



**BETTER
BUILDINGS
PARTNERSHIP**

ANNUAL REPORT

FY2020

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Welcome from the chairs



2020 marks the tenth year of the Better Buildings Partnership. A year that coincided with great upheaval with catastrophic fires, extreme weather events and the global disruption as a result of COVID-19. A year that highlighted the need for collaboration and demonstrated that we are more resilient when we work together.

The Partnership acknowledges its leadership role in Australia. We worked tirelessly to foster innovation and leverage our capacity to develop best practices. But more importantly, we made the extra effort to embed our practices into the broader industry.

The Partnership consolidated its role as industry leaders; setting a course for the industry to achieve a circular economy and increase resilience in the built environment.

Together we go faster. Together we get further.

Alicia Maynard
Chair (2020-)
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.



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



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.



Janaki Dhagat
Environmental Technical
Working Group Chair
(2020-)
Charter Hall



Lina Rico Gomez
Environmental Technical
Working Group Deputy
Chair (2020-)
AMP Capital



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

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.



Lucy Sharman
Tenant and Communities
Technical Working Group
Co-Chair (2018-2020)
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.



Katie Shammass
City of Sydney (2020-)



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

The Barangaroo precinct became carbon neutral for all the years of its operation. As a result, 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 FY20, 7.5% per cent of data is accrued.



Our collective impact



59%

COMMERCIAL
OFFICE SPACE
IN SYDNEY CBD



98

OFFICE
BUILDINGS IN
SYDNEY CBD

Our progress



66%

EMISSIONS
REDUCTION
(FROM FY06)



39%

ENERGY
REDUCTION
(FROM FY06)



39%

POTABLE WATER
REDUCTION
(FROM FY06)



1.9mT

CO₂-e AVOIDED (IN FY19)



5.6TJ

ENERGY AVOIDED
(SINCE FY06)



10.5GL

POTABLE WATER
AVOIDED
(SINCE FY06)

How we transform markets



82

BUILDINGS
COMMITTED TO
USING THE GECA
WASTE SERVICE
STANDARD IN FY21



4

WASTE SERVICE PROVIDERS
ALREADY USING THE GECA
STANDARD

-ORG
-GRASSHOPPER
-CLEANAWAY
-HAULAWAY

Our transition to a low carbon economy



88

BUILDINGS WITH CARBON
NEUTRAL COMMITMENTS BY 2030

CO₂ + 16

BUILDINGS
ALREADY
CARBON
NEUTRAL

emissions

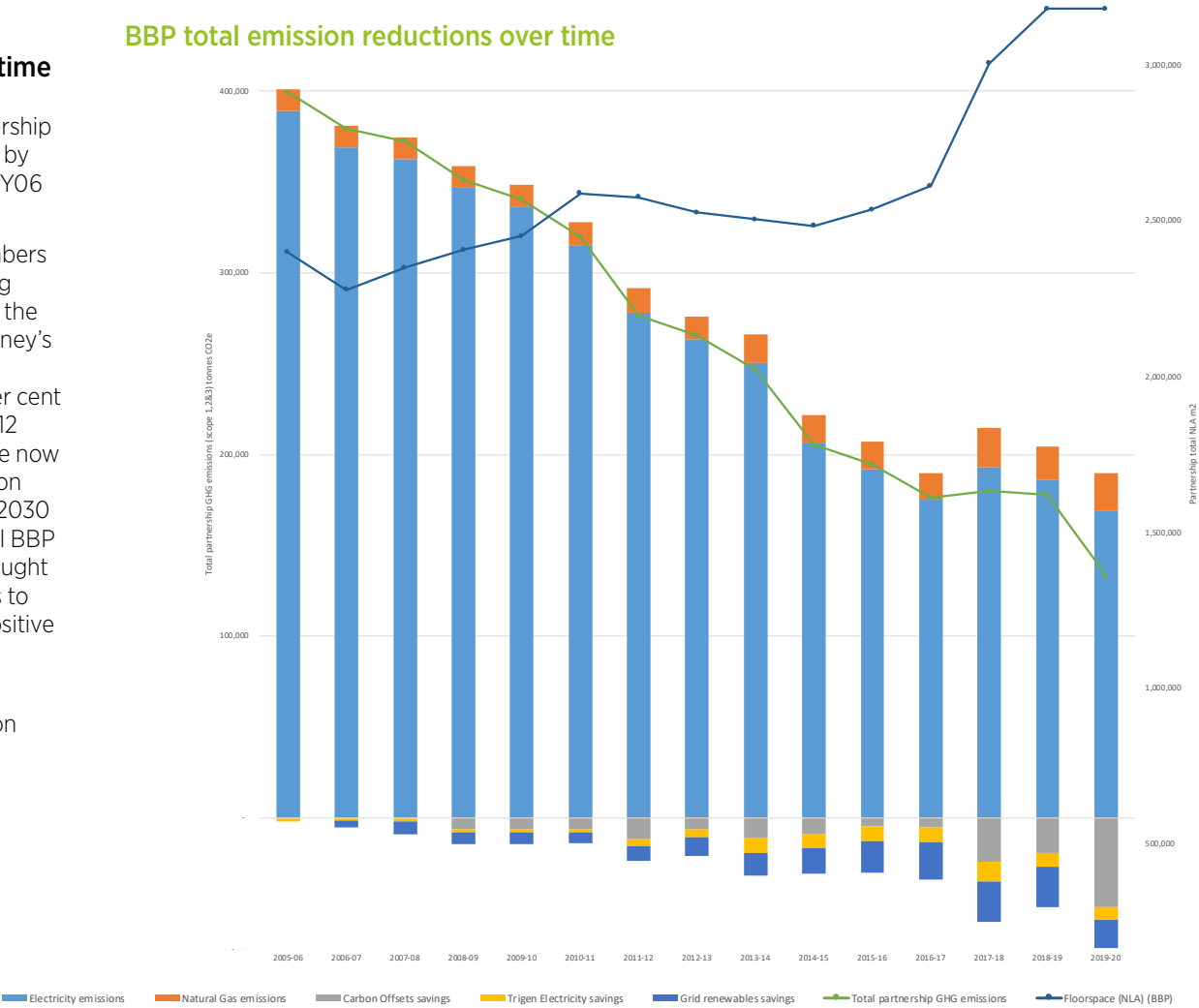
Partnership emissions over time

In FY20 the Partnership reduced emissions by 66 per cent from FY06 baseline.

In FY20, BBP members committed to going beyond and above 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 and before. Several BBP members have brought forward their goals to become carbon positive by 2024 or before.

Currently, 16 BBP buildings are carbon neutral.

BBP total emission reductions over time

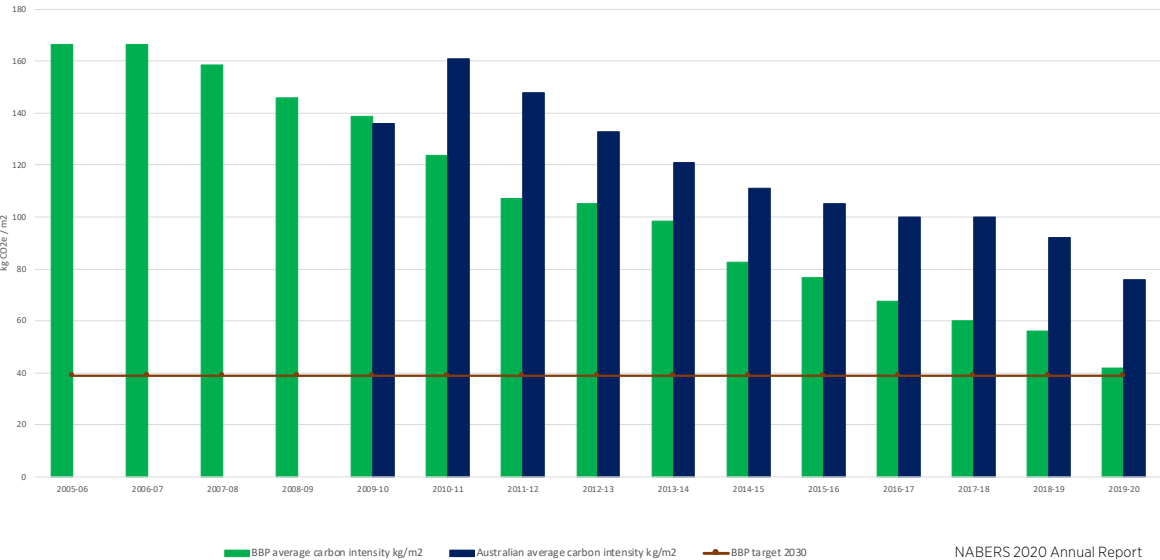


emissions intensity

Partnership emissions intensity

In FY20, the Partnership emissions intensity was 42 kg CO₂-e/sqm. This represents a 25 per cent decrease from the previous year. Currently the Australia average emissions intensity is 76 kg CO₂-e/sqm.

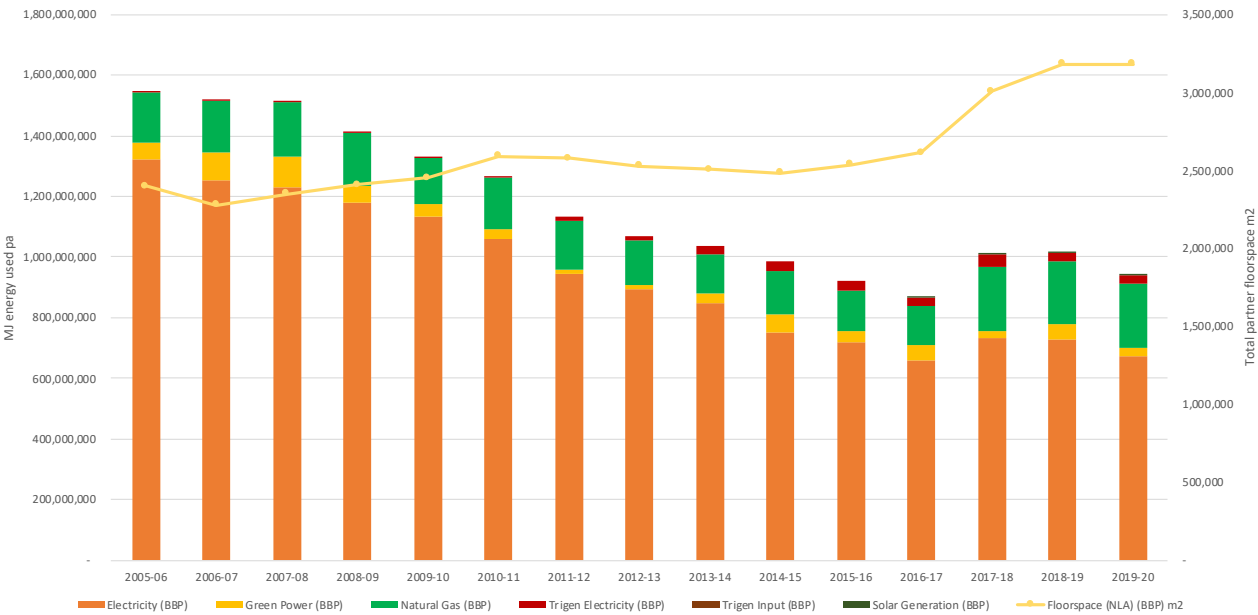
BBP emissions intensity



Partnership energy consumption over time

The Partnership's energy consumption reduced by 7 per cent in FY20 from the previous year.

BBP energy consumption



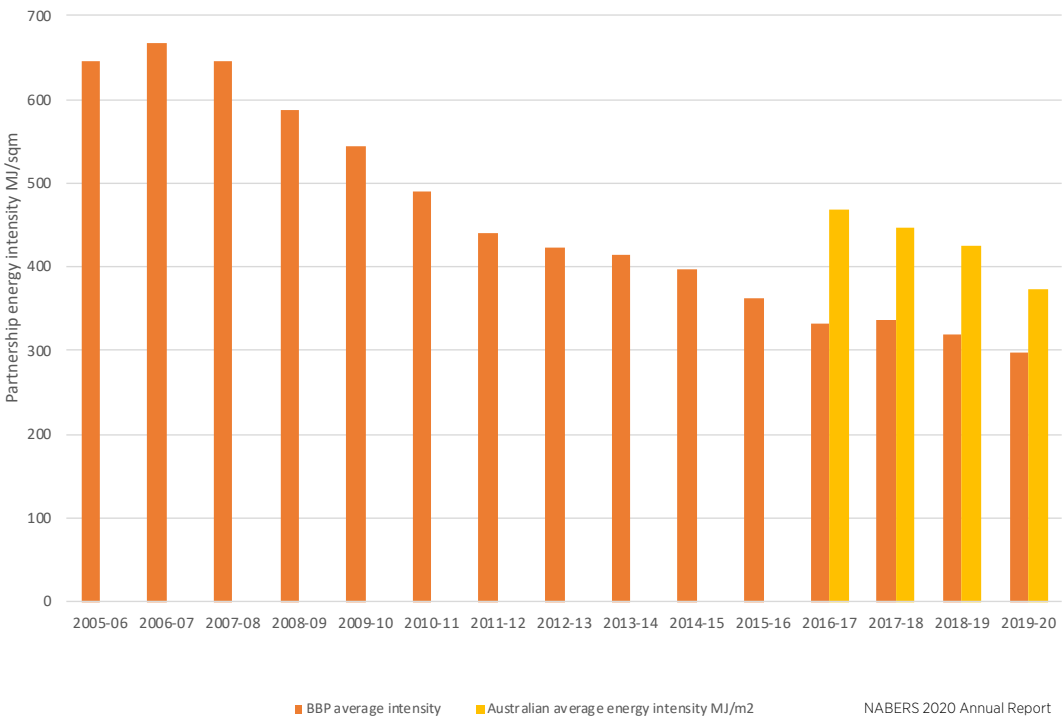
energy intensity

Partnership energy intensity

The average energy intensity for a BBP building in FY19 was 297 MJ/sqm, 7 per cent lower than previous year.

The Australian average energy intensity is 373 MJ/sqm.

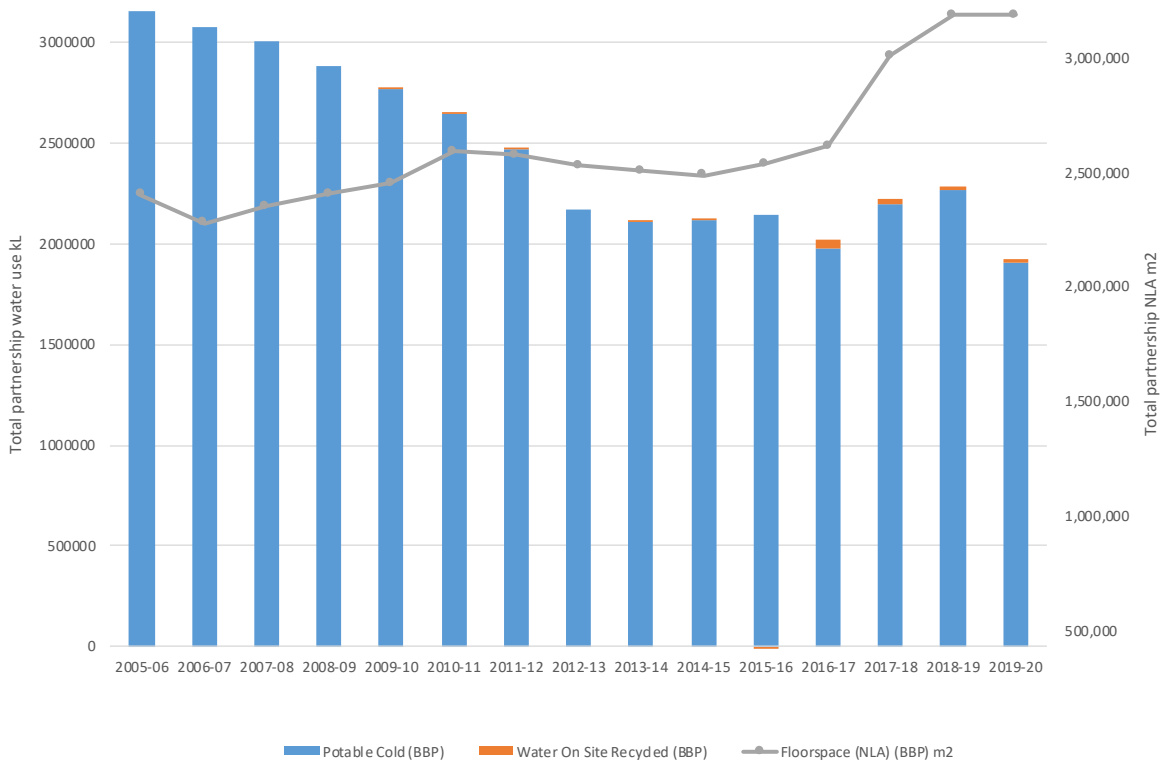
BBP energy intensity



Partnership water consumption

In FY20, the Partnership annual water consumption decreased by 16 per cent from previous year.

BBP water consumption over time

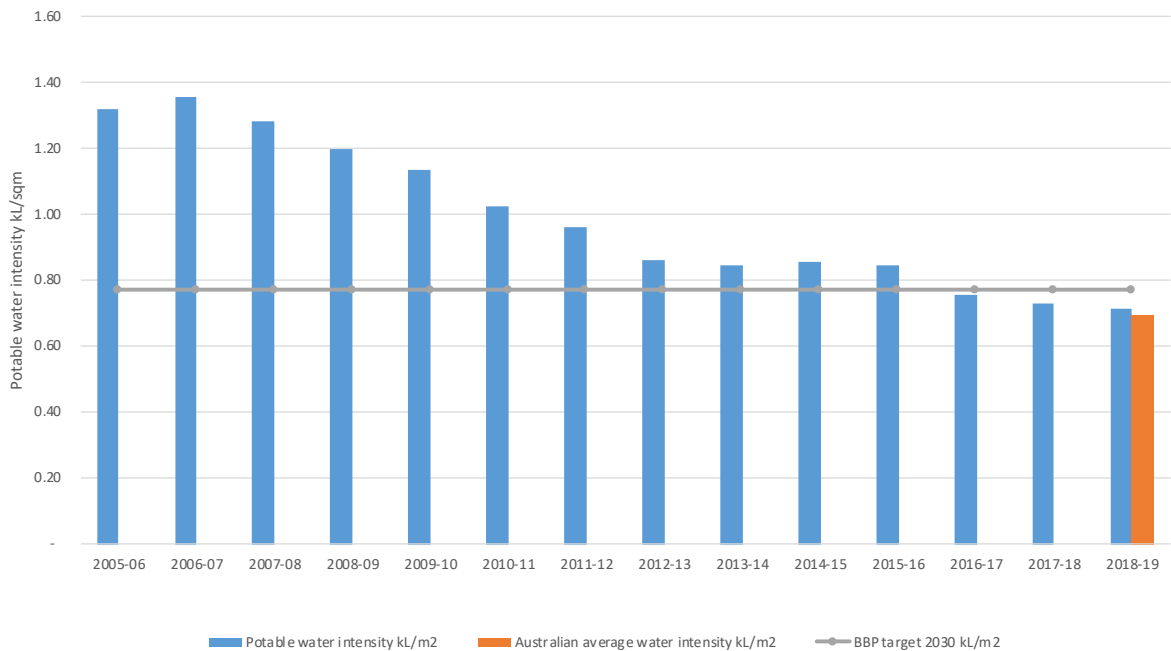


water intensity

Partnership water intensity

The average water intensity for a BBP building is 0.6 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.



Current initiatives

Environmental

Waste

Tenants and
communities

Benchmarking and
engagement



DEFINE BEST PRACTICE

BBP DEMAND MANAGEMENT PLANNER

It provides a framework for assessing the potential of a building to participate in, and benefit from, a demand management program that engages in the balance of electricity supply with demand.

IMPLEMENTING BEST PRACTICE

ENERGY DEMAND MANAGEMENT CASE STUDIES

Four case studies offered by building owners (UTS, The GPT Group and Brookfield) detailing their experiences in implementing energy demand management project.

PROBLEM IDENTIFICATION

RISK AND SAFETY STUDY INTO THE INSTALLATION OF BATTERIES IN COMMERCIAL BUILDINGS

The GPT Group, a BBP member, partnered with The City of Sydney, ERM and CTP to conduct a risk and safety study into the installation and operation of stationary batteries, along with electric vehicles and electric vehicle charging infrastructure, in commercial buildings. This tool has been designed to assist would-be battery project proponents in the initial decision-making process by raising awareness of the potential challenges that need to be taken into account.

IMPLEMENTING BEST PRACTICE

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.

DEFINE BEST PRACTICE

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.

IMPLEMENTING BEST PRACTICE

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.

OTHER TOOLS AND PROJECTS AVAILABLE

Recycled water connection guidelines

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

TRANSITION TO STANDARD PRACTICE

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.

ITERATIVE CO-CREATION

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

TRANSITION TO STANDARD PRACTICE

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.

TRANSITION TO STANDARD PRACTICE

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.

DEFINE BEST PRACTICE

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 FY21

1	2	3	4	5
ACCELERATE TRANSITION TO LOW-CARBON ECONOMY	LEAD UPTAKE OF RENEWABLE ENERGY	DRIVE TRANSITION TO CIRCULAR ECONOMY	RECOGNISE THE COST OF INACTION ON CLIMATE CHANGE	LEVERAGE PEOPLE, CULTURE AND BUILDINGS TO ACHIEVE SUSTAINABILITY OUTCOMES
Implement pathways to achieve carbon neutrality by 2030 or before	Increase capability by industry to transition to a renewable grid	Start transition to circular economy, repositioning waste as a resource	Contributing to a more resilient Sydney	Moving towards a whole building approach





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