footprint, after its 2012 launch in New Zealand and expansion to the United Kingdom in 2020.

60 King William St,
Adelaide, Charter Hall.



NABERS celebrates 25 years of game changers



London skyline.

“NABERS is a stepping stone to action and continues to expand into new sectors to help transform our buildings towards net zero.”

Clare McLaughlin

Head of the Energy Performance and Security Division, Department of Climate Change, Energy, the Environment and Water

As Clare McLaughlin, Head of the Energy Performance and Security Division at DCCEEW, notes: “NABERS is a stepping stone to action and continues to expand into new sectors to help transform our buildings towards net zero. Since 2020, supported by Commonwealth funding, NABERS ratings have expanded to residential aged care facilities, retirement living villages, and warehouses and cold stores, to assist building owners in more sectors to understand their building’s energy use and where to save costs and emissions.” Rating tools for schools, big box retail and other types of shops are coming soon.

NABERS continues to adapt and evolve to meet the market. For GPT Group’s Head of Sustainability and Energy, Steve Ford, the reboot of the NABERS Waste rating tool and development of a Climate Active Carbon Neutral Certification pathway have been “important industry enabling steps” over the past five years “which show that NABERS can be just as transformative now as it was 25 years ago.”

Charter Hall’s Office CEO Carmel Hourigan agrees. Charter Hall now has the largest portfolio of NABERS rated office buildings in the country – 1.4 million square metres in total. Carmel says one of the gamechangers for Charter Hall “has been our participation in the NABERS Waste assessment, which has provided us with a clear roadmap and independent benchmark for measuring progress against our ambitious targets”. NABERS ratings have also “helped us unlock access to sustainable finance and clearly communicate our environmental sustainability achievements to all our stakeholders.”

THE NEXT GAME- CHANGERS

Where do the trendlines point?

In 2024, NABERS rated 77% of Australia's office space, hundreds of shopping centres, apartments, hotels, hospitals and more. NABERS has saved \$1.7 billion dollars in energy bills over the life of the program and eliminated 11.57 million tonnes of carbon emissions.

Studies show buildings with high NABERS ratings are more attractive to tenants, and this translates into value. On average, offices in Australia's CBDs with NABERS Energy ratings of 5.5 stars or more can command 10% rental premiums and 2.7% lower vacancy rates than the wider market, according to JLL. Prime office buildings in Melbourne and Sydney with NABERS ratings of more than 5 stars trade for a 17.9% premium, according to Knight Frank.

In 2023, the Australian Government launched the Commonwealth Net Zero in Government Operations Strategy. This, according to David Atkins, DCCEEW's Branch Head, Industrial and Buildings Energy Performance Branch, is a "milestone policy" that leverages NABERS "as an accepted, highly regarded and widely used industry standard to drive real change in buildings and travel requirements for the Australian Government."

Setting an ambitious minimum NABERS Energy rating for leasing, purchasing and refurbishing office buildings "will mean higher demand for more efficient buildings, better buildings for our workforce to work in and energy savings that are diverted back into the economy," David notes.

Public servants undertaking business travel are also encouraged to choose hotels with high NABERS ratings. "This will create an incentive for hotels to become NABERS rated and reduce emissions in hotels across Australia."

There is still plenty of work to do. Australia's commercial buildings consume around a quarter of Australia's electricity and generate around 10% of total carbon emissions. But embodied carbon is emerging as the industry's next biggest challenge. Just as the CBD program sent "ripples" through the industry in 2010, Lendlease's Ann Austin expects embodied carbon to do the same when NABERS releases its embodied carbon rating tool later in 2024. "NABERS continues to evolve to meet the market," she says.

Holiday Inn Express, Sunshine Coast,
Pro-invest Group.

"NABERS has saved \$1.7 billion dollars in energy bills over the life of the program."

David Atkins

Branch Head, Industrial and Buildings
Energy Performance Branch,
Department of Climate Change,
Energy, the Environment and Water

PEOPLE POWER

“Our success with NABERS is thanks to many people who have devoted their careers to making a difference to the planet. When we walk together, we can build a nation where nature, people and the economy thrive.”

Carlos Flores
Director, NABERS



NABERS team 2015.



NABERS team 2024.

The true story of NABERS is not told in energy meter readings or Excel spreadsheets. It's not on billboards or building brochureware. The NABERS story is held in the hearts and minds of people.

People who championed an idea, who developed a robust methodology and who wore out shoe leather convincing boards and building owners to take climate action that delivered business and societal benefits. It is found in the people who committed to disclosure before the drivers were there, who developed and set policies that created demand, who stood firm when the pressure mounted, and who worked collaboratively and consistently to drive change.

Dr Bannister's sentiments reflect many in the industry. "It has been an honour to work on NABERS for the past 25 years. It is still somewhat amazing to contemplate that a thought bubble I had in the late 1990s could turn into a system that has achieved so much for energy efficiency. But none of it would have happened without the inspired leadership and contributions of many, many people in developing, promoting, running, tuning and

expanding the scheme, not to mention an industry that has had the capacity and flexibility to adapt and improve its operations to build on the insights NABERS provides."

"The story of NABERS over the last 25 years is the story of thousands of sustainability champions joining forces to save the world, one building at a time" says Carlos Flores, NABERS Director.

"This is a powerful story about what is possible when government jurisdictions work together with industry in partnership, to deliver change neither could deliver in isolation. In that time, we have seen the Australian office and shopping centre sectors lead the world in sustainability, and with several other sectors starting to follow suit. Those of us who work at NABERS are thankful for the privilege of working with so many people devoting their careers to building a society where nature, people and the economy can all thrive."

