



IMEX Green Supplier Award Submission

1) MINIMISING ENVIRONMENTAL IMPACTS

a) Energy efficiency

The smart sustainable building concept behind the new Melbourne Convention Centre makes it a leading venue in Australia in regards to its energy efficiency.

Design features will reduce energy consumption during peak summer months by up to 150,000 megajoules (Mj), reduce heating energy consumption during cooler months by up to 750,000 Mj and reduce fan energy consumption by up to 2000 Mj.

Its features include:

- an expansive glass façade which allows availability of **natural light to the foyer** and pre-function spaces and reduces the need for artificial light
- **solar hot water systems** which will offset more than 40% of general hot water requirements and can provide 100% of public amenity hot water requirements
- fittings and switches selected and positioned in order to minimise resource and energy consumption, for example, **energy efficient lighting** is designed with daylight and motion detection control features
- **radiant slab heating and cooling** provides energy efficient occupant thermal comfort and reduces air conditioning requirements
- a computerised 'Building Management System' (BMS) minimises energy consumption by controlling the amount of energy used and continuously monitoring energy use to ensure all systems are operating efficiently.

These features contributed to the new centre being awarded the world's first '6 Star Green Star' environmental rating for a convention centre.

Green Building Council of Australia executive director David Craven, who awarded the rating, says the rating system takes into account a range of factors from materials to indoor environmental quality. A 5 Star Green Star rating signifies Australian excellence but a 6 Star Green Star rating stands out as setting new global standards for a convention centre.

"This rating means the new Melbourne Convention Centre will be a public building for the future, with drastically reduced impact on the environment."

Refer to attached diagram titled MCC Green Design.

In the existing Exhibition Centre the **air-conditioning has been reprogrammed** so multiple cooling towers are used to cool water, rather than cooling tower fans. This reduces the use of cooling tower fans, saving water and energy.


Sensor lighting has been located around the entire perimeter of the Exhibition Centre, the new Melbourne Convention Centre and in all back of house areas of the new Melbourne Convention Centre.

Light bulbs in the Exhibition Centre are being replaced to **energy efficient bulbs**. In one area alone, above the public catering kiosks in the bays of the Exhibition Centre 16 lamps at 18 watt were replaced with four lamps at 36 watt, reducing the wattage by half.

An **energy audit** is conducted every six months to ensure energy consumption continues to significantly decrease, with a target of reducing consumption by at least another 25% by December this year.

Clients are also offered **green power**, where equivalent power usage is purchased from a renewable energy source.





Events to take up this option include the largest environmental exhibition of its kind in Australia, Enviro 08, which attracted more than 5,000 delegates and visitors, and the Banksia Environmental Foundation gala dinner - the most prestigious awards program of its kind in Australia, recognising outstanding environmental achievements by businesses, government and individuals.

b) Air & water quality

The new Melbourne Convention Centre features large scale **displacement ventilation**, meaning visitors to the venue will literally breathe easier, as cool air is released at a lower level of the building, not second hand air which is traditionally pumped through the ceilings of large buildings.

This system means the indoor environment quality (IEQ) introduces 50% more outside air direct to occupants.

The centre was built using **sustainable furnishings and floor coverings** and low volatile organic compounds (VOC) in its carpets, paints, adhesives and sealants to enhance indoor air quality.

As well as having a more pleasant experience through better air quality, delegates and visitors to MCEC can enjoy the freshest, best quality local produce, with food purchased from **local suppliers**, which in turn reduces the carbon impact of events held at the venue. All wines served at the centre are also sourced from the best winegrowing regions in the State.

All of MCEC's tea is naturally grown by certified organic tea producer Tea Tonic, while organic coffee is sourced from Veneziano.

To encourage a reduction in carbon emissions, secure bike racks have been installed in the Exhibition Centre car park to enable staff to cycle to work and safely lock up their bicycles on site.

Clients are also encouraged to 'green' their events and have access to an entire green micro-site including an on-line check-list of how best to do this, including ways of **reducing transportation of freight and consumables** and promoting public transport.

c) Water conservation

The new Melbourne Convention Centre has the first privately funded black water treatment plant in a public building in Australia.

The **black water treatment plant** treats wastewater, rainwater and stormwater to Grade A quality for reuse reducing flow to sewer and will save up to 50% on water consumption.

The centre will operate the '**E-water system**' - a chemical free electrolyte water system using water, salt and electricity creating cleaning water and sanitising water. The water units have passed exhaustive independent tests in Australia which show electrolysed water cleans and sanitises virtually on contact, meaning less water is required.

The new centre has **water efficient fixtures and fittings**, including waterless urinals and sensor taps.

The venue's M-Green team has established a **water management plan** to increase captured rainwater capacity and reduce overall water use, with a target of a 20% reduction in current water usage by December this year.

Water tanks on roof spaces capture an additional 24,000 litres of water which is used for cleaning and watering the gardens.

All hoses used in dishwashing areas have been fitted with **water efficient pre rinse spray guns**. The kitchen has also recently purchased **waterless woks**. Studies have shown* the average daily water use of a conventional wok stove is 5,500 litres per day, but this can be reduced to just 500 litres per day by installing a more water efficient unit.

Refer to attached graph titled MCEC Water Consumption.

(from Sydney Water, Australia's largest water utility)*



d) Waste minimisation

MCEC is one of the leading venues in the country in terms of waste handling and the encouragement of waste minimisation within the exhibitions industry.

It is the only venue in Australia to hold both **Green Globe and Waste Wise** accreditations – accolades which reflect its **extensive waste minimisation programs**.

Green Globe has commended MCEC's water consumption, waste sent to landfill, waste recycling and use of cleaning products as all **above best practice level**.

MCEC's efforts in this area included the M-Green team implementing a **comprehensive waste recycling program** to reduce the amount of waste that goes to landfill.

Organic waste, tin, glass, plastic, paper cardboard and toner cartridges are all recycled. In a three month period MCEC has recycled more than 38 tonnes of organic waste into compost and reduced the amount of tin, plastic and glass sent to landfill by more than 38,000 litres.

The centre follows the three R principles, **reduce, re-use and re-cycle**. All events are individually catered for using **china and linen** with the kiosks in the Exhibition Centre using **PLA bio-degradable packaging**.

MCEC encourages all event organisers to **'green' their events** providing information on how they can best reduce, reuse or recycle the amount of collateral, food waste and building materials they use.

Its efforts in assisting Asia Pacific's premier event for the business event industry, AIME 08, in becoming a climate neutral event, and in particular through its recycling efforts, led to it winning the prestigious **'Best Environmental Supplier Award'**.

MCEC prints promotional material on **recycled paper, returns all ink cartridges to the supplier** for re-use and ensures cleaners use **non-toxic cleaning agents**.

All **organic food waste is recycled** with the help of supplier KS Environmental, which trains staff to separate compostable food waste. The company transports the waste to a composting recycler, where it is turned into garden compost.

Any fresh produce which is unused is given to 'Second Bite' a non for profit organisation which redistributes it to people who are homeless or living in disadvantaged circumstances.

The MCEC's new award winning website offers interactive brochures on-line to reduce the use of paper and the venue works closely with Colorpak, to ensure gift boxes are fully recyclable and plant based inks are used for the coloured boxes.

e) Environmental purchasing

MCEC is vigilant in its environmental purchasing, whether it's the coffee it serves to clients, or the paper used in the office.

Nothing is purchased without investigation as to its origin, to determine if it is from a sustainable supplier and how, and if, it will be recycled, reused or disposed of.

The centre uses **PLA plastic**, a plant based material that is fully biodegradable and compostable.

100% recyclable paper is used in the office and printers use **vegetable ink**. MCEC offers a **sustainable menu**, sourcing its produce and wine from local producers, farmers and winemakers, which in turn reduces the carbon impact of events held at the venue and uses **biodegradable corn starch cutlery** for food which is taken offsite.



As part of achieving the new Melbourne Convention Centre's 6 Star Green Star environmental rating, plenary and construction contractor Brookfield Multiplex sourced **FSC certified timber*** to cover 8,500 sqm of ceiling and wall panelling.

The centre was built using sustainable furnishings and floor coverings and low volatile organic compounds (VOC) carpets, paints, adhesives and sealants low in VOC to enhance indoor air quality.

**FSC is an international not-for-profit organisation devoted to guarantee the responsible management of the world's forests.*

2) ECONOMIC INDICATORS

The new Melbourne Convention Centre opens in mid 2009, so savings associated with its extensive environmental initiatives won't be able to be economically equated until after a 12 month period.

However, solar hot water systems in the new convention centre will offset more than 40% of general hot water requirements and can provide 100% of public amenity hot water requirements, while the black water treatment plant will save up to 50% on water consumption.

A computerised 'Building Management System' (BMS) is in place to ensure MCEC can continually monitor and assess its energy use and cost savings associated with this. This minimises energy consumption by controlling the amount of energy used and continuously monitoring energy use to ensure all systems are operating efficiently.

MCEC has a solid commitment to the local Victorian food and wine industries, sourcing produce and wine from local producers. Annually it invests **\$3.2 million** into the Victorian economy through its food and wine purchasing alone.

Victorian Wine Industry Association chief executive Joanne Butterworth-Gray is under no illusion as to the benefits the partnership brings.

"The Melbourne Convention and Exhibition Centre's dedication to the Victorian wine industry has a significant impact in the economic benefits it provides boutique wineries; and the industry as a whole. By including local winemakers and making a conscious decision to always serve Victorian wines at all events held at the centre, it not only gives international and national delegates a rare chance to get face to face with key industry representatives, but it raises awareness of our industry and entices them to travel to the wine regions of Victoria."

Event organisers have found costs are reduced through following the principle of the three Rs and taking advantage of MCEC's practices. MCEC offers free recycling services to its clients. Event organisers also save costs by assessing how they transport freight and consumables to the venue, reducing the use of lighting and using re-usable signage and recycling name badges.

Asia Pacific's premier event for the business events industry, AIME 08, was one event which, with the help of MCEC, was able to save costs in some areas of its operation in creating a Climate Neutral event. In particular it was able to offer a paperless media office, so didn't have to print out media releases and other collateral for the dozens of media attending the event. Exhibitors were also encouraged to provide information on USB; it used recyclable visitor bags and designed signage that was reusable.



3) COMMITMENT TO CHANGE

No better demonstration of MCEC's commitment to change was a tour it hosted of local Government authorities wanting to learn about MCEC's successful waste management processes.

The tour of 12 representatives from councils across Melbourne was organised through the Melbourne Waste Management Group which co-ordinates Waste Wise certifications.

MCEC is also frequently asked to speak about its environmental initiatives. Chief executive Leigh Harry has **presented to the industry** at **IMEX** 2007 and 2008, **EIBTM** 2007 and 2008, **PCMA** in the US 2008, **MEA** 2008 in conjunction with **MCI Group**, **AIME** 2007 and 2008 and **ICCA** 2007.

Leigh and his management team's commitment to change led to the establishment 18 months ago of **MCEC's M-Green team**.

The team is made up of a **dedicated and devoted group of employees** tasked with coming up with fresh initiatives and new strategies to benchmark and progress MCEC's environmental performance.

To date it has:

- Recycled more than 38 tonnes of organic waste into compost over a three month period
- Reduced the amount of tin, plastic and glass sent to landfill by more than 38,000 litres over a three month period
- Developed a Water Management Plan (waterMAP) to reduce water usage by introducing new rainwater tanks and native gardens and using captured rainwater for general cleaning purposes
- Reassessed every single product in the kitchen from the flour to the fish, to ensure they are sourced using limited food miles reducing carbon emissions, and introduced a range of biodegradable packaging and cutlery
- Worked with clients to encourage them to 'green' their events, by recommending waste management, green power (where equivalent power usage is purchased from a renewable energy source) and sustainable food menu options and solutions
- Worked with Asia Pacific's premier event for the business events industry, AIME 08, to help it become the first climate neutral event of its kind in Australia
- Launched a micro-site introducing visitors to the environmental design credentials of the new Melbourne Convention Centre, giving an overview of MCEC's environmental strategies and initiatives
- Educated staff through green fact sheets and introduced a 'green office' program promoting recycling initiatives

This year will see the M Green team go a step further and establish '**green ambassadors**' from every department in the organisation to assist in actioning the environmental initiatives.

MCEC's other environment accolades and initiatives include:

- **'6 Star Green Star'* environmental rating**
- **Green Globe Certification**
- **Waste Wise Certification**
- Winning the prestigious '**Best Environmental Supplier Award**' at the Asia Pacific's premier event for the business events industry for its efforts towards ensuring AIME was a climate neutral event, in particular through its recycling efforts



- MCEC is also involved in a local Government initiative called ResourceSmart to ensure it is operating towards the environmental targets set by the state government.

The '6 Star Green Star' rating was awarded by the Green Building Council of Australia (GBCA). The design of the new Melbourne Convention Centre was put through a rigorous ratings process and confirmed as having world leadership status.

4) COMMITMENT TO COMMUNITY

MCEC has established relationships with organic and sustainable companies, farmers and producers throughout Melbourne, sourcing everything from the produce it purchases for the two million people it caters for each year, to the type of water bottles it provides.

Its produce is sourced from **local (Victoria) organic or sustainable food producers and farmers.**

One of those is Red Hill Cheese in the Victorian region of 'Red Hill', which is made using fresh organic cow milk and free-range goat milk and is free from genetically modified organisms, artificial stabilisers and preservatives.

Owner Jan Brandon says the relationship with MCEC is invaluable.

"We feel it's important when international and interstate visitors come to Victoria, they associate our State with having exciting world class food. We were able to personally present our cheese at the MCEC on a number of occasions, and always made to feel like a special guest, no matter how busy the staff were. We admire the genuine respect between staff members, and a real sense of team work."

MCEC's wine is also sourced from the best local winegrowing regions. All of MCEC's tea is naturally grown by certified organic tea producer Tea Tonic, while organic coffee is sourced from Veneziano.

The centre has also established close relationships with local sustainable suppliers for other areas of its business including Cool Change, a family run company in the Yarra Valley of Victoria which has created Australia's first natural spring water in a bottle derived from plants and Going Green Solutions where it sources its biodegradable cutlery.

Going Green Solutions director Sean Flynn says the relationship is a fruitful one for both parties: "having a relationship with MCEC helps us financially and it helps to support environmentally conscience companies such as ourselves. We value the relationship we have with MCEC and look forward to working mutually on the opening of the new convention centre."

MCEC utilises the services of local supplier KS Environmental to **recycle all organic food** which is transported to a composting recycler, where it is turned into garden compost, and any fresh produce, which is unused, is given to **'Second Bite'** a non for profit organisation which redistributes it to people who are homeless or living in disadvantaged circumstances.

MCEC's efforts in ensuring clients have the best options when holding environmentally responsible events led to an independent body applauding it for its environmental initiatives.

The **Banksia Awards Gala Dinner** was commended for having "outstanding results in the areas of event promotion and the venue and surrounding environment" by the world's first event sustainability rating framework, Sustainable Event Solutions.



The Awards, touted as Australia's most prestigious environmental awards, serve to recognise outstanding environmental achievements by businesses, government and individuals.

MCEC worked closely with the foundation, ensuring wherever possible, all aspects of the event were carefully considered from an environmental standpoint.

That involved:

- providing a menu using regional produce to reduce carbon emissions and Australian organic tea and coffee
- ninety per cent of waste from the event was recycled
- no plastic bottles were used and all glass was crushed for re-use
- all glass was crushed for re-use
- energy efficient lighting was implemented, with a more than 96% electricity saving

It's not the first time MCEC has been applauded for hosting an environmentally conscious event.

In May last year, it was commended after hosting the largest environmental exhibition of its kind in the country.

ENVIRO 08 is the only Australasian industry-run event of its kind, bringing together business, consultants, academics and representatives from the water, waste, energy and environment fields.

MCEC supplied the event with 'green power', recycled all food waste into compost and collected all other waste, which was then taken off-site and individually separated and recycled.

5) COMMITMENT TO CONSERVATION

MCEC's commitment to conservation extends to the trees that were sourced for the interior ceiling and wall paneling of the new Melbourne Convention Centre.

When constructing the new centre, Plenary Group and its construction contractor Brookfield Multiplex searched for months to find a forest that was Forest Stewardship Council certified (FSC) and able to supply sustainable Australian native timber to cover 8500 square metres of ceiling and wall panelling.

They worked tirelessly to find appropriate timber so they didn't have to import it from overseas. With patience and perseverance found a forest in New South Wales, where Eucalyptus Maculata, otherwise known as spotted gum, is grown more prevalently in conditions which comply with FSC standards.

On the exterior of the Exhibition Centre, a 1500 sqm native garden has been planted as part of MCEC's commitment to conservation. The Australian native plants are only watered using the water captured from roof spaces.

MCEC also contributes to 'Earth Hour' turning off lights for one hour on 29th March – a step it has taken to encourage others to make small adjustments to the way they live to slow the current rate of global warming.

MCEC is hoping in undertaking all of these initiatives in regards to its environmental responsibility it will encourage staff, clients and all other stakeholders, who in turn will educate their own associates, to ensure a more sustainable future for the industry, the city and the State.

