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Welcome

from the chairs



2019 marks the ninth year of the Better Buildings Partnership. The Partnership achieved another year of success with a vast majority of BBP members publicly committing to achieving carbon neutrality by 2030 or before.

The Partnership recognises that the cost of inaction on climate change is too high. Australia is also well-placed to reap the social and economic benefits of a low-carbon, circular economy. But this requires vision and collaboration between industry and government.

We will continue to perform our role as leaders and engage

industry and governments to de-risk the sustainability journey for the entire sector. And we will seek to embed our best-practice principles in the industry and across the supply chain to drive lasting change.

Moving forward, the Partnership must continue to leverage our people and places to drive more ambitious environmental, social and economic outcomes. We can't do this alone – a whole-of-building approach is needed through meaningful engagement with tenants and occupants.

Together we go faster. Together we get further.

Alicia Maynard Chair (2017-) ISPT Andrew Cole Deputy Chair (2019-) Lendlease

acknowledgements

The Better Buildings Partnership (BBP) would like to acknowledge the professional expertise and insights of all its partners and contributors and thank its members for their commitment to leadership excellence.

PARTNERS































ASSOCIATES







SUPPORTERS











about the partnership

The Better Buildings Partnership was launched by the Lord Mayor of Sydney, Clover Moore, on 30 June 2011. It is a collaboration of leading property owners, managers, peak bodies and industry influencers that work to improve the performance and sustainability of existing commercial buildings in the City of Sydney area and across Australia.

The partnership represents more than half of Sydney's commercial floor space in the city centre and is demonstrating how effective new models of collective action to unlock complex barriers around change.

Under the banner of 'moving industry forward together', the partnership has worked with industry professionals to create and embed new best practice standards in key areas such as leasing, operational waste, refurbishment waste, solar installations, and optimising water use.

BETTER BUILDINGS PARINERSH

Lord Mayor, Clover Moore launched the Better Buildings Partnership in 2011

background

The Better Buildings Partnership is a key initiative of Sustainable Sydney 2030.

Sustainable Sydney 2030 is a vision and plan for the development of a green, global, and connected city. Formulated after extensive community consultation, the plan sets out to make Sydney a leading environmental performer and, among other things, to reduce greenhouse gas emissions by 70 per cent by 2030 (from 2006 baseline) and net zero by 2050.

A total of 44 per cent of the City of Sydney's greenhouse gas emissions come from its commercial office buildings and their occupants¹. These buildings are also responsible for significant water consumption and waste generation. Landlords and building managers play an important role in improving the energy, water and waste efficiency of Sydney's existing buildings.

¹ Office Sector Emissions Modelling Foundation Report Pitt and Sherry October 2016

How the BBP works

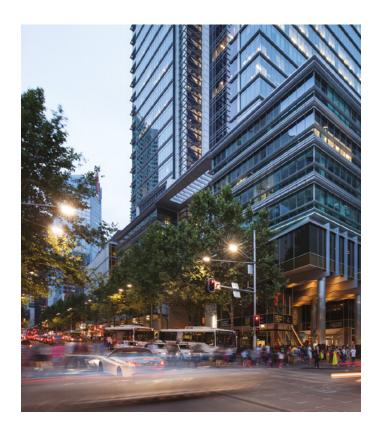
BBP delivery method

Engaging industry and government

Enabling markets

Scaling sustainability

Benchmarking progress



Objectives

- Work collaboratively to improve the sustainability of Sydney's commercial and public sector buildings and achieve the City's Sustainable Sydney 2030 goals
- Improve the environmental performance of buildings within the City's local government area
- Facilitate the rollout of, and connection to green infrastructure through the development of commercial propositions and removal of structural barriers to action
- Engage with regulators and governments on key environmental policy and regulatory issues
- Champion and promote the objectives and outcomes of the Better Buildings Partnership and Sustainable Sydney 2030 to tenants and the wider community.

governance

LEADERSHIP PANEL

The Better Buildings Partnership is a co-creative project where members actively participate in collaborative decision-making. The partnership is directed by a leadership panel comprising senior representatives from each member organisation. This panel sets the partnership's annual work program, addressing the issues of most importance to members regarding the performance of existing buildings. Senior representatives act as champions in embedding new practices within their respective organisations.

TECHNICAL WORKING GROUPS

In addition to the leadership panel, technical working groups cover key areas:

- environmental
- tenant and communities
- waste
- benchmarking and engagement

The technical working groups lead project-specific industry collaborations. They advise on and deliver key projects identified by the leadership panel and develop resources such as toolkits, guidelines and voluntary best practice standards.



Danielle McCartney Environmental Technical Working Group Co-Chair (2011–) UTS



Chris Nunn Environmental Technical Working Group Co-Chair (2015–) AMP Capital



Ben Thomas Waste Technical Working Group Chair (2018–) The GPT Group



Lucy Sharman Tenant and Communities Technical Working Group Co-Chair (2018–) Lendlease



Danny De Sousa Benchmarking and Engagement Technical Working Group Chair (2016–) Brookfield Property Partners

SECRETARIAT

Project management of the Better Buildings Partnership is delivered through its secretariat, as provided by the City of Sydney.



Esther Bailey City of Sydney (2011–2019)



Alberto Jimenez City of Sydney (2015–)

Annual Results

SCOPE

The detailed scope of inclusions for this data is set out in the Partnership Benchmarking Handbook. A summary of the scope of the data includes:

- all NABERS rate-able commercial office buildings under operational control of the partners in Sydney LGA
 - base building services/meters
- emissions scope 1 & 2 electricity and gas
 - · diesel, refrigerants and scope 3 (waste) excluded
 - · GreenPower and carbon offsets included

DATA VERIFICATION

These outcomes rely upon the data reported by our partners. They are the result of best efforts in designing and modelling processes that provide metrics to measure sustainability performance over time.

HISTORICAL DATA

In 2019, the Barangaroo precinct became carbon neutral. This achievement is not only for the current year 2019, but for all the years it has been in operation. BBP historical data has been updated to reflect the retrospective carbon neutrality of the Barangaroo office towers.

CONFIDENCE

The platform used by the Better Buildings Partnership calculated accruals where gaps in data exist. For FY19, 2.5% per cent of data is accrued.



Our collective impact



59%

COMMERCIAL

OFFICE SPACE
IN SYDNEY CBD

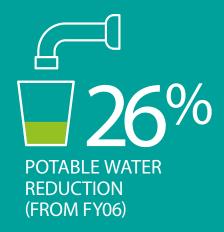


98
OFFICE
BUILDINGS IN
SYDNEY CBD

Our progress









CO₂-e AVOIDED (IN FY19)





9.1GL POTABLE WATER AVOIDED (SINCE FY06)

How we transform markets



82

BUILDINGS COMMITTED TO USING THE GECA WASTE SERVICE STANDARD IN FY20



88

BUILDINGS COMMITTED TO USING NABERS WASTE RATINGS IN FY20



66

BUILDINGS COMMITTED TO OFFERING NABERS CO-ASSESS IN FY20

Our transition to a low carbon economy



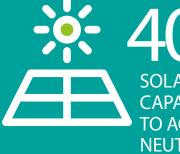
88

BUILDINGS WITH CARBON NEUTRAL COMMITMENTS BY 2030



68,251 MWh

OF RENEWABLE ENERGY REQUIRED TO ACHIEVE CARBON NEUTRAL COMMITMENTS



SOLAR FARM (INSTALLED CAPACITY) REQUIRED TO ACHIEVE CARBON NEUTRAL COMMITMENTS BY BBP



emissions

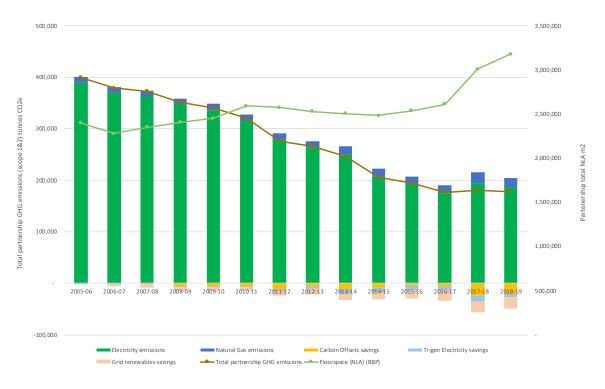
Partnership emmissions over time

Partnership total emissions over time

In FY19, despite a portfolio 6 per cent larger, the partnership reduced emissions by 55 per cent from FY06 baseline.

In FY19, BBP members committed to going above and beyond the original City of Sydney's target of reducing emissions by 70 per cent by 2030. 10 out of 12 BBP members have now adopted new carbon neutral targets by 2030 or before.

Currently, 7 BBP buildings are carbon neutral.

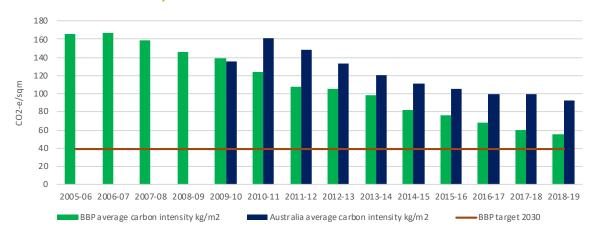


emissions intensity

Partnership emissions intensity

In FY19, the partnership emissions intensity was 56 kg CO2-e/sqm. This represents a 6 per cent decrease from the previous year. Currently the Australian average emissions intensity is 92 kg CO2-e/sqm for an office building.

BBP emmissions intensity

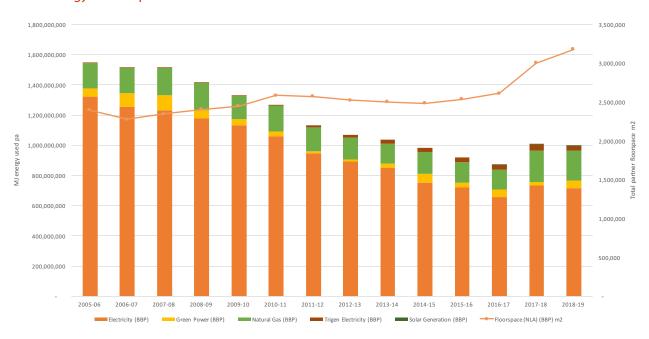


energy

BBP energy consumption

Partnership energy consumption over time

The partnership's energy consumption reduced by 1 per cent in FY19 from the previous year.



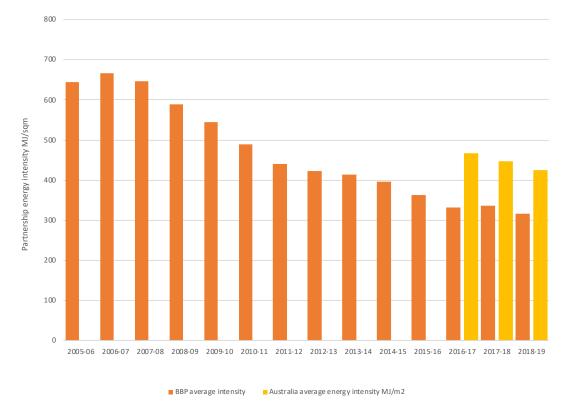
energy intensity

Partnership energy intensity

The average energy intensity for a BBP building in FY19 was 315 MJ/sqm, 6 per cent lower than previous year.

The Australia average energy intensity is 425 MJ/ sqm for an office building.

BBP energy intensity

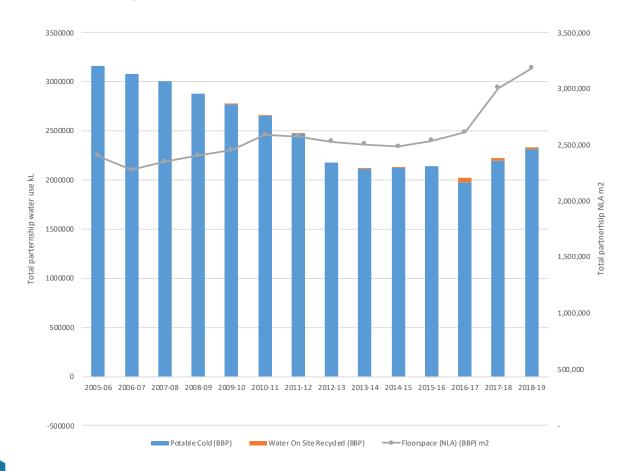


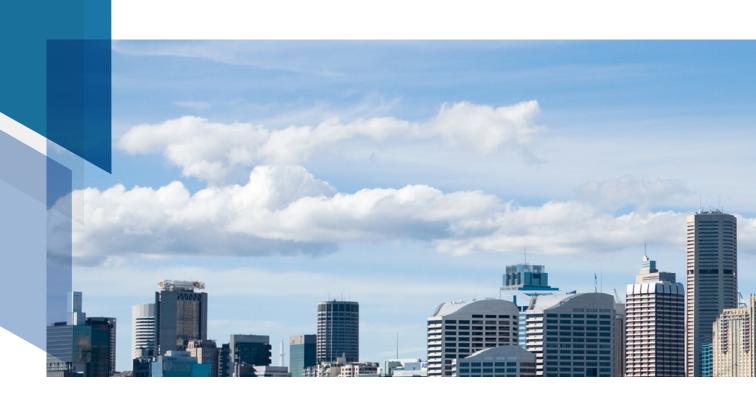
water

Partnership water consumption

In FY19, the partnership annual water consumption increased by 5 per cent from previous year.

BBP water consumption



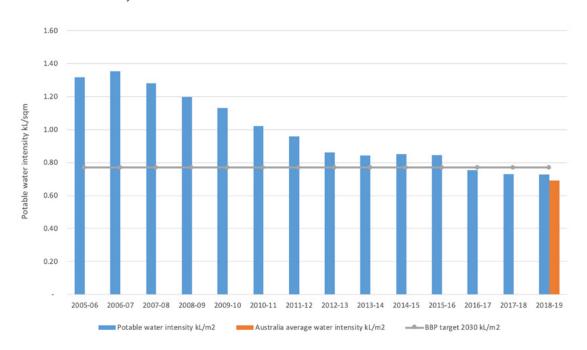


water intensity

Partnership water intensity

The average water intensity for a BBP building is 0.72 kL/sqm.

BBP water intensity





BBP project maturation model

The BBP focuses its efforts on intractable and systemic industry issues and seeks to identify best practice on a particular issue. While the exact delivery method is designed for each issue, projects are generally moved from identification to delivery and transition to industry standard using a series of maturation levels. This process is not always direct and linear, as different issues may require an iterative looping of key areas to achieve the long-term objectives.





environmental



NCC SECTION J COMPLIANCE CHECKLIST AND JV3 REPORT TEMPLATE

The Partnership developed the National Construction Code (NCC) Section J Deemed To Satisfy Compliance checklist and JV3 Report Template. These tools facilitate improved compliance with current energy efficiency provisions according to the NCC Section J, which ensure that a minimum standard of energy efficiency is achieved in the design of building envelopes and engineering services. These tools were tested with industry and BBP members.

OTHER TOOLS AND PROJECTS AVAILABLE

Recycled water connection guidelines Guidance, specifications and scenarios on preparing a building to connect to recycled water sources.



PLAN TOWARDS NET ZERO

The Partnership, having already progressed significantly toward the greenhouse gas emissions, energy and water targets of Sydney 2030, began investigating its transition towards net zero emissions by 2050. The Partnership developed a set of guidelines and tools which inform building owners and tenants about the pathways that can be taken to achieve net zero buildings.



BBP COOLING TOWER GUIDELINES

The Partnership finalised the BBP Cooling Tower Guidelines which includes recommendations for best practice management for building owners to implement within their operations in order to unlock water saving opportunities.



BBP OPERATIONAL WASTE GUIDELINES

The Partnership embedded the principles of the guidelines into the Australian supply chain. The Partnership collaborated with Good Environmental Choice Australia (GECA) in the creation of a certification for waste service providers. This certification enabled businesses to make an informed decision during the procurement process in regards to waste contractors' standards and integrity.

The guidelines informed the redevelopment of the NABERS waste tool. Training on the guidelines was provided through peak bodies and industry partners.

DEFINE BEST PRACTICE

BBP STRIPOUT WASTE GUIDELINES

The Partnership updated the BBP Stripout Waste Guidelines. These guidelines and its associated workbook provide a framework to improve stripout operations, procurement processes, and ensure consistent measurement and reporting.



CREATING NEW RESOURCE RECOVERY PATHWAYS FOR PROBLEM WASTE

The Partnership engaged leading resource recovery facilities and UNSW on the development of new engineered timber from stripout waste such as loose furniture. This group is now studying the commercial feasibility of production at scale of new engineered timber from loose furniture.

OTHER TOOLS AND PROJECTS AVAILABLE

Best practice operational waste guidelines Outlines best practice steps for the management of waste and provides flowcharts on what areas of procurement, management and reporting of waste are most appropriate for intervention.

Operational waste management plan template

Sets a common reporting standard that enables comparison between multiple sites and providers. Consistent application will reduce reporting costs.

Data integrity rating matrix

Sets a framework for rating the confidence in the waste data based on consistent reporting and the ability to use a second source of data for reconciliation.

Model operational waste procurement clauses Provides ready-to-use waste contract procurement clauses to ensure clear delineation of expectations and roles.

Resource recovery in office stripout case study Provides a practical demonstration of how simple planning and procedural changes can dramatically increase resource recovery rates in office stripout.

Resource recovery facility directory
Provides a listing of Sydney (and eventually nationwide) operators that can assist in resource recovery for common materials from office stripout.

Waste management report template
Provides a consistent reporting framework to
assist industry in establishing more robust data
about the volume and composition of waste from
office stripout.

tenant and communities



BBP LEASING STANDARD AND ASSOCIATED TOOLS

The Partnership launched a new leasing standard which sets a minimum definition of green leasing as a way for tenants and landlords to collaborate for better sustainability and performance outcomes. The standard has bronze, silver and gold ratings which may be included in lease documentation and marketing materials.

The BBP Leasing Standard is aligned with GRESB reporting and is endorsed by the Property Council of Australia.



BBP LEASING SCORING TOOL

This tool enables lease documents to be scored under the BBP Leasing Standard. The tool outputs a scorecard that can be used as a summary of the lease's green elements to brief prospective tenants or landlords or to instruct lawyers in drafting.



THE BETTER BUILDINGS CUP

The Partnership launched its tenant engagement initiative; the Better Buildings Cup. The Cup is founded on social behavior change principles. Its objective is to engage people within the built environment around sustainability issues.

OTHER TOOLS AND PROJECTS AVAILABLE

BBP template clauses and Memorandum of Understanding

The template clauses cover 20 topics relating to energy, water, waste and IEQ management; sustainable transport; sustainable procurement; fitout works; social initiatives; comfort; and information sharing and provide background information and drafting to enable the clauses to be easily inserted into leases.

A standalone Memorandum of Understanding is also available for those wishing to agree principles mid-lease term or at the commencement of leasing discussions.

benchmarking and engagement

GAP ANALYSIS

BBP DATA GUIDELINES: FOUNDATION REPORT

The Partnership started developing a foundation report which outlines the barriers and opportunities for improved data management within commercial office buildings. This report seeks to identify programs towards best practice management as well as identify the tools and activities that enable better performance.

ITERATIVE CO-CREATION

INSIGHTS TO IMPROVE ASSET PERFORMANCE

The Partnership commenced evaluating opportunities to drive insights from existing data sets. Using historical BBP data and new data sets we will seek to produce leading and unique insights that will enable better informed decisions, help achieve sustainability targets, communicate trends and celebrate leading performers in order to shift industry.



The year ahead

big 5 commitments FY20

ACCELERATE LEAD THE **RECOGNISE LEVERAGE DRIVE UPTAKE OF TRANSITION TO TRANSITION** THE COST OF PEOPLE, INACTION **CULTURE AND LOW-CARBON RENEWABLE TO CIRCULAR ECONOMY ON CLIMATE ENERGY ECONOMY BUILDINGS CHANGE TO ACHIEVE SUSTAINABILITY OUTCOMES** Implement pathways Increase uptake of Start transition to Contributing to a Moving towards renewable energy, more resilient Sydney a whole building to achieve carbon circular economy, neutrality by 2030 or driving economic, repositioning waste approach before environmental and as a resource social benefits for the city and beyond



