

Greenhouse Challenge Plus Awards 2007

APPLICATION - CATEGORY 1: SMALL BUSINESS AWARD

As Australia's largest specialised Energy and Greenhouse consultancy, Energetics' corporate mission is to make a positive impact on the environment by supporting our business community to effectively manage their energy and related challenges.

We continue to lead by example and 'walk the talk'. This is evidenced in our continued active involvement and commitment to a number of energy / greenhouse reduction programs (Energetics was the first energy / greenhouse consultancy to become a member of the Greenhouse Challenge Plus Programme in 1998) and our emissions intensity reduction since joining the programme.

For 23 years, Energetics has been helping Australia's top 200 organisations to manage their energy and related challenges to achieve emission reductions. Through the very nature of our business, we continue to innovate and significantly influence our clients to operate in a more sustainable manner.

Further, Energetics' innovative products and services have been highly regarded at Australia's federal government level. In a recent article¹, Australia's federal Minister for Small Business, Fran Bailey, cited Energetics as one of two innovative Australian businesses that are developing sustainable energy solutions. She noted that the companies were proof that Australia is at the cutting edge of the business ideas generation stating that both businesses are "...developing the innovative technology to enable big business to become more energy efficient."

While we have a relatively small environmental footprint when compared to our clients, we have substantially reduced our environmental footprint through the activities of Energetics' dedicated internal environmental team; the 'E-Team'.

Some of the E-Team highlights over 2007 include:

- Purchasing 100% GreenPower™ for our Sydney and Melbourne offices (where we have direct control over the purchasing decision);
- Implementing energy efficiency measures;
- Offsetting scope emissions; including flights and waste;
- Implementing employee behavioural change campaigns across our major offices; and
- Committing to becoming carbon neutral by March 2008.

In this award application, we draw specific attention to Energetics' energy and greenhouse abatement relating to the reporting period of Year Ending March 2007 or 'YEM07'.

HISTORY OF PERCENTAGE GREENHOUSE GAS ABATEMENT

Over the last two reporting periods, Energetics has continued to grow significantly, not only in revenue, but also in personnel numbers to keep up with the high demand from the market in which we operate.

In YEM07, we recorded a 43.1% growth in personnel versus a 24% growth in employee numbers over YEM06. This large growth has not only caused a higher utilisation of our offices but has also resulted in Energetics' expansion of its physical locations. In YEM07, we

¹ 'Innovate or Evaporate' published in Virgin Blue's May 2007 in-flight magazine 'Voyeur'.



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increased our total operating space in m² by 32.7%; we expanded our Sydney office from Level 7 (L7) of 132 Arthur Street, North Sydney to include half of Level 11 (L11) and we began leasing office space in Perth.

Our overall operational energy consumption in YEM07, relative to YEM06, has increased by 19.1% due to our personnel and operational space increases, as mentioned above. Despite this, the company's energy intensity per employee and per m² has decreased by 16.8% and 10.2% respectively. This decrease is as a result of the implementation of energy efficiency and behavioural change measures alone. When considering emission reductions as a consequence of energy efficiency measures and our GreenPower™ purchase (see 'Procurement of 100% GreenPower™' below), our total operational emissions have decreased by 19.6% or 23.5 Tonnes.

Figure 1: KPI's

KPI's	Unit	YEM06	YEM07	YEM07 % change ²
Total operational Energy ³	GJ	546.3	650.9	+19.1
Total operational emissions ⁴	Tonne CO ₂ -e	119.7	96.20	-19.6
Total employees	Number	51	73	+43.1
Total floor area	m ²	1,100	1,460	+32.7
Total Energy per employee	GJ/Employee	10.7	8.92	-16.8
Total CO ₂ per employee	Tonne/Employee	2.35	1.32	-43.8
Total Energy per floor area	GJ/m ²	0.50	0.45	-10.2
Total CO ₂ per floor area	Tonne	0.11	0.07	-39.4

In the following sections of this award application, we will demonstrate the innovative programs responsible for such a reduced operational emissions footprint in YEM07.

ENERGY EFFICIENCY IMPROVEMENTS

Throughout YEM07, Energetics' E-Team has implemented a number of energy efficiency initiatives that have produced impressive results for the company's overall greenhouse emissions reduction. The activities implemented by the E-Team have predominantly taken place in our NSW and Victorian offices, where most of our scope 2 emissions arise.

At the beginning of 2004, due to the growth of staff numbers in Energetics' Sydney office, we moved from a highly energy efficient tenancy (the first tenancy to achieve a 5-star ABGR rating) to a less efficient tenancy that achieved an ABGR rating of 3.5-star when first assessed in August 2005. It has been difficult for Energetics to improve the star-rating of its Sydney tenancy without undertaking major upgrades where we have a relatively short lease period. In contrast, our Melbourne tenancy achieved a 4.5-star ABGR rating in February 2007.

² Calculated as difference between YEM06 and YEM07 relative to YEM06 value

³ Note that this inventory includes only scope 1 and scope 2 emission sources. While we record our scope 3 emission sources and report them in our Greenhouse Challenge Plus annual report, we do not have adequate historical data for these information sets. We are working on improving and tracking these information sets going forward.

⁴ Note that these emission values take account of GreenPower™ purchased as discussed below.



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Energetics' E-Team in Sydney and Melbourne has continued to identify and implement energy efficiency measures that have contributed considerably to our overall greenhouse emissions reduction.

Energy efficiency measures implemented in Sydney:

- Purchased energy efficient data projector, photocopier and printers;
- Installed 12 light switches in all individual office areas (including the kitchen and storage rooms) - this brings the switch count to 17 versus 4 prior to installation;
- Ensured power-save software was activated on all equipment;
- Installed a timer on the kitchen water boiler;
- Changed 50W halogen reception lamps to 35W lamps;
- Implemented flat-screen replacement; and
- Moved 'Save-it-Easy' light fittings from the board room to utilities.

Energy efficiency measures implemented in Melbourne:

- Purchased energy efficient printer and photocopier;
- Installed timers on the kitchen water-chiller and the hot water urn to alter operating hours;
- Reprogrammed office comprehensive lighting control system;
- Replaced two CRT computer screens with flat screens;
- Audited computers to ensure full shut down;
- Shut down photocopier out of operating hours;
- Installed sleep mode on new photocopier; and
- Trialled shutdown on fans in server cabinet.

PROCUREMENT OF 100% GREENPOWER™

Through the use of Energetics' internal Strategic Energy Procurement services, Energetics negotiated a contract to purchase 100% accredited GreenPower™ for its Sydney (L7⁵) and Melbourne offices. This means that 100% of the electricity purchased directly by Energetics' Australian offices is GreenPower™. Energetics is also looking to help staff buy accredited GreenPower™ for their residential electricity consumption⁶.

Energetics' GreenPower™ purchase in YEM07 has resulted in a cut to greenhouse gas emissions of 51 Tonnes – equivalent to taking about 11 cars off our roads (see Figure1: KPI's in relation to 'Total Operational Energy' and 'Total Operational Emissions').

Energetics' purchase of GreenPower™ does not span the entire reporting period of YEM07 as we began purchasing GreenPower™ for Sydney (L7) in September 2006 and Melbourne in December 2006. Therefore, our purchase of GreenPower™ does not completely eliminate our consumption of stationary energy that is generated from fossil fuels for YEM07. Therefore, following the implementation of energy efficiency measures and purchase of GreenPower™, Energetics chose to offset the remainder of its operational emissions through the purchase of credits from Origin Energy and Bendigo Bank offset programs.

⁵ Sydney's L11 was not included in this purchase as we sub-lease this office space and, as such, do not have direct control over the purchasing decision.

⁶ Note that the inventory included above is inclusive of GreenPower™, in other words it has been reduced by the GreenPower™ purchased.



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PROCUREMENT OF CARBON OFFSETS

In total, Energetics purchased 331 tCO₂-e offsets. This was based on conservative estimates of emissions from flights, taxis and waste. In addition, energy consumption per m² from offices where energy is paid directly to the retailer (Sydney L7 and Melbourne) was extrapolated to offices where energy is paid indirectly through leasing agreements (Perth, Brisbane, Sydney L11 and Canberra).

We do not have a percentage comparison to YEM06 data as this is the first year that we have calculated emissions associated with flights and waste.

Figure 2: Carbon Offset Purchase

Supplier	Product	tCO ₂ -e	Covering Emissions from
Origin Energy Electricity	Carbon Reduction Scheme	271	Flights, taxis, waste and energy; Sydney (L7 & L11), Perth, Brisbane and Canberra.
Bendigo Bank	Greenhouse Balance	60	Flights, taxis, waste and energy; Melbourne.
Total offsets purchased		331	

BEHAVIOURAL CHANGE CAMPAIGNS

When new and efficient technology is purchased, a large proportion of energy and emissions reduction is realised upon installation. However, many organisations do not recognise the further reductions that can be achieved by staff simply changing their behaviour in relation to the use of new technology.

As such, Energetics' E-Team has set specific targets in relation to potential savings identified through behavioural change. Whenever the E-Team's technical specialists commit to installing new and efficient technology, that purchase decision undergoes a behavioural change screening to identify where additional savings may be achieved through behavioural change.

Thus, to achieve greater results in energy efficiency and waste reduction initiatives, the E-Team has introduced five behavioural change campaigns or 'E-Campaigns' throughout YEM07.

The E-Team's 'Flick-the-Switch' awareness and behavioural change E-Campaign is a great example of encouraging staff to use new technology in order to achieve energy savings. In November 2006, Energetics installed 12 light switches in all individual office areas (including the kitchen and storage rooms) in Sydney (L7). To act as a 'prompt'⁷ for staff to switch off light's when they are not occupying a room where a switch was installed, the E-Team mounted small laminated posters that read: "Flick the Switch".

These posters were carefully positioned so as to be visible to staff members when leaving the room. Full E-Campaign posters were also placed around the office that read: "Don't be an Ostrich, Flick the Switch". By using 'norms'⁸ the concept of an 'Ostrich' in this E-

⁷ www.cbsm.com: 'Prompts' are effective in reminding people to engage in sustainable behaviours.

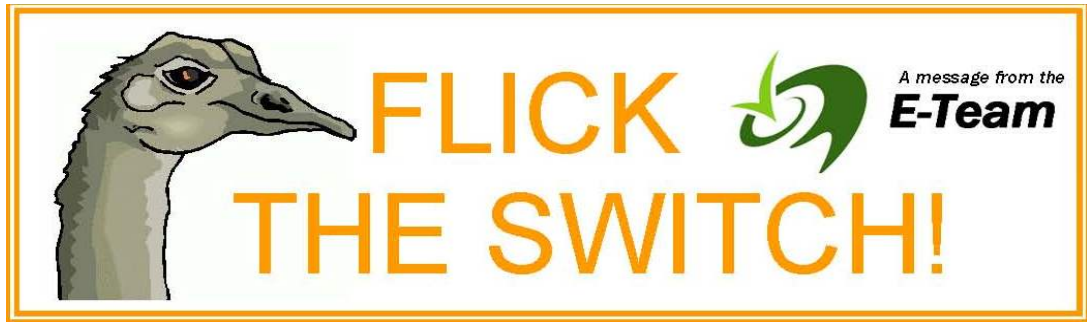
⁸ www.cbsm.com: 'Norms' have a powerful influence upon the uptake of sustainable behaviour. They are used to encourage colleagues to look to the behaviour of those around them to determine acceptable behaviour.



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Campaign was adopted to encourage employees not to 'bury their heads in the sand' but to encourage their colleagues to behave in a more sustainable manner.

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All staff across Energetics (including interstate offices) were surveyed by the E-Team and asked to give their feedback on which campaigns were the most effective in changing their behaviours. A vast majority said that the "Flick the Switch" E-Campaign was the most successful and memorable.

Energetics is using other E-Campaign's to increase office recycling, co-mingling and composting; such as "Don't throw it out, sort it out", and will implement water E-Campaigns throughout YEM08. Relevant E-Campaigns will also be rolled-out across all Energetics' major offices overtime.

IN SUMMARY

YEM07 presented considerable challenges to Energetics in terms of achieving continued greenhouse gas abatement. Specific challenges were the considerable growth in Energetics' personnel numbers (43.1%) and the company's expansion into more physical locations, increasing our total operating space in m² by 32.7%.

Despite these obstacles, the company has continued to show strong leadership in reducing its greenhouse gas emissions. The company's energy intensity per employee and per m² has decreased by 16.8% and 10.2% respectively as a consequence of energy efficiency and behavioural change measures alone. Further, the company achieved an absolute greenhouse gas reduction of 19.6% or an emission abatement of 23.5 tCO₂-e. This is an outstanding achievement for Energetics and the company would like to thank the E-Team for its dedication and hard work throughout YEM07 to achieve this outcome.

Looking ahead, Energetics has committed to conducting a full Life Cycle Assessment in order to reach its target of being carbon neutral by March 2008. Alongside our corporate dedication to reducing greenhouse gas emissions, we shall also continue to promote our Greenhouse Challenge Plus commitment to suppliers and customers and encourage them to adopt similar measures.

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