

Draft February 2018

A plan for environmental sustainability in the accommodation and entertainment sector





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01 Executive Summary

Together we can build Sydney's reputation as a leading sustainable destination for tourist and business travellers.

In creating Sustainable Sydney 2030, Sydney's community members – residents, visitors, workers and businesses – established their vision of a sustainable future. To support achieving this vision, the City of Sydney has set bold targets including a 70 per cent emissions reduction for the local government area from a 2006 baseline, and net zero emissions by 2050. These targets are in line with the historic 2015 Paris Climate Agreement, which commits over 130 parties, including Australia, to pursue efforts to limit the global temperature increase to less than 1.5 degrees.

The city's accommodation and entertainment sector has a crucial role to play in helping to achieve these targets and in doing so can leverage significant economic opportunities.

Environmental sustainability in Sydney's accommodation and entertainment venues can lead to long-term economic savings of up to \$32 million by 2030, and new market opportunities that in turn boost visitor numbers and local employment figures.¹

The landscape in which the city's accommodation and entertainment venues operate is changing. By 2025, the millennial generation will represent 75 per cent of the global workforce. This generation expects businesses to be active citizens and demands that those businesses help them live sustainably. A study by Nielsen revealed that about 72 per cent of millennial respondents were willing to pay extra for sustainable offerings.



¹ Interim (2022) and 2030 Abatement Potentials: Final Report, Strategy. Policy.Research., 2017

Executive Summary



Chinese New Year festivities in Darling Harbour, February 2017. Photographer Damain Shaw / City of Sydney

Business visitors spend three to four times that of leisure visitors and often return to a destination with their families. The market for business meetings and events is worth billions globally and sustainability in business events is a global growth market. This is driven by the rise of corporate social responsibility (CSR) and the growth of the green economy.²

This plan supports accommodation and entertainment businesses owners and operators to reduce their environmental impact, in turn saving money, engaging staff and improving guest experience. By responding to this changing demand, businesses will not only remain competitive, but will likely win more of the growing market for sustainable goods and services.

The accommodation and entertainment sector has substantial environmental impacts and in 2015/16 was responsible for 21 per cent of the city's total greenhouse gas emissions, 14 per cent of potable water consumption and 47 per cent of the city's commercial waste, only 50 per cent of which is recycled³.

The plan identifies actions for industry to lesson this environmental impact and realise business benefits, including: resource-efficiency upgrades, better waste minimisation processes, higher energy performance standards for new buildings and major refurbishments, including making 6 Star NABERS Commitment Agreements for new hotels. These measures will provide long term economic savings. The City is dedicating resources to support the sector in taking action. We will provide grants for environmental ratings and assessments. We will promote ways in which the sector can improve its environmental performance, focusing on the business benefits of investing in environmental upgrades. To attract more business events we will work with industry to promote Sydney's environmental performance. And to reinforce the business case for this change, we will advocate that corporations and government agencies preference accommodation and entertainment venues with environmental performance ratings.

These initiatives need to be matched by a substantial increase in renewable energy supply in order for the sector to be on track for net zero emissions.

The City will work with State and Federal government to increase the share of renewable energy into the grid. Stakeholders in the accommodation and entertainment sector can contribute by purchasing GreenPower and investing in onsite solar PV installations where practical.

^{2 &}lt;u>"Sustainable Destination Management Trends and Insights: A Path to a</u> <u>Brighter Future"</u>, MCI Sustainability Services

³ Environmental Sustainability Platform, City of Sydney 2017

Sector emissions reductions and measures

Between 2005/06 and 2015/16, emissions from the sector fell 37 per cent.

If the below policy measures are implemented through delivery of the actions in this plan, sector emissions could:

- Reduce by 47 per cent by 2021/22 (from 2006 levels)
- Reduce by 61 per cent by 2029/30 (from 2006 levels)

Carbon emissions reductions

- Commitment to net zero
- Enhanced waste recovery
- Higher standards for new building work
- Building tune ups
- Building retrofits

However, there is still a significant gap before the sector's emissions reach the level that the City is aiming for across the local government area - 70 per cent reduction by 2030 from 2006 levels. And an even greater gap exists to the net zero by 2050 target. This gap must be filled by a large increase in renewable energy in the grid, and potentially other energy efficiency measures not yet identified.

More detail on the assumptions behind each measure is available in Appendix A.

- On-site solar PV (not including large scale RECs)
- 6 Star Commitment Agreement
- Restaurants Lighting Upgrades
- Restaurants Water Upgrades



* Emissions numbers include electricity, gas, waste but not transport



Sydney Opera House

Under business as usual conditions, continuation of current trends in energy efficiency and policy drivers would deliver a reduction in emissions intensity, however this would be offset by projected growth in the sector's floor space. Without implementation of the actions in this plan, emissions for the sector are predicted to increase to 7 per cent above 2015/16 levels by 2029/30.

The actions in this plan can also enable the sector to deliver:

- Zero increase in potable water use from 2006 baseline by 2021/22; and a 9 per cent reduction by 2029/20, achieved through water efficiency and recycled water
- An increase in resource recovery to divert 70 per cent of waste from landfill by 2021/22; and up to 90 per cent by 2029/30.

Actions

This plan outlines opportunities and areas of action for:

- · Sector leaders owners and operators
- Accommodation owners and operators
- · Entertainment owners and operators
- · Event organisers and their clients
- Building developers
- Government organisations
- · Visitors and delegates
- · Restaurants, bars and other businesses

The following table summarises these actions and also the ways in which the City will provide support.

Industry action and City support

Sector leaders - owners and operators

- · Show commitment to environmental leadership
- · Undertake building retrofits to achieve environmental outcomes, where cost effective
- · Collaborate on best practice models
- Advocate for increased minimum standards and policy reform to reward environmental performance

City support

- Encourage and support collaboration between sector leaders recognising best practice, showcasing business benefits and supporting advocacy for policy reform to affect sector-wide change
- · Work with sector leaders to facilitate building retrofits
- Proactively work with the operators of City-owned properties to influence positive environmental outcomes

Accommodation owners and operators

- Use environmental performance ratings to benchmark and identify opportunities for improvement; and publicly report ratings
- Commit to achieving net zero emissions from your building and develop a pathway to get there, including, but not limited to, purchasing renewable energy
- Install on-site solar where possible
- · Require better waste data and management solutions from contractors
- Encourage staff and guests to use active transport, promoting the City's bike maps, free route planning service, and bike hire companies servicing the city area
- · Provide incentives to guests to reduce their impact
- Use recycled water for cooling tower use where possible

Entertainment owners and operators

Privately owned entertainment venues can:

- Use environmental performance ratings to benchmark and identify opportunities for improvement; and publicly report ratings
- Commit to achieving net zero emissions from your building and develop a pathway to get there, including, but not limited to, purchasing renewable energy
- Install on-site solar where possible
- Promote accommodation with environmental performance ratings to clients and visitors
- · Encourage visitors to walk, cycle and use public transport options where possible
- · Require better waste data and management solutions from contractors

In addition, government-owned entertainment venues can:

• Access support to achieve the Government Resource Efficiency Policy (GREP) targets from the Sustainable Government Team, which provides support to meet policy obligations

Tenants and production companies can:

 Request venue owners and operators to improve environmental performance and take short-term steps such as asking for energy and water-intensity data, what efficiency measures have been implemented by the venue, and if sub-metering is in place

City support

- Provide grants for independent ratings and assessments
- Support environmental innovation through the provision of grants and the sharing of success and knowledge
- · Assess the barriers to recycled water uptake and identify solutions
- Develop and deliver a tune-up program supporting owners and operators to improve the environmental performance of their buildings
- Encourage and support collaboration between sector leaders recognising best practice, showcasing business benefits and supporting advocacy for policy reform to affect sector-wide change
- Distribute wayfinding maps and signage, and information on cycling and walking in the city
- Distribute resources through industry channels to highlight environmental outcomes and business value
- Influence private sector companies to utilise sustainable accommodation and entertainment venues
- Support the identification of skills and training gaps as the sector progresses to deeper environmental upgrades and work with industry to address these
- · Collect energy, water and waste-intensity data to track industry progress
- Update the Development Control Plan (DCP) to specify minimum waste and recycling storage requirements in buildings
- · Support new waste technology and innovations through environmental grants
- Support the development of waste education, engagement and incentives tailored for hotel housekeeping systems and staff
- Advocate for state government agencies to standardise waste data collection definitions and processes and reinstate annual reporting

Event organisers and their clients

- · Actively promote Sydney's sustainability credentials
- · Incorporate environmental performance ratings on supplier listings
- Ensure procurement policies and events criteria give preference to service providers demonstrating environmental performance
- · Implement best practice event waste management practices
- · Require better waste data and management solutions from contractors
- · Provide bike valet parking at events

City support

- Publish a list of accommodation providers with recognised environmental ratings to assist event organisers and corporate and government clients to evaluate the environmental performance of providers
- Work with online booking agents to incorporate environmental performance ratings in their listings
- Assist with bids for major events by providing information on Sydney's sustainability, the city's environmentally rated hotels and venues, walking and cycling paths, and sustainable events, experiences and/or tours
- Work with Business Events Sydney and Destination NSW to improve Sydney's listing on the Global Destination Sustainability Index
- Use data and social media to promote sustainability leadership in the sector, the business benefits of sustainability and Sydney as a sustainable destination
- Distribute wayfinding maps and signage, and information on cycling and walking in the city

Industry action and City support

Developers

- Commit to the highest NABERS energy Commitment Agreement, (and other NABERS CAs as they become available)
- Install on-site solar where possible
- Install the highest standard WELLS rating water fixtures for water efficiency
- Look to be dual-plumbed for recycled water use, where there will be a source of recycled water
- Provide suitable waste management infrastructure for maximum resource recovery as per the City's Waste Management in New Development Guidelines.
- · Provide ample, well located bike parking for staff and visitors

City support

- Provide grants for independent environmental ratings and assessments
- Encourage the design, construction and operation of net zero hotels, both new and existing
- Investigate the inclusion of planning control provisions that introduce NABERS Energy Commitment Agreements, for new hotels and major refurbishments.

Visitors and delegates

- Choose environmentally rated accommodation, engage with sustainability initiatives such as walking, cycling and using public transport wherever possible
- Ask for information on the City's Culture Walks app, bike maps, free route planning service, and bike hire companies servicing the city area, from traditional bike tours to electric bicycles

City support

- · Investigate options for the best way to provide city-wide public domain wifi
- Distribute wayfinding maps and signage, and info on cycling and walking in Sydney
- Support the advocacy of industry associations for:
 - The removal of airport station access fees
 - Train travel to be promoted by event and conference organisers
 - Event and conference organisers recommending hotels with environmental ratings

Government

Australian Government

- Increase National Construction Code (NCC) minimum environmental performance standards for building and refurbishments (Responsibility of the Council of Australian Government's Australian Building Codes Board)
- Increase compliance with NCC minimum environmental performance standards for building and refurbishments (Responsibility of the Council of Australian Government's Australian Building Codes Board)
- Consider green depreciation for building owners undertaking refurbishments as part of the potential Commonwealth tax reforms
- Promote the National Carbon Offset Standard for Carbon Neutral Buildings to building owners; and develop
 programs to encourage certification

NSW Government

- Commit to achieving net zero emissions from government buildings and develop a pathway to get there, including, but not limited to, purchasing renewable energy
- Adopt policies to procure accommodation and event venues with environmental performance ratings, moving to minimum ratings when capacity has been built in the market
- · Develop case studies on how to include environmental credentials of hotels in procurement policies
- · Deliver waste market reform to incentivise resource recovery

City support

- Advocate for increases to the NCC minimum environmental performance standards for building and refurbishments, and increased compliance with the NCC
- Update City procurement policies to assess environmental credentials of accommodation and entertainment suppliers, advocate to government agencies to update their policies

Restaurants, bars and other businesses

- · Upgrade to energy-efficient lighting and water-efficient fixtures
- Improve recycling and waste management by undertaking a waste audit and talking to neighbours and building owners about better waste management
- · Request on-street visitor bike parking from the City
- Explore partnerships and services to reduce environmental impact

City support

- Provide information and case studies on the results of the City's engagement with businesses on environmental upgrades
- Provide practical information on money-saving measures when the City's environmental health officers visit to complete compliance checks
- · Provide on-street visitor bike parking (subject to space availability)

02 Our vision for Sydney as a sustainable destination

Accommodation and entertainment providers with high environmental performance ratings will benefit from the growing demand for sustainable venues and experiences

By 2030, the sector can reduce its emissions by 61 per cent and potable water use by approximately 9 per cent. The sector can also aim to increase its resource recovery to 90 per cent, in line with the City's target for the whole commercial sector.

Vision for the sector in 2030:

- New developments will have been designed and constructed to the highest level of sustainability performance available
- Existing accommodation and entertainment venues continuously improve resource efficiency and disclose their environmental performance with the aim to be net zero by 2050
- Government and corporate business procurement policies specify minimum environmental ratings for suppliers of accommodation and venues
- Sector leaders collaborate on best practice environmental performance and access to renewable energy supply
- Tools and resources are available to address barriers to resource efficiency and continuous improvement

- Skills and capacity are accessible to design, develop, measure and manage environmental performance in buildings
- Visitors seek out businesses that help them enjoy Sydney sustainably and prioritise active and public transport options
- Disclosure of rating data and information on environmental performance allows the City to recognise leadership and results, track sector progress and adapt this plan for continuous improvement.

<u>03 About the sector</u>

Over 10 million visitors come to Sydney each year

The accommodation and entertainment sector makes a significant contribution to the local economy. Over 10 million visitors come to Sydney each year, making Sydney Australia's largest accommodation market. Accommodation buildings in City of Sydney are worth about \$7.8 billion⁴. Visitors contributed over \$5 billion to the City of Sydney's economy in 2012.

The City's 2015 Visitor Accommodation Action Plan⁵ encourages new and diverse hotel developments to accommodate a growing number of visitors. Currently, 15 hotels and 5 serviced apartments are expected to be built within our local government area over the next 5 years. Online platforms such as Airbnb and Stayz have also contributed to new tourist accommodation supply through people sharing their homes. This growth will build on the city's current hotels to help Sydney remain Australia's premier destination.

There are 45 major entertainment venues in the City's area. These include convention, sporting, exhibition and conference venues, from the Sydney Opera House, International Convention Centre, Sea Life Sydney Aquarium and the Sydney Cricket Ground to the Entertainment Quarter and Fox Studios.

Industry associations that represent the sector are key to influencing industry. Providers of event services, booking agents and government agencies that promote tourism to Sydney and organise events and exhibitions are also important.

- 4 As of September 2013 and based on 23,128 rooms as per Jones Lang LaSalle (JLL), Sydney Hotels Supply & Demand Study: Stage 1, November 2013, p. 63
- 5 http://www.cityofsydney.nsw.gov.au/_data/assets/pdf_file/0003/238422/ Visitor-Accommodation-Action-Plan.pdf

The city's accommodation is made up of:





Chinese New year festivities, Circular Quay, January 2017. Photographer Jessica Lindsay



Around 75% of all visitors			
stay in hotel accommodation.			

04 Environmental performance in the sector

More accommodation and entertainment providers could take the opportunity to improve their environmental impact, report their performance and gain business benefits This sector has substantial environmental impacts. Accommodation needs lights, air conditioning and ventilation 24 hours a day. Entertainment venues also use energy-intensive stage lights, sound systems and air conditioning.

Food and beverage services significantly add to energy and water consumption and waste generation. Up to one-third of commercial waste is food; greenhouse emissions from food waste are 20 times that of carbon dioxide emissions. Paper and plastic are the two other major components of commercial waste; these resources can be recycled.

This sector has substantial environmental impacts and is currently responsible for:





Sydney Opera House, December 2015. Photographer Brett Hemmings / City of Sydney / Getty Images

4.1 Existing buildings

Many accommodation and entertainment providers have taken up popular initiatives such as recycling, energy-efficient lighting retrofits and water-saving projects⁶, but more can be done.

Less than 30 per cent of Sydney's accommodation and entertainment venues rate their environmental performance through recognised ratings. Ratings provide various benefits, from improving asset value, operational efficiency, benchmarking performance, guest experience and/or staff satisfaction.⁷

The low uptake of environmental ratings is likely due to a low level of awareness by owners and operators of such ratings and perceived lack of demand by the market.³ Some businesses without ratings may have made environmental improvements, but it is difficult for the market to compare and reward businesses that do not disclose their performance.

Over the last 3 years, the City's Smart Green Business program has worked with over 230 businesses in the accommodation and entertainment sector on improving their environmental performance. Each business has cut operational costs by an average of \$15,940 per annum, through average reductions of 3.7 million litres of potable water, 39 tonnes of waste to landfill and 56 tonnes of carbon emissions.

6 Accommodation & Entertainment Sector Survey prepared for the City of Sydney by Woolcott Research and Engagement – June 2016

 7 City of Sydney Accommodation and Entertainment Stakeholder Engagement

Schwartz hotels reduce impact

The Schwartz Family Group implemented Smart Green Business' resource efficiency recommendations, reducing water use by 17 megalitres per annum across the portfolio, leading to energy-related hot water savings of over 830,000 megajoules per annum. The Group is also diverting 374 tonnes of materials from landfill each year. The combined projects achieve a total greenhouse gas emissions reduction of 487 tonnes per annum and reduced operating costs are estimated to be \$124,000 year on year.

Schwartz hotels participating in Smart Green Business include Mercure, IBIS World Square and IBIS King Street Wharf.

Sydney Opera House upgrades

The Sydney Opera House has invested in environmental performance upgrades and is using the Green Star tool to benchmark performance. The Sydney Opera House was awarded a 4 Star Green Star 'performance rating' in 2015 by the Green Building Council of Australia. Upgrading the lighting systems in the Concert Hall reduced electricity consumption from lighting by 75 per cent, and resulted in annual savings of \$70,000 per year. The Sydney Opera House is also EarthCheck certified and in 2016 released their Environmental Sustainability Plan. The plan outlines long term goals for the Opera House including carbon neutrality, a 5 Star Green Star 'performance rating' and 14 per cent energy savings.

Environmental performance in the sector



Town Hall House solar panels, October 2010. Photographer: Paul Patterson

4.2 New buildings

Sydney has had a shortage of accommodation supply, particularly in 3 star hotels. In recent years, there has been strong growth in the supply of short-term holiday letting by online providers.⁸ There are now 20 new accommodation developments in the planning pipeline, which will provide 3,000 new rooms in the next 5 years.⁹

While these new developments must comply with the National Construction Code (NCC), the NCC's efficiency requirements fall short of securing environmental performance in operations. Unfortunately, at present only 36 per cent of these new developments showed some level of commitment beyond the minimum NCC compliance standards. Only 20 per cent are committing to environmental ratings in design and construction.¹⁰

In relation to water fixtures, approximately one-half committed beyond the minimum NCC compliance standards and 34 per cent have committed to installing the highest performing Water Efficiency Labelling and Standards Scheme (WELS) water appliances currently available.

Owners and operators are increasingly aware of the asset and operational value of sustainable high performance buildings, but are often not involved in the planning of infrastructure and services in design and construction. More often than not properties are bought and management rights contracted after the property is designed and constructed. This misses the most cost-effective opportunity to secure resource efficiency in operations – in the process of design and construction. In some cases, new developments need to balance heritage issues as well as sustainability. The Sydney Opera House lighting upgrade and Sydney Town Hall solar photovoltaic installation are good examples of how environmental sustainability can be incorporated without compromising heritage value. Owners and operators stand to benefit from investments in design, amenity and environmental sustainability that respect heritage value.

Our surveys¹¹ show the sector is willing to adopt further environmental practices and ratings, particularly where financial advantage and a point of difference can be gained.

Low levels of awareness and knowledge may be inhibiting further uptake of environmental sustainability. There may be a need to promote environmental rating tools and ways in which the sector can improve its environmental performance, focusing on the business benefits of investing in environmental upgrades.

⁸ City of Sydney Visitor Accommodation Action Plan 2015

⁹ City of Sydney Visitor Accommodation Monitor

¹⁰ City of Sydney review of ESD commitments in development applications

¹¹ City of Sydney Accommodation and Entertainment Stakeholder Engagement



International Convention Centre, Darling Harbour. Photo: ICC Sydney

International Convention Centre

The International Convention Centre Sydney (ICC Sydney), is part of the Darling Harbour precinct. The precinct was successfully awarded a 6 Star Green Star Communities v1 rating from the Green Building Council of Australia. The Convention Centre is also set to achieve a Gold Certification in Leadership in Energy and Environmental Design from the US Green Building Council.

The ICC Sydney is home to the first communityfunded solar energy project. The 520kW array powers approximately 5 per cent of the baseline energy for the ICC. The not-for-profit provider of the community solar project was supported with an innovation grant from the City.

The ICC Sydney recycled 91 per cent of total construction waste and has systems in place to meet its target of diverting 75 per cent of its operational waste from landfill. A rainwater harvesting system will meet 100 per cent of irrigation and 63 per cent of toilet flushing demands. Design targets for the building include 20 per cent less greenhouse gas emissions, 25 per cent less energy and 14 per cent less potable water than minimum requirements¹².

Only about 20 per cent of hotels currently in planning and development stages in the City are committing to environmental ratings in design and construction.

¹² http://www.iccsydney.com.au/social-responsibility



Accommodation and entertainment venues can be twice as energy intensive as office buildings and three times that of residential apartments.

Operations round the clock, commercial kitchens, on-site laundry services and conferencing facilities in hotels, and the heating and cooling of large open spaces in entertainment theatres and museums, all use vast amounts of energy. Showers, baths, pools and gardens mean these venues are also water intensive. Commercial food and beverage services also require water and generate significant levels of waste.¹³

13 Accommodation & Entertainment Sector Emission Modelling Final Foundation Report, Pitt & Sherry 2016

14 JLL Sydney Hotels market report

5.1 Competing business priorities and split incentives

With a shortage of supply, Sydney hotels have enjoyed high occupancy and room rates in recent years.¹⁴ Investment in sustainability in new hotel developments and upgrades to existing visitor accommodation can be hard to warrant when business is good.

Looking at the building life cycle, the majority of a building's impact is in operations, but the most cost-effective time to secure environmental performance is in design and construction. Therefore for new developments, the incentive to invest in environmental performance is split. The costs are borne by the developer but the benefits go to the final owner and operator.

Ideally, collaboration would be encouraged between the developer, the owner and the operator to maximise the sustainability of design and infrastructure to secure environmental performance in operation.

Developers will only prioritise the integration of sustainability design and construction when there is broad demand for accommodation with environmental performance from owners, operators and visitors.

While operators understand the business case for environmental performance, with benefits in lower costs and increased revenue, capital constraints are a significant barrier for existing buildings to improve performance. Energy use is often controlled by the operator, while investment in the building and its infrastructure is controlled by the owner. Operators are driven by profit and loss, owners by investment return and low overheads. Essentially, efficiency is advantageous to both parties in profit share and asset value, but currently, environmental projects compete with 'front of house' priorities.



Cafe Sydney, Customs House, July 2015. Photographer: Josef Nalevansky

5.2 Low minimum standards

All new buildings need to comply with the mandatory provisions of the National Construction Code, but these fall short of securing sustainability in operation.

The City's Development Control Plan encourages applicants to implement the principles of ecologically sustainable development but these are guidelines rather than requirements.

5.3 Perception that environmental sustainability compromises luxury

Quality upgrades contribute to and secure guest experience and amenity now and in the future. Environmental sustainability does not compromise luxury, but rather secures the potential to experience luxury, for future generations.

Smart Green Business participants have seen the benefits of environmental sustainability, for example, having implemented water-efficiency retrofits with no guest complaints. To the contrary, guests and staff welcome environmental initiatives.

5.4 Awareness and information

The broader industry is less aware of the business benefits of sustainability and the available information, resources and incentives. Specialist advice is often required and time-constrained building engineers often rely on product and service providers for information, who may not provide independent advice on environmental performance options. "The market is not dictating that we have to be green. If guests are not demanding it, there is no interest in larger upgrades. When they start demanding sustainability, upgrades will happen promptly"

Hotel operator

This type of information has in the past been disseminated through industry associations, but industry focus on the issue fell away with the abolition of the carbon tax. Proactive individuals can access information through a proliferation of membership organisations, sustainability programs and environmental rating schemes.¹⁵

5.5 Lack of incentives

Ultimately, the major challenge is the lack of incentive to invest when there is a shortage of supply and high occupancy rates. While some government and corporate bodies specify sustainability as a condition for their staff accommodation and events, for the majority, availability, price and location take precedence.





Stronger environmental standards, coordinated advocacy, and partnerships could create many more business opportunities

6.1 New developments

The City of Sydney and the NSW government have committed to achieving net zero emissions by 2050. New developments are important opportunities to ensure new buildings don't lock in increased emissions and poor resource efficiency.

New accommodation and entertainment developments have the opportunity to design to the highest level of environmental rating for performance, operational efficiency and long-term asset value.

Strengthening the minimum standard through the National Construction Code will happen in time, but owners and developers can now envision what hotels should look like in 2050 to secure premium hotels with best practice in sustainability.

New hotels can anticipate accommodating the growing market of sustainable business events; government departments and corporations with sustainability policies; and the luxury leisure visitor looking to have an impactfree, guilt-free stay.

Designing to the highest sustainability standard, new developments would be future-proofed for a more discerning market, meeting more than the current minimum standards and avoiding the future need for costly retrofits.

The NSW Office of Environment and Heritage has recently developed a NABERS Energy Commitment Agreement tool for hotels. Analysis undertaken for this plan determined that significant emissions savings can be achieved if new hotel developments make high rating NABERS Energy Commitment Agreements. This could be achieved by amending the City's planning controls to specify minimum standards, which would require the support of the state government. The City will investigate the inclusion of planning control provisions that require new hotel developments or major refurbishments to make minimum NABERS Energy Commitment Agreements.

6.2 Resource efficiency

As noted earlier, buildings designed for leisure and entertainment tend to be resource intensive. For example, hotels are twice as energy and waterintensive than office buildings in impact per square metre. This intensity can mean that efficiency measures can result in greater environmental and economic savings on a per site basis. Also, equipment in this sector tends to be less frequently replaced, and older centralised plant and management systems can be less efficient.

Financial savings are a significant driver for environmental upgrades, to both owners and operators. Capital is the greatest hurdle. In the City of Sydney, 75 per cent of accommodation is hotels, the majority operated under Hotel Management Agreements. Hotel Management Agreements tend to be long-term, sometimes 10 to 25 years, so are a good platform for collaboration between owners and operators.

Hotels are typically valued on a net revenue multiplier; therefore, any reduction in costs should have a positive impact on valuation. For example, a new chiller for a hotel property that is set to decrease energy costs by \$50,000 may not represent big savings, but the overall impact on value of the asset could be as much as \$500,000-\$600,000, depending on the yield applied.

The greatest cost for hotel operators is staff. Turnover is high compared to other sectors, so engaged employees can save recruitment and training costs and drive performance. Operators noted that resource efficiency initiatives are often very effective in engaging and ultimately retaining staff.

"Our guests are very happy with the quality and feel of the low flow showers. No one has suggested they are not luxurious."

Hotel operator

6.3 Demand for sustainable events and business travel

Sustainability is a growth area in the global events industry.¹⁶ New industries in renewable energy, electric cars and ecological design, as well as the rise of corporate social responsibility, are leading to sustainability considerations being integrated into the governance and decision-making of major corporate clients. Government and industry associations are updating procurement policies to secure supplier standards that go beyond safety – to sustainability.

Good sustainability policy and practice is a competitive advantage in business events and meetings. The majority of international event clients now cite sustainability in their specifications and criteria. These specifications are increasingly part of a comprehensive sustainability strategy, rather than a one-off event requirement.

Environmental sustainability can now be key to winning contracts for these major clients. And organisers can access resources, standards and rating tools to assist them to meet client requirements, integrate sustainability and choose suppliers who demonstrate sustainability.

The new International Convention Centre Sydney lifts Sydney's sustainable event credentials. Business Events Sydney, experts in winning international events, welcome Sydney's listing on the Global Destination Sustainability Index (GDS-Index).

Global Destination Sustainability Index (GDS-Index)

The GDS-Index is a collaborative business initiative created to help destinations, convention bureaux, event planners and suppliers drive the adoption, promotion and recognition of responsible practices in the business tourism and events industry. The GDS-Index does this by measuring and comparing the social and environmental sustainability strategies, policies and performance of participating destinations and by sharing best practice from around the world. In 2017 Sydney was ranked joint 15th.

http://gds-index.com/

¹⁶ GDS-Index Sustainable Destination Management Trends and Insights, 2016



Opportunities



Barangaroo Reserve, March 2017. Photographer: Katherine Griffiths

6.4 Environmental ratings

Office buildings in Australia have been benchmarking and disclosing energy ratings since 1999. This has resulted in improvements in performance with resource efficiency upgrades in order to attract premium tenants. Environmental ratings allow businesses to understand their impact, identify opportunities and improve performance.

Public reporting can improve reputation and attract and retain new business. Owners and operators of accommodation who have implemented environmental upgrades say they have saved money, engaged staff and increased asset value. But many are not obtaining independent environmental certification to gain recognition and tap into the growing demand for sustainability services.

Scandinavian cities have high levels of third-party certification. Only 30 per cent of Sydney accommodation has environmental performance ratings, whereas in Stockholm, 80 per cent of hotels and 85 per cent of venues have independent certification.

A key requirement for the GDS-Index is the number of accommodation and venue providers with thirdparty certification within walking distance from sustainable venues. "Guests have been telling us that it's great we've got the program started and staff are very motivated. Once you establish the right culture, it all begins to work itself."

Duncan Hilder, Deputy Manager, 790 on George backpackers,

6.5 Encouraging visitors to walk, cycle and use public transport

Sydney suffers traffic congestion. If a visitor's first impression of Sydney is in a taxi from the airport stuck in standstill traffic, they will not experience Sydney as a sustainable destination. Whether visitors come for business or pleasure, travel agents, event organisers and accommodation providers can encourage visitors to use the airport train and public transport, hire a bike and walk to enhance their experience and avoid traffic.

07 Industry action – and support from the City

Each part of the sector can act to improve environmental performance and enhance its offering

To seize opportunities, the sector needs to act boldly and quickly. Leaders can collaborate with each other, owners can look to invest in building upgrades, operators can rate and improve performance, organisers can foster sustainability partnerships, and clients and visitors can then reward these businesses with bookings and good reviews. It is important that all levels of government update their policies to foster businesses that contribute to environmental sustainability.

The following proposed actions have been informed by research, stakeholder consultation and emissions modelling.

7.1 Sector leaders – owners and operators

The International Convention Centre, Sydney Opera House and one-third of hotels use recognised ratings to demonstrate their environmental performance. Others take action on sustainability without using environmental ratings. These leaders report similar challenges and barriers to performance improvement and a desire to collaborate on solutions and advocacy for policy reform for sustainability.

Sector stakeholders communicated key concerns related to environmental sustainability: traffic congestion, being penalised with increased energy tariffs for efforts in energy efficiency, and the challenges of waste management contracts and data collection.

Leading owners and operators can:

- · Showcase their commitment to environmental leadership
- Undertake building retrofits to achieve environmental outcomes, where cost effective
- Collaborate on best practice models and tools to address
 barriers to improved environmental performance
- Advocate for increased minimum standards and policy reform to incentivise and reward environmental performance.

The City will:

- Encourage and support collaboration between sector leaders recognising best practice, showcasing business benefits and supporting advocacy for policy reform to affect sector-wide change.
- · Work with sector leaders to facilitate building retrofits
- Proactively work with the operators of its own properties to influence positive environmental outcomes.



Industry action - and support from the City



Vibe Hotel, Rushcutters Bay. Photo supplied by TFE Hotels

7.2 Accommodation owners and operators

Over 50 per cent of the sector's greenhouse gas emissions in 2015/16 were attributed to accommodation: hotels (42 per cent), backpackers (10 per cent) and serviced apartments (1 per cent).

Accommodation contributes 66 per cent of the sector's water consumption: over 50 per cent by hotels, 16 per cent by serviced apartments and 2 per cent by backpacker accommodation. These figures are somewhat conservative, as they do not include water consumption from restaurants and catering services.

Whereas accommodation generates relatively less waste proportional to entertainment venues, both are responsible for significant amounts of food wasteand recyclables going to landfill.

However, accommodation providers reported that the business case for environmental performance retrofits is often outweighed by front-of-house upgrades. Winning business clients and better guest satisfaction as a result of environmental performance could help prioritise environmental improvements.

Sector stakeholders communicated key concerns related to environmental sustainability: traffic congestion, being penalised with increased energy tariffs for efforts in energy efficiency, and the challenges of waste management contracts and data collection.

Efficiency at TFE Group

Thirteen city hotels from the TFE Group, including Vibe, Adina and Travelodge properties, have implemented a range of resource efficiency recommendations which have resulted in positive environmental and economic outcomes. Water efficiency measures have achieved a total water reduction of 46 megalitres per annum across the portfolio. Additionally, this has led to energy-related hot water savings of 194,065 megajoules per annum. Lighting upgrades across the portfolio resulted in total energy reductions of over 115 megawatt hours per annum. Adjustments to recycling systems to maximise the capture and collection of paper/cardboard and co-mingled materials has seen their portfolio divert 259 tonnes of materials away from landfill each year.

These projects, recommended by the City's Smart Green Business Program, have delivered a total greenhouse gas emissions reduction of 477 tonnes per annum and an estimated \$185,000 in reduced annual operating costs. TripAdvisor's GreenLeaders program already provides a platform for hotels and B&Bs with environmental practices to connect with travellers seeking to reduce their environmental footprint. While this will not necessarily convince all users, making this type of information available can support sustainability; as accommodation supply increases, it allows customers to distinguish between different accommodation providers.

Owners and operators can:

- Use environmental performance ratings to benchmark and identify opportunities for improvement; and publicly report ratings
- Commit to achieving net zero emissions from your building and develop a pathway to get there, including, but not limited to, purchasing renewable energy
- Install on-site solar where possible
- Require better waste data and management solutions from contractors
- · Use recycled water for cooling tower use where possible
- Encourage staff and guests to use active transport, promoting the City's bike maps, free route planning service, and bike hire companies servicing the city area
- Provide incentives to guests to reduce their impact.

The City will:

- · Provide grants for independent ratings and assessments
- Support environmental innovation through the provision of grants and the sharing of success and knowledge
- Assess the barriers to recycled water uptake and develop solutions

Government-owned entertainment venues can access support to achieve environmental targets from the NSW Sustainable Government Team.

- Develop and deliver a tune-up program supporting owners and operators to improve the environmental performance of their buildings
- Encourage and support collaboration between owners and operators recognising best practice, showcasing business benefits and supporting advocacy for policy reform to affect sector-wide change
- Distribute wayfinding maps and signage, and information on cycling and walking in the city
- Distribute resources through industry channels to highlight environmental outcomes and business value
- Influence private sector companies to utilise sustainable accommodation and entertainment venues
- Support the identification of skills and training gaps that become apparent as the sector progresses to deeper environmental upgrades and work with industry to address these
- Collect energy, water and waste-intensity data to track industry progress
- Update the Development Control Plan (DCP) to specify minimum waste and recycling storage requirements in buildings
- Support new waste technology and innovations through environmental grants
- Support the development of waste education, engagement and incentives tailored for hotel housekeeping systems and staff
- Advocate for state government agencies to standardise waste data collection definitions and processes and reinstate annual reporting.

Industry action - and support from the City



Town Hall, February 2017. Photographer: Katherine Griffiths

7.3 Entertainment

Entertainment venues are responsible for 17 per cent of the sector's emissions, 13 per cent of water and over 20 per cent of the sector's waste.

Entertainment venues often upgrade their operational efficiency as part of continual improvement or refurbishment programs.

Venues and theatres often pass on utility costs in venue hire charges to production companies, shows or event managers. As a result, the incentive for investing in energy efficiency to benefit from lower operating costs is largely removed.

Venues do compete for shows and events, but the cost of utilities is not considered to be a significant determinant of whether a venue is chosen or not. Estimates of energy and water consumption can often be used in place of actual data when reporting. Where costs are recognised as a major expense, sub-metering should be in place.

Approximately 50 per cent of entertainment venues in the City of Sydney are government-owned and required under the NSW Government Resource Efficiency Policy (GREP) to reduce their operating costs and ensure they provide leadership in resource productivity.

Privately owned entertainment venues can:

- Use environmental performance ratings to benchmark and identify opportunities for improvement; and publicly report ratings
- Commit to achieving net zero emissions from your building and develop a pathway to get there, including, but not limited to, purchasing renewable energy
- Install on-site solar where possible
- Promote accommodation with environmental performance ratings to clients and visitors

- Encourage visitors to walk, cycle and use public transport options where possible
- Require better waste data and management solutions from contractors.

Tenants and production companies can:

• Request venue owners and operators to improve environmental performance and take short-term steps such as asking for energy and water-intensity data, what efficiency measures have been implemented by the venue, and if sub-metering is in place

How the City can help:

- · Provide grants for independent ratings and assessments
- Support environmental innovation through the provision of grants and the sharing of success and knowledge
- Distribute wayfinding maps and signage, and information on cycling and walking in the city
- Collect energy, water and waste-intensity data to track industry progress
- Update the Development Control Plan (DCP) to specify minimum waste and recycling storage requirements in buildings
- Support new waste technology and innovations through environmental grants
- Support the development of waste education, engagement and incentives tailored for hotel housekeeping systems and staff
- Advocate for state government agencies to standardise waste data collection definitions and processes and reinstate annual reporting.



Vivid Sydney, Circular Quay, May 2015. Photographer: Paul Patterson

City of Sydney – leading by example:

The City owns or manages several entertainment venues including Sydney Town Hall, the City Recital Hall, the Eternity Playhouse, the Capitol Theatre and Customs House. In some cases, these venues are under long-term lease, and as a result the City has limited control over operations. Where the City has operational control over capital or maintenance, it has invested in refurbishments including lighting and heating, ventilation and air conditioning upgrades. Sydney Town Hall is now being supplied electricity from solar panels on its roof, and electricity, heating and cooling are generated by a low-carbon trigeneration system. Sydney Town Hall and Customs House are also undergoing major energy, water and waste audits to assess further opportunities for improvement. Solar power is generated on 35 Cityowned properties. The City's operations are carbon neutral and we were the first government in Australia to be certified as such in 2011.

7.4 Event organisers and their clients

The City will act to reduce the environmental impact of events it approves and manages. The City's Sustainable Event Management Policy and Guidelines encourage, and in some cases require, that events authorised by the City minimise waste generation, reduce energy and water consumption, maximise recycling and the use of renewable energy, and promote principles of sustainability. The sustainability practices of contractors are also considered in the procurement process of all major projects. In 2016, Destination NSW engaged the Banksia Foundation as the sustainability partner for Vivid Sydney. This resulted in GreenPower accreditation for the Vivid Light Walk and offsetting airline travel and accommodation for a range of artists. EarthCheck was engaged to benchmark and improve the energy, waste and transport impacts of this major international event. Vivid Sydney is just one example of an opportunity to showcase Sydney's sustainability. Vivid Sydney attracted 38,000 people for business events, a 40 per cent increase from last year, and used 60 venues within and outside Sydney.

Business Events Sydney is taking part in the Global Destination Sustainability Index (GDS-Index). Initiated by the Scandinavian chapter of the International Congress and Convention Association and the company MCI, the GDS-Index benchmarks the sustainability performance of worldwide event destinations. So far, Scandinavian cities have been leading the charge and reaping the rewards through hosting some of the most prestigious environmental sustainability meetings in the world. Sydney was first listed on the index in 2016.

Sydney has a great environmental track record and outstanding plans for the future, which Business Events Sydney plans to showcase to the business events industry through the GDS-Index.

Event organisers and their clients can:

- Actively promote Sydney's sustainability credentials (Destination NSW and Business Events Sydney, and conference and event organisers)
- Incorporate environmental performance ratings on supplier listings (booking agents)



Industry action - and support from the City



Westpac Lunar Lantern Hub 澳大利亚西太平洋银行 农历花灯美食街 27 Jan-12 Feb | Daily 5pm-10pt

Cure Brain Cancer's Royal Roosters 治疗脑癌基金会 魔幻紫色皇家公鸡灯 27 Jan-12 Feb

Chinatown Celebrations 唐人街庆典 27 Jan-12 Feb

Dragon Boat Races 龙舟竞渡

Cockle Bay, Darling Harbour Official Closing Party

官方闭幕派对 **12 Feb | From 3pm** Sky Terrace at The Star

Bursting with more than 80 cultural events across 17 days, there are plenty of experiences for the whole family! Visit the Sydney Visitor Centre to collect you free copy of the full program or download the PDF from sydneychingseneywear.com





Chinese New Year wayfinding signage, Circular Quay, January 2017. Photographer Jessica Lindsay

- Ensure procurement policies and events criteria give preference to service providers demonstrating environmental performance (event organisers, and corporate and government clients)
- Implement best practice event waste management practices
- Require better waste data and management solutions from contractors
- Provide bike valet parking at events to encourage patrons to use active transport.

The City will:

- Publish a list of accommodation providers with recognised environmental ratings to assist event organisers and corporate and government clients looking to evaluate the environmental performance of providers
- Assist with bids for major events by providing information on Sydney's sustainability, the city's environmentally rated hotels and venues, walking and cycling paths, and sustainable events, experiences and/or tours
- Work with Business Events Sydney and Destination NSW to improve Sydney's listing on the Global Destination Sustainability Index
- Use data and social media to promote sustainability leadership in the sector, the business benefits of sustainability and Sydney as a sustainable destination
- Work with online booking agents to incorporate environmental performance ratings in their listings
- Distribute wayfinding maps and signage, and information on cycling and walking in the city.

7.5 Developers

Design for environmental performance in operations

All new developments and refurbishments can seize the most cost-effective opportunity to integrate sustainability, in the design and infrastructure of accommodation and entertainment venues in order to secure resource efficiency in operations. This is particularly important given the immediate growth in development in hotels and serviced apartments.

To do this, there are various tools available to developers. Developments like the International Convention Centre Sydney often use international standards such as Leadership in Energy and Environmental Design (LEED). Green Star, NABERS and EarthCheck are the locally relevant tools in Australia. NABERS is often preferred by hotel owners and portfolio managers as a benchmark of operational energy efficiency across building types.

The City's emissions modelling shows that incorporating higher environmental performance standards in new buildings and refurbishments is the most effective mechanism in the sector for the reduction of greenhouse gases.

Recycled water opportunities

As part of the CBD and South East Light Rail project, recycled water pipelines are expected to be constructed by the NSW state government along George Street between Circular Quay and Central Station by 2018. It is the City's role to facilitate the delivery of a recycled water scheme that utilises this pipeline. Buildings close to George Street will be able to access recycled water for all non-potable uses including cooling tower use, toilets, laundry and irrigation.

Initially, existing buildings will be able to connect cooling towers to recycled water, while future buildings or buildings undergoing major refurbishments will



Bourke Street cycleway, July 2010. Photographer: Richard Birch

be able to connect to recycled water for all non-potable uses. It is important to ensure that new development is future-proofed through the inclusion of dual plumbing for recycled water where it will be available.

The City is looking to connect its own water-intensive assets, including Hyde Park, Town Hall and other buildings in the George Street corridor, to recycled water, in line with its target of a zero increase in potable water use by 2030 from the 2006 baseline.

For all new accommodation and entertainment developments and refurbishments, developers can:

- Commit to the highest NABERS energy Commitment Agreement, (and other NABERS CAs as they become available)
- Install the highest standard WELLS rating water fixtures for water efficiency
- Look to be dual plumbed for recycled water use where there will be a source of recycled water
- Provide suitable waste management infrastructure for maximum resource recovery as per the City's Waste Management in New Development Guidelines
- Provide ample, well-located bike parking for staff and visitors to encourage active transport.

The City will:

- Provide grants for independent environmental ratings and assessments
- Encourage the design, construction and operation of net zero hotels, both new and existing
- Investigate the inclusion of planning control provisions that introduce NABERS Energy Commitment Agreements, for new hotels and major refurbishments.

7.6 Government

Many stakeholders argued for the need for stronger regulation and minimum standards to improve energy efficiency and environmental sustainability, similar to European standards and policies.

The City commissioned independent research that showed the most effective policy to encourage better performance in buildings is to increase minimum energy and water efficiency requirements for new buildings and refurbishments.

Government agencies can:

Australian Government

- Increase National Construction Code (NCC) minimum environmental performance standards for building and refurbishments (Responsibility of the Council of Australian Government's Australian Building Codes Board)
- Increase compliance with NCC minimum environmental performance standards for building and refurbishments (Responsibility of the Council of Australian Government's Australian Building Codes Board)
- Consider green depreciation for building owners undertaking refurbishments as part of the potential Commonwealth tax reforms
- Promote the National Carbon Offset Standard for Carbon Neutral Buildings to building owners; and develop programs to encourage certification

Industry action - and support from the City



Darling Harbour, October 2011. Photographer: Paul Patterson

NSW Government

- Commit to achieving net zero emissions from government buildings and develop a pathway to get there, including, but not limited to, purchasing renewable energy
- Adopt policies to procure accommodation and event venues with environmental performance ratings, moving to minimum ratings when capacity has been built in the market
- Develop case studies on how to include environmental credentials of hotels in procurement policies
- Deliver waste market reform to incentivise resource recovery

The City will:

- Advocate for increases to the NCC minimum environmental performance standards for building and refurbishments, and increased compliance with the NCC
- Update its own procurement policies, advocate to government agencies to update their policies.

7.7 Visitors and delegates

Visitors and delegates can make choices about their own behaviour to lessen their environmental impact. They can choose accommodation with environmental ratings, opt to not have sheets and towels replaced every day and where possible walk, cycle and use public transport.

It is recognised that visitors are often keen to explore Sydney on foot or by bicycle, taking in all of the sites and having an authentic experience. However, accessing service providers and finding your way is not always easy in an unfamiliar city.

Environmental ratings make finding information on environmental performance easier and more credible. However, many smaller boutique hotels and pub and clubs are also making genuine efforts, and their efforts shouldn't be discounted.

Accommodation concierges can:

- Promote the City's Culture Walks app, bike map for route planning, and receiving expert advice through the free route planning service
- Promote bike hire companies servicing the city area, from traditional bike tours to electric bicycles.



Finger Wharf, Wooloomooloo, April 2017. Photographer Katherine Griffiths

How the City can help:

- Distribute wayfinding maps and signage, and info on cycling and walking in Sydney
- · Support the advocacy of industry associations for:
 - The removal of airport station access fees
 - Train travel to be promoted by event and conference organisers
 - Event and conference organisers recommending hotels with environmental ratings
- Investigate options for the best way to provide citywide public domain wifi

7.8 Restaurants, bars and other businesses

Everyone can contribute to making Sydney a sustainable destination in a way that suits their business model. Restaurants, cafes, pubs and small businesses providing goods and services to the city's visitors can benefit from upgrading resource efficiency.

Small businesses can:

- Upgrade to energy-efficient lighting and waterefficient fixtures
- Complete a waste audit to improve recycling and talk to neighbours and building owners about better waste management
- Explore partnerships and services to reduce environmental impact
- Request on-street visitor bike parking from the City.

The City will:

- Provide information and case studies on the results of the City's engagement with businesses on environmental upgrades
- Provide practical information on money-saving measures when the City's environmental health officers visit to complete compliance checks
- Provide on-street visitor bike parking (subject to space availability).

08 Plan development and reporting

The City of Sydney is dedicated to building a culture of sustainability to achieve the objectives of Sustainable Sydney 2030. This plans aims to engage the sector to build awareness and the capacity to act on environmental sustainability opportunities.

8.1 Plan development

The City of Sydney's research identified accommodation and entertainment as a priority sector. This is because of its relative resource intensity, the growth in its development and the fact that environmental improvements generate business benefit as well as contribute to sustainability targets.

Over the last few years, the City's Smart Green Business program has supported accommodation and entertainment providers to reduce their water consumption and waste generation. Participating businesses have saved money, become aware of their environmental impact, and achieved positive outcomes for their customers and staff. Targeted engagement was undertaken to gain insights across the City of Sydney's accommodation and entertainment sector, with the aim to test the City's assumptions on the barriers to and incentives for environmental sustainability. An External Reference Group was convened to provide the City with strategic, technical and policy advice and influence the development and delivery of the plan.

The Reference Group consisted of representatives from a number of key government and private organisations, which included: the NSW Government Office of Environment and Heritage; the NSW Government Department of Planning and Environment; UrbanGrowth NSW; the NSW Department of Industry; Transport for NSW; the Green Building Council of Australia; the Property Council of Australia; the Better Buildings Partnership; the Energy Efficiency Council; the Facility Management Association of Australia; Engineers Australia; Sydney Water; and Jemena.

The City also met with representatives of industry associations, and accommodation, events and entertainment providers. There was support and interest across the board for the development of the plan and there was an overall consensus on the drivers for and barriers to environmental improvements within the sector.

A number of opportunities identified in these meetings are included in the suite of actions in this plan. Feedback during consultation also reinforced the need and desire for continued engagement with sector stakeholders.



Ombretta Cafe, Glebe, 2015. Photographer: Adam Hollingworth

An industry survey was commissioned to gain insights more broadly across the sector: 99 respondents were asked about environmental practices, plans and priorities; awareness and use of sustainability ratings; and barriers and motivators for improving environmental performance. Further research was undertaken to better understand management structures and access to capital.

The City also commissioned detailed greenhouse gas modelling to understand the most cost-effective emissions reduction opportunities for businesses in the sector and the most effective environmental policy measures available to all levels of government.

This is a draft plan and is open to further input from the sector during the public exhibition period. It is the City's hope that the sector will lead on delivering the plan, facilitated and supported by the City.

8.2 Reporting

Progress will be reported annually as part of the City's environmental reporting. The plan will be reviewed in 2022, and adapted as required to support the sector's progress towards 2030 goals.

Appendix A: Carbon reduction measures, assumptions and actions

These actions are a sub-set of those outlined earlier in this plan, which also included actions to reduce water use and waste generation, as well enabling actions that don't provide a direct carbon reduction but which are essential to creating change in the industry.

Carbon emissions include electricity, gas and waste but not transport.

Commitment to net zero						
Abatement to 2022	Reduction from 2022 BAU scenario (t CO2-e)	71,700	% of 2015/16 - 21/22 abatement	45%		
Abatement to 2030	Reduction from 2030 BAU scenario (t CO2-e)	178,000	% of 2015/16 - 29/30 abatement	46%		
Key assumptions	 Description: Voluntary uptake of renewable energy and/or carbon offsets to achieve net zero emissions Take up rates (% floorspace): Hotels: 2022 - 20%; 2030 - 40% Serviced apartments: 2022 - 2.5%; 2030 - 5% Convention Conference Event centres: 2022 - 0%; 2030 - 100% Entertainment Venues – large: 2022 - 10%; 2030 - 70% Savings rate: 					
City actions	 Encourage the design, construction and operation of net zero hotels, both new and existing Encourage and support collaboration between sector leaders recognising best practice, showcasing business benefits and supporting advocacy for policy reform to affect sectorwide change Support environmental innovation through the provision of grants and the sharing of success and knowledge Update City procurement policies to assess environmental credentials of accommodation and entertainment suppliers, and advocate to government agencies to update their policies Influence private sector companies to utilise sustainable accommodation and entertainment venues Work with online booking agents to incorporate environmental performance ratings in their listings 					
Industry actions	 Accommodation and entertainment owners & operators: Commit to achieving net zero emissions from your building and develop a pathway to get there, including, but not limited to, purchasing renewable energy Government: Promote the National Carbon Offset Standard for Carbon Neutral Buildings to building owners; and develop programs to encourage certification Commit to achieving net zero emissions from your building and develop a pathway to get there, including, but not limited to, purchasing renewable energy 					

Enhanced waste	recovery				
Abatement to 2022	Reduction from 2022 BAU 53,200 % of 2015/16 - 21/22 abatement 3 scenario (t CO2-e) 53,200 % of 2015/16 - 21/22 abatement 3	33%			
Abatement to 2030	Reduction from 2030 128,600 % of 2015/16 - 29/30 abatement 3 BAU scenario (t CO2-e) 128,600 % of 2015/16 - 29/30 abatement 3	33%			
Key assumptions	Description: • An increase in the diversion of waste from landfill. Diversion rates: • Hotels: 2022 - 70%; 2030 - 90% • Backpackers: 2022 - 40%; 2030 - 50% • Serviced apartments: 2022 - 70%; 2030 - 80% • Convention/Conference/Event centres: 2022 - 70%; 2030 - 90% • Entertainment Venues – large: 2022 - 75%; 2030 - 90% • Entertainment Venues – other: 2022 - 40%; 2030 - 50% • Restaurant/Eating: 2022 - 60%; 2030 - 75% • Pubs/Clubs: 2022 - 60%; 2030 - 70%				
City actions	 Update the Development Control Plan (DCP) to specify minimum waste and recycling storage requirements in buildings Support new waste technology and innovations through environmental grants Support the development of waste education, engagement and incentives tailored for hotel housekeeping systems and staff Advocate for state government agencies to standardise waste data collection definitions and processes and reinstate annual reporting 				
Industry actions	 Accommodation owners & operators Work with product and service contractors to implement innovative ideas to minimise waste generation on site and to encourage the uptake of re-usable or recyclable materials Require better waste data and management solutions from contractors Entertainment owners and operators Require better waste data and management solutions from contractors Event organisers and their clients Implement best practice event waste management practices Require better waste data and management solutions from contractors Developers Provide suitable waste management infrastructure for maximum resource recovery as per the City's Waste Management in New Development Guidelines. Government Deliver waste market reform to incentivise resource recovery Restaurants, bars and other businesses Improve recycling and waste management by undertaking a waste audit and talking to neighbours and building owners about better waste management 				

Higher standards	for new building work		
Abatement to 2022	Reduction from 2022 BAU scenario (t CO2-e)	11,800	% of 2015/16 - 21/22 abatement 74
Abatement to 2030	Reduction from 2030 BAU scenario (t CO2-e)	28,700	% of 2015/16 - 29/30 abatement 84
Key assumptions	that will take effect July 2019. Prior t	o this, we a -16. This re ard ntres: 100%	in Section J of the National Construction Code assume that new floorspace performs better effects both a higher standard for building work
City actions	 Advocate for increases to the NCC building and refurbishments, and 		environmental performance standards for compliance with the NCC
Industry actions	standards for building and refurbis Government's Australian Building Increase compliance with NCC mi	standards i tandards i ode (NCC) shments (F Codes Boa nimum env	ncrease minimum environmental performance lesponsibility of the Council of Australian

eduction from 2022 BAU			
cenario (t CO2-e)	10,900	% of 2015/16 - 21/22 abatement	7%
eduction from 2030 BAU cenario (t CO2-e)	22,700	% of 2015/16 - 29/30 abatement	6%
hinor works and power factor correct ake up rates (% floorspace): Hotels: 2022 - 46%; 2030 - 75% Backpackers: 2022 - 15%; 2030 - 38 Serviced apartments: 2022 - 15%; 2 Convention/Conference/Event centr Entertainment Venues – large: 2022	on. 030 - 38% es: 2022 - 46%; 20	6 - 46%; 2030 - 75% 030 - 75%	ng,
		orting owners and operators to improve th	е
Upgrade energy and water efficience Provide incentives to guests to redu Measure and manage environmenta and publically disclose these intertainment owners and operator Privately owned entertainment venu - Measure and manage environment ratings and publically disc Tenants and production companies - Request venue owners ar and take short-term steps what efficiency measures metering is in place	y and wa ce their ir I impact es can: /ironment close thes can: id operate such as have bee	npact using environmental performance ratings al impact using environmental performance bors to improve environmental performance asking for energy and water-intensity data in implemented by the venue, and if sub-	
	eduction from 2030 BAU enario (t CO2-e) escription: une-up initiatives such as building ma inor works and power factor correction ake up rates (% floorspace): Hotels: 2022 - 46%; 2030 - 75% Backpackers: 2022 - 15%; 2030 - 38 Serviced apartments: 2022 - 15%; 20 Convention/Conference/Event centre Entertainment Venues – large: 2022 Entertainment Venues – other: 2022 avings rate: Electricity : A 10% reduction Gas: A 0.65% reduction Develop and deliver a tune-up progreenvironmental performance of their ccommodation owners & operator Upgrade energy and water efficience Provide incentives to guests to redu Measure and manage environmenta and publically disclose these ntertainment owners and operator Privately owned entertainment venu - Measure and manage environmenta and publically disclose these ntertainment owners and operator Privately owned entertainment venu - Measure and manage environmenta and publically disclose these ntertainment owners and operator Privately owned entertainment venu - Measure and manage environmenta and publically disclose these ntertainment owners and operator Privately owned entertainment venu - Measure and manage environmenta and publically disclose these ntertainment owners and operator Privately owned entertainment venu - Measure and manage environmenta and take short-term steps what efficiency measures metering is in place	eduction from 2030 BAU enario (t CO2-e) escription: Ine-up initiatives such as building management inor works and power factor correction. Ake up rates (% floorspace): Hotels: 2022 - 46%; 2030 - 75% Backpackers: 2022 - 15%; 2030 - 38% Serviced apartments: 2022 - 15%; 2030 - 38% Convention/Conference/Event centres: 2022 Entertainment Venues – large: 2022 - 46%; 20 Entertainment Venues – other: 2022 - 46%; 20 avings rate: Electricity : A 10% reduction Gas: A 0.65% reduction Develop and deliver a tune-up program supp environmental performance of their building ccommodation owners & operators Upgrade energy and water efficiency and water Provide incentives to guests to reduce their in Measure and manage environmental impact of and publically disclose these ntertainment owners and operators Privately owned entertainment venues can: - Measure and manage environmental impact of and publically disclose these ntertainment owners and operators Privately owned entertainment venues can: - Measure and manage environmental and publically disclose these tenants and production companies can: - Request venue owners and operators overnment Upgrade energy and water efficiency and water and take short-term steps such as what efficiency measures have bee metering is in place	eduction from 2030 BAU enario (t CO2-e) 22,700 % of 2015/16 - 29/30 abatement secription: une-up initiatives such as building management system optimisation, retro-commission inor works and power factor correction. Ake up rates (% floorspace): Hotels: 2022 - 46%; 2030 - 75% Backpackers: 2022 - 15%; 2030 - 38% Serviced apartments: 2022 - 15%; 2030 - 38% Convention/Conference/Event centres: 2022 - 46%; 2030 - 75% Entertainment Venues – large: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment Venues – other: 2022 - 46%; 2030 - 75% Entertainment aperformance of their building Commodation owners & operators Upgrade energy and water efficiency and waste practices Access support to achieve the Government Resource Efficiency Policy (GREP) targets



Building retrofits					
Abatement to 2022	Reduction from 2022 BAU scenario (t CO2-e)	10,200	% of 2015/16 - 21/22 abatement	6%	
Abatement to 2030	Reduction from 2030 BAU scenario (t CO2-e)	20,800	% of 2015/16 - 29/30 abatement	5%	
Key assumptions		- 38% - 38% - 32030 - 38% - 38	- 46%; 2030 - 75% 030 - 75%	•	
City actions	 Work with sector leaders to facilitate building retrofits Work with the operators of City-owned properties to facilitate building retrofits Provide information and case studies on the results of the City's engagement with businesses on environmental upgrades 				
Industry actions	Entertainment owners and opera • Undertake building retrofits to ac Government	hieve enviro tors hieve enviro building owr	nmental outcomes, where cost effective nmental outcomes, where cost effective ners undertaking refurbishments as part of	fthe	

On-site Solar PV	(not including large scale RECs	\$)			
Abatement to 2022	Reduction from 2022 BAU scenario (t CO2-e)	3,200	% of 2015/16 - 21/22 abatement	2%	
Abatement to 2030	Reduction from 2030 BAU scenario (t CO2-e)	3,000	% of 2015/16 - 29/30 abatement	1%	
Key assumptions	 Scenario (t CO2-e) Description: Cover eligible roofspace in solar panels, assuming 25% of roofspace is currently free. Take up rates (% floorspace): Hotels: 2022 - 10%; 2030 – 10% Backpackers: 2022 - 10%; 2030 – 10% Serviced apartments: 2022 - 10%; 2030 – 10% Convention/Conference/Event centres: 2022 - 10%; 2030 – 10% Entertainment Venues - large: 2022 - 10%; 2030 – 10% Savings rate: Variable depending upon ratio of roof to floorspace assumed for each sub-sector 				
City actions	Work with sector leaders to facilitate uptake of on-site solar				
Industry actions	Accommodation owners & operator government • Install on-site solar where possible	s, entert	ainment owners and operators, develop	ers,	

6 Star Commitme	ent Agreements (Hotels)				
Abatement to 2022	Reduction from 2022 BAU scenario (t CO2-e)	400	% of 2015/16 - 21/22 abatement	0.3%	
Abatement to 2030	Reduction from 2030 BAU scenario (t CO2-e)	3,900	% of 2015/16 - 29/30 abatement	0.9%	
Key assumptions	 Description: Commitment for 6 star NABERS energy rating. Take up rates (% floorspace): Hotels: 2022 – 3%; 2030 – 25% Savings rate: Electricity: A 64% reduction Gas: A 64% reduction 				
City actions			provisions that introduce NABERS Energy new hotels and major refurbishments.	y	
Industry actions	 Accommodation owners & operators Commit to the highest NABERS energy Commitment Agreement, or equivalent, when undertaking major renovations Developers Commit to the highest NABERS energy Commitment Agreement, or equivalent Government Adopt policies to procure accommodation and event venues with environmental performance ratings 				

Restaurants - Lighting Upgrades					
Abatement to 2022	Reduction from 2022 BAU scenario (t CO2-e)	200	% of 2015/16 - 21/22 abatement	0.1%	
Abatement to 2030	Reduction from 2030 BAU scenario (t CO2-e)	400	% of 2015/16 - 29/30 abatement	0.1%	
Key assumptions	 Description: Retrofit lighting to LED where possible covered by higher standards for new b Take up rates (% floorspace): Restaurant/Eating: 2022 – 11%, 2030 – Savings rate: Electricity: 30% reduction in lighting 	ouilding	ional to major refurbishment which would g work.	d be	
City actions	 Provide grants for independent ratings and assessments Provide practical information on money-saving measures when the City's environmental health officers visit to complete compliance checks 				
Industry actions	Restaurants, bars and other businessUpgrade to energy-efficient lighting	es			

Restaurants - Water Upgrades					
Abatement to 2022	Reduction from 2022 BAU scenario (t CO2-e)	100	% of 2015/16 - 21/22 abatement	0.05%	
Abatement to 2030	Reduction from 2030 BAU scenario (t CO2-e)	200	% of 2015/16 - 29/30 abatement	0.04%	
Key assumptions	 Description: Installation of flow restrictors to reduce water use. The reduction of hot water use will lead to an energy saving. Take up rates (% floorspace): Restaurant/Eating: 2022 – 11%, 2030 – 20% Savings rate: Electricity: 30% reduction in hot water Gas: 30% reduction in hot water 				
City actions	 Provide grants for independent ratings and assessments Provide practical information on money-saving measures when the City's environmental health officers visit to complete compliance checks 				
Industry actions	 Restaurants, bars and other business Improve water management by under building owners about better water ma 	aking			









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