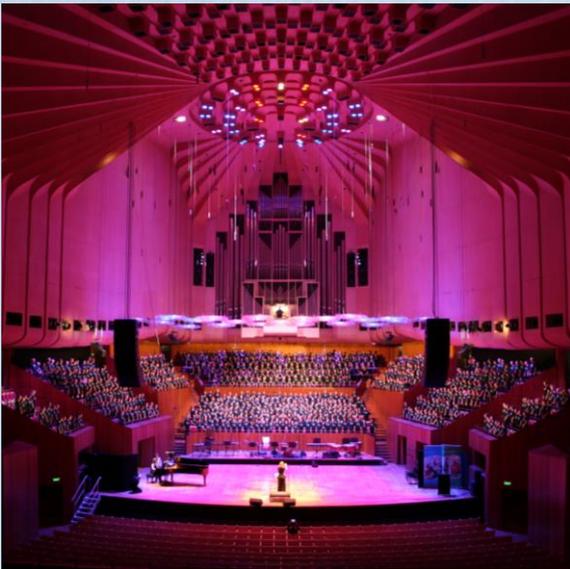


# GBCA GREEN STAR PERFORMANCE RATING

## Building Management

Good design and efficient service delivery



### Utzon's Sustainable Heritage Design

When designing the Opera House, Jørn Utzon was inspired by nature and integrated features now recognised as sustainable design:

- The innovative seawater cooling system continues to efficiently power the Opera House's main heating and air-conditioning
- An early interpretation of the 'chilled ceiling' design remains in the Drama Theatre today to help control the venue's air temperature
- The building was designed with durable materials to meet a 250-year lifespan, much more than the 80-year standard of the day
- Jørn Utzon's requirements for minimal finishings on building materials reduced resources used and maintenance requirements
- The white shell tiles of the Opera House sails are self cleaning
- Watch: [Sydney Opera House: Inspired by Nature](#)

### Energy Efficiency

At a time when the Opera House is putting on more performances and welcoming more visitors than ever before, energy usage has been reduced by more than 10% over the past five years. This has been made possible through a range of lighting-retrofit and lighting-control projects, including:

- Heritage Sensitive Lights in Drama Theatre and Playhouse (2011)
- Lighting Control (CBUS) installation across the building (2011)
- Central passage lights upgrade (2011)
- Replacement of 1900 back-of-house fluorescent lights to LED (2011)
- The award-winning [Concert Hall lighting project](#) installed LED lights which included a 'heritage lighting setting'; world class theatre capabilities; 75% reduction in electricity consumption with estimated savings of about \$70,000 a year
- Watch: [Sydney Opera House: Concert Hall lighting](#)

### Green Cleaning

The development of a range of eco-friendly cleaning methods not only maintains the heritage value of the building but reduces its impact on the environment

Some of the practices that are currently employed:

- Baking soda for concrete cleaning
- Olive oil for bronze restoration
- Ozone-treated water for disinfectant
- Lux soap flakes used in Western Foyers
- Mixture of clay and lux soap flakes used in the Utzon room
- Watch: [Greening the House while Cleaning the House](#)

We have also developed a Sydney Opera House *Sustainable Cleaning Guide*.

# GBCA GREEN STAR PERFORMANCE RATING

## Environmental Management

Live responsibly, within our environment



### Building User Engagement

A dedicated Environmental Sustainability Manager supports the delivery of the Opera House *Environmental Sustainability Plan*.

A range of initiatives are in place to actively engage staff and performers as well as on-site food and beverage operators and venue hirers in ways they can reduce their environmental impact everyday:

- Staff receive sustainability training at induction
- Quarterly staff engagement activities (e.g. Ride to Work, paper diet)
- The Sydney Opera House Environmental Action Leaders (SEALS) program develops green champions across the organisation
- A range of guidelines and environmental information are available for users including the Outdoor Event Guide and Food and Beverage Operations Manual
- Read: [Sydney Opera House's Environmental Sustainability Plan](#)



### Waste Management

There are systems to ensure the Opera House understands and tracks all waste from our operations, with documented processes in place for its recycling and management:

- We have an Operational Waste Management Plan in line with [Better Building Partnership](#) best practice guidelines
- The Opera House recycles eight different waste streams including co-mingled (glass, plastics & cans), paper, cardboard, light bulbs, e-waste (computers, batteries, toners, etc) and polystyrene
- In FY20014/05 the Opera House recycled 450 tonnes

### Monitoring & Reporting

- An Environmental Monitoring Strategy is in place which provides energy, water and waste performance data to staff and the Management quarterly. Environmental Performance is publicly reported in our annual report each year.



### Sustainable Transport

The Opera House's proximity to the Circular Quay hub has led to increased public transport use. A sustainable transport action plan is also in place:

- The Opera House supports staff to travel to work in active modes by providing secure bike racks, lockers and showers. A staff travel survey showed that 45% more staff than the ABS average come to work by walking, bikes and public transport
- A shuttle bus between Circular Quay and the Opera House encourages less mobile patrons to take public transport, and is used by 18,000 people per year
- For this year's Vivid LIVE festival fuel-efficient transport was also introduced for artist transfers where possible

# GBCA GREEN STAR PERFORMANCE RATING

## Social Sustainability

Benefiting the community now and in the future



### Reconciliation Action Plan

Sydney Opera House was the first performing arts centre in Australia to develop a Reconciliation Acton Plan, signed off by Reconciliation Australia. Recent initiatives include:

- Launch of an interactive digital excursion for school groups called *Guwanyl Walama: To Tell and Return*
- *Homeground*, the annual Opera House outdoor celebration of First People music, dance and culture, attracted 10,000 attendees in November 2014

### Access Strategic Plan

The [Access Strategic Plan](#) (2013 – 2015) is spearheaded by the Opera House's full time Accessibility Manager

Alongside building modifications to improve accessibility, the Access Program focuses on making performances accessible to all. Recent highlights of the program include:

- Autism-friendly performances, accompanied by 'Meet your Seat preparation excursions'
- Oddysea: a highly specialised, hands-on, interactive theatre experience for young people with special needs including those with multiple disabilities
- Audio described tours of the lighting of the sails for Vivid LIVE 2015



### Engage & Inspire

The Opera House aims to set a positive example and engage and inspire others beyond our individual performance. For example:

- Vivid LIVE 2015 was carbon neutral. All electricity, including the iconic Lighting of the Sails, was powered by 100% Green Power. Initiatives were also taken to reduce the environmental impact and all remaining emissions were tracked and will be offset including flights for performers, artist transport, catering, hotel accommodation, waste and paper
- *Ideas at the House* program continues to inspire debate. Five talks in the *Festival of Dangerous Ideas* 2014 and two in *All About Women* 2015 addressed sustainability issues. The Creative Learning Education program 2015 included two children's shows with environmental themes – *Tale of Samulnori* and *Snugglepot and Cuddlepie*
- A 'sustainability tour' in partnership with the Green Building Council of Australia was held on World Environment Day in June 2015

