

Godfrey Hirst

C A R P E T S



CATEGORY WINNER
Medium Business Award



Outstanding Achievement in Greenhouse Gas Abatement

05

THE GREENHOUSE CHALLENGE
PLUS BENEFITING BUSINESS
+ THE ENVIRONMENT
2005 AWARDS



Press Release

15 September 2005

Godfrey Hirst Australia Pty Ltd - National Greenhouse Challenge Winner "Outstanding Achievement in Greenhouse Gas Abatement"

Godfrey Hirst Australia Pty Ltd. has been honoured with the Medium Business Award for "Outstanding Achievement in Greenhouse Gas Abatement" at the Greenhouse Challenge Plus Awards held at Parliament House in Canberra on 14 September.

The awards recognise outstanding achievement by business and government departments and agencies across Australia that have implemented innovative processes, systems or procedures to help reduce greenhouse gases or to offset emissions that their organisation produces.

Godfrey Hirst Group Operations Manager, Mr Tim Maishman said "Godfrey Hirst has made significant investment and effort to improve its environmental performance, involving all of its personnel and operations. Improvements to carpet dyeing efficiency have increased productivity, reduced water consumption and increased the efficiency of energy per metre of carpet produced."

"Waste from the Geelong plant has also been significantly reduced, while recycling initiatives in removing wool from waste streams have reduced greenhouse emissions by 60%."

"Godfrey Hirst uses a computerised monitoring and control system within the manufacturing process. This enables management to accurately assess production efficiencies by continually identifying consumption and environmental performance," he said.

The 2005 awards were judged by a three-member panel consisting of representatives from the Department of the Environmental and Heritage (Australian Greenhouse Office), the Department of Industry, Tourism and Resources and the Australian Industry Greenhouse Network (AIGN).

Other finalists in the category for Medium Business included Tooheys Pty Limited; GlaxoSmithKline Australia, Boronia; Armstrong World Industries; Aurora Energy and Australian Vinyls Corporation Limited.

There are over 800 companies throughout Australia who participate in the Greenhouse Challenge, with only the top organisation from each of the 5 categories receiving an award.

Mr Maishman stated that, "Godfrey Hirst remains committed to reducing greenhouse gas emissions and will continue to seek and invest in opportunities for further reductions in the future."

Contact Details

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2005 Greenhouse Challenge Plus Awards

The Greenhouse Challenge Plus Awards acknowledge outstanding achievement in the reduction of greenhouse gas emissions by business and government departments or agencies. This was the inaugural year for this prestigious event.

The awards recognise small, medium and large enterprises across Australia that have implemented innovative processes, systems or procedures to help reduce greenhouse gases or offset emissions that their organisation produces.

The categories for the 2005 Greenhouse Challenge Plus Awards were: Small Business award -> Medium Business award -> Large Business award -> Government and Essential Services award -> Business Leadership award.

The Awards Programme Criteria

Only Greenhouse Challenge participants (including Greenhouse Friendly and Generator Efficiency members) qualified for entry in the Greenhouse Challenge Plus award categories. Participants had to satisfy at least one of the following criteria:

- Evidence of achievement in abating greenhouse gas emissions during the specified period. (2004-2005)
- Evidence that the action builds on a history of recognised abatement action under the programme.
- Implementation of innovative actions that have resulted in improved performance and the abatement of greenhouse gas emissions.
- Achievement in promoting and assisting Australian industry or the Australian community to reduce greenhouse gas emissions.

2005 Greenhouse Challenge Plus Awards – Category Winner

**WINNER OF THE MEDIUM BUSINESS AWARD FOR
OUTSTANDING ACHIEVEMENT IN GREENHOUSE GAS
ABATEMENT GODFREY HIRST AUSTRALIA PTY LTD**



Geelong-based Godfrey Hirst Australia manufactures high quality carpets and floor coverings. The company, established in 1865, has made considerable efforts to improve its environmental performance, involving all of its personnel and operations. Improvements to carpet dyeing efficiency have increased productivity, reduced water consumption and increased the efficiency of energy per metre of carpet produced.

Waste from the company's Geelong plant has also been significantly reduced, while recycling initiatives in removing wool from waste streams have reduced their greenhouse emissions by 60%. Godfrey Hirst uses a computerised monitoring and control system within the manufacturing process.

This enables management to accurately assess production efficiencies by continually identifying consumption and environmental performance. The company expects to reduce greenhouse gas emissions by a further 5% in the current reporting period.

Selection Criteria – 2005 Greenhouse Challenge Plus Awards

(The following document is an extract from the entry prepared by Godfrey Hirst as part of their winning submission into the 2005 Greenhouse Challenge Plus Awards.)

Godfrey Hirst Australia Pty Ltd: Category 2 – Reduction in Greenhouse Gases

Godfrey Hirst as a conscientious member of the community of the Geelong region has made considerable efforts to improve its environmental performance, in particular to save energy and greenhouse emissions.

This focus has extended over all operations and included all personnel. The process improvements made have yielded increased productivity as well as improved energy efficiency. Carpet dyeing efficiency improvements have led to greater production capacity, less water consumption and increased efficiency of energy per metre of carpet produced.

Waste from the Geelong plant has been significantly reduced by recycling initiatives including the removing wool from waste streams resulting in a reduction of greenhouse gas emissions, enhancing the sustainability in the manufacturing process.

Greenhouse Gas Emissions Reduction Initiatives

Godfrey Hirst remains committed to reducing greenhouse gas emissions and will continue to seek opportunities for further reductions. It is forecast that further reductions of 5% will take place for the reporting period of 2004/2005.

The major energy saving actions undertaken by Godfrey Hirst carpets during 2003/2004 are as follows:

- Increased production speeds resulting in increased efficiency
- Investment in a new state-of-the-art energy efficient dyeing system which is more energy efficient
- Air-conditioning rationalisation
- Office consolidation - centralisation

The main component of Godfrey Hirst's continuous improvement program focuses on the minimisation of waste production, promotion of environmental awareness and further waste recycling initiatives. A computerised monitoring and control system automates manufacturing processes.

This facilitates the allocation of environmental responsibility at a departmental level by identifying consumption and environmental performance on a continual basis. In turn, this then allows management to accurately assess production efficiencies and implement changes / improvements to the production process.

The net result of these initiatives will be a continual decrease in water consumption, raw materials usage, increase in production efficiencies and a decrease in the total solid and liquid wastes generated by the production process.

Greenhouse abatement measurements

Total tonnes of Greenhouse Gas Emissions Abated

Overall Godfrey Hirst Pty. Ltd. has sustained a net reduction in greenhouse gas emissions for the key performance indicator KgCO₂ per metre of carpet produced. Below is a summary of the carbon dioxide abatement over the last three years reported in;

1. Carbon dioxide abatement Tonnes/ year
2. Kg of Carbon dioxide per metre of carpet
3. Percentage reduction

Year	Carbon dioxide abatement Tonnes/ year	Percentage abatement	Kg of Carbon dioxide per metre of carpet. KgCO₂/ Metre	Percentage reduction from previous year %
2001 - 2002	4704	13	11	N/A
2002 - 2003	1900	5.5	10	10
2003 - 2004	4700	12	8.34	17

Significant Production Changes

Godfrey Hirst has invested heavily over the last few years in improving the manufacturing process and related efficiencies, thereby lowering the net emissions per metre of carpet produced. Major works completed from 1995 through to 2005, which have helped contribute to these efficiencies, include:

Previously

- High-speed, energy efficient carpet laminator.
- Solid shade carpet dyeing line with energy efficient dye fixation.
- High-speed, energy efficient wet good carpet drying line.

Recently

- Energy efficient fibre dyeing line.
- New Boiler.
- High efficiency twisting machines.
- Several high-speed tufting machines.
- Improvements to the Kuster input including the QCC Quick Colour Change, to reduce wastage.
- Conversion of machinery and infrastructure from the use of carpet trucks to rolls.

In addition to machinery upgrades, there has been significant investment in process and management improvements such as:

- Citect SCADA implementation
- Forklift task management system

The implementation of the Citect SCADA process monitoring system has provided personnel with more information and control over processes, resulting in increased process efficiency and waste reduction. Quality initiatives, such as those required by ISO 9001 accreditation have reduced process variability and wastage through continuous improvement programs.

Waste reduction and recycling initiatives

Enhanced management and employee focus in the area of waste reduction has achieved a 40% reduction in waste to land fill, from 2002 to 2005. The program has also managed to generate approximately \$200,000 in profit through the sale of various waste products over the last two years.

This waste reduction program has been a significant contributor to the reduction of greenhouse gas emissions from 2003 to 2005.

Summary

Godfrey Hirst remains committed to reducing greenhouse gas emissions and will continue to seek opportunities for further reductions. The focus for Godfrey Hirst in the future is enhanced environmental performance through:

- Cleaner production processes.
- Continual decrease in water consumption.
- Increase water recycling initiatives.
- Reduction in total solid and liquid waste.
- Improvements in energy efficiency.