

## KENSINGTON SWAN ETHICAL GOVERNANCE AWARD

# New Zealand Aluminium Smelters

## CREATING SUSTAINABLE VALUE

**N**ew Zealand Aluminium Smelters (NZAS) is back in top spot in this category after winning in 2004 for its workplace safety programme and being a finalist in 2006 for its efforts to eliminate waste. This year it has again led the way by effectively tackling the climate change challenge from the board to the smelter floor.

NZAS and Rio Tinto (managing owner and a key customer of NZAS) believe that avoiding human-caused changes to the climate is an important international goal and that the world needs to reduce emissions of greenhouse gases.

NZAS defines its core purpose as being to create the most sustainable value from its resources and relationships. Its strategic map identifies key result areas that include environment and communities where it aims to be best in class with greenhouse performance, waste and water management, no environmental harm and enduring relationships with communities. Annually the NZAS management team review with the board these high-level commitments and their supporting key performance indicators, which include emissions reduction targets.

Through a cluster of projects, known as PFC ZerO Project, NZAS has been able to halve emissions of perfluorocarbon (PFC) greenhouse gases. PFCs are caused by an event called an 'anode effect' due to process instability, and are a common issue grappled with in the worldwide aluminium industry. A number of specially trained project and technical leaders as

well as many operations and maintenance employees have been engaged in the work. A rigorous technical problem-solving methodology called Six Sigma was used to manage the project.

The improvements have reduced PFC emissions by 40,000 tonnes of carbon dioxide equivalent a year and will produce around 120 tonnes per year of extra aluminium through recovering wasted power. This project as well as others aimed at energy efficiency has achieved annual emissions savings of over 420,000 tonnes of carbon dioxide per year since 1990 – a 40 percent reduction and equivalent to taking approximately 120,000 cars permanently off the road. The improvements have lifted NZAS from a middle ranking smelter to the top five percent of the world's 200 plus smelters.

Located on the Tiwai Peninsula, NZAS is one of the world's largest aluminium smelters.

Tiwai Point was chosen for the site in the late 1960s as aluminium smelting requires a large and reliable power source for continual supply to reduction cells and Tiwai Point is close to the then proposed Manapouri Power Station. It is also close to the deep sea port of Bluff.

Since opening in 1971, the smelter has expanded three times. Aluminium ranks seventh in New Zealand as a commodity export earner and NZAS ranks first as a single operating site. Independent analysis of the economic benefit of NZAS to the New Zealand economy is \$3.65 billion.

## JUDGES' COMMENTS

With a record number of entries in this category this year, the judges have announced five finalists alongside the winner.

### FINALIST

#### ECOSTORE

##### SAFE PRODUCTS

Ecstore's vision is to help create a healthier and more sustainable world through providing everyday products free of harmful chemicals.

Ecstore finds that it is often difficult to know who to trust regarding scientific appraisal of the safety or otherwise of particular ingredients. It therefore operates "a precautionary principle" and takes the view "If in doubt, leave it out". Its customers report positive health changes since using Ecstore products. For example, rashes, eczema, other skin and respiratory problems have improved and in some cases disappeared altogether.

Ecstore plant- and mineral-based ingredients come from renewable sources, are biodegradable and release no toxic substances into the environment. It only uses recyclable packaging and all its products are made in New Zealand to the strictest environmental standards.

Customers know they can trust the safety of its products and along with other stakeholders also value the Ecstore's pioneering commitment to operate a triple bottom line.



## FINALIST

### LANDCARE RESEARCH REDUCING EMISSIONS OF GREENHOUSE GASES

Landcare's carboNZero programme provides a robust methodology for measuring and managing GHG emissions. The programme enables verification of an organisation's emissions inventory (and reductions achieved), and a certification standard for marketable carbon neutrality.

Over 350 organisations and individuals have signed-up since its launch in November 2006. The New Zealand Wine Company, producers of Grove Mill and Sanctuary wines, was the first company in the world to offer carbon neutral wine and has become a dedicated advocate for the programme. Some 30 vineyards and wineries are currently consulting Landcare about carboNZero certification. Meridian now supplies carbon neutral certified electricity giving consumers more choice in the electricity market. More than 10 organisations and events can now claim to be carboNZero certified and another 40 are actively working towards certification.

The Government has highlighted the programme as a practical method to achieve the quest for a "carbon neutral economy". There is now broad international interest in the programme.

## FINALIST

### METRO WATER ASSISTING SUPPLIERS TO IMPROVE THEIR ENVIRONMENTAL PERFORMANCE

Metro Water is leading the way with environmental management within the water industry. It has developed an electronic platform and framework to enable its contractors to develop and implement their own environmental management plans.

These plans help to reduce the environmental impact of their operations by ensuring environmental best practice. The programme assists its contractors to effectively identify, measure, manage and control their potential environmental risks and impacts. The extensive management tool consists of an online toolbox and workbooks, which enable contractors to develop their own comprehensive environment management plans that reflect the work they do.

Metro Water monitors and reports on its environmental performance by benchmarking against industry standards and assessing compliance with its own and its contractors' environmental management systems. It is committed to sustainability in all areas of the business, and measures and reports on progress in terms of social, financial, environmental and cultural achievements.

## FINALIST

### THE NORTHERN GATEWAY ALLIANCE (NGA) LEARNING AND DEVELOPMENT

The Northern Gateway Alliance (NGA) is a 'virtual organisation' where seven partners have come together to demonstrate leadership in ethical governance. The project vision is to create a Northern gateway that is a visual showcase of environmental and engineering excellence. This vision feeds into the three key result areas (KRA) – environmental, social and economic and key performance indicators (KPI) assist with implementation and performance measurement. The NGA is the first New Zealand construction project to publicly report against triple bottom line measures.

The NGA was formed by Transit New Zealand in 2004 to design, project manage and construct the SH1: Northern Motorway extension. The alliance partners are owner participant Transit, Fulton Hogan, Leighton Contractors, URS New Zealand, Tonkin and Taylor, Boffa Miskell and VSL.

The "Legacy – Skills Development" KPI is one of five measures under the 'social' KRA and is the mechanism for measuring the project's contribution to developing the skills of its staff, and therefore contributing to the wider construction industry and society as a whole.

Typical construction industry practice, for project work, is to rely on recruitment of skilled plant and equipment operators from within the industry. However, in response to the national shortage of skilled operators, the NGA took a unique approach by seeking to attract and train people from outside the industry, providing them with the skills needed to join the project as skilled operators. They also provided training for people hired from within the construction sector, to further improve their skills.

## KENSINGTON SWAN ETHICAL GOVERNANCE AWARD (continued)

### FINALIST

#### VODAFONE NEW ZEALAND WORLD OF DIFFERENCE

Vodafone is back in this category after being a finalist in 2001 for innovative giving for its staff community volunteer programme. This year it is recognised for its World of Difference (WOD) programme. The programme pays the salary and expenses of up to six New Zealanders each year, so they can work for a cause of their choice for 12 months.

Vodafone is creating stronger communities and sustainable outcomes through building the capacity of the not-for-profit sector. The programme helps organisations begin or complete new projects, extend and improve services and capabilities, and in some cases

gives recipients the chance to lend their skills to set up a new charity. It is now well established, with over 23 recipients working for 23 separate charities since it was formed in 2002. This year's recipients are now lending their skills and passion to five youth-related charities.

WOD winners have used their year to set up new charities, which have successfully survived and achieved independent funding. This year the foundation has assisted two of the current recipients, EDEN (Eating Difficulties Education Network) and Big Buddy, to seek and receive ongoing funding from other sources.

Vodafone's commitment to the community flows from its core values and principles. It

views social investment not as an add-on to business activities, but at the heart of how it engages with the communities where its customers, employees, investors and suppliers live.

Vodafone publishes an annual NZ Corporate Responsibility Report, which is independently assured. Environmental and social KPIs are integrated into the business plan, and members of the executive team (the Vodafone NZ board) are responsible for the sustainability initiatives, which fall under their operational leadership. These include cellphone recycling, responsible marketing, and energy efficiency.

# MURRAY DOESN'T DO EMAIL.

Murray's been working for us for the last 17 years. Couldn't wait to get out. Never really liked reading or writing and his spelling's shocking. When something in the plant's going wrong, he's having trouble with the paper. But we can't get him to move up, he loves work, can't do email and is going to quit when the new computers come in.

To keep and develop people like Murray find out more at [www.workbase.org.nz](http://www.workbase.org.nz) or call 0800 Literacy.



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