

August 2007

### IN THIS ISSUE:

- Welcome to the first edition of Carbon Matters
- Introducing the Carbon Innovators Network
- Pilkington signs Sustainability Covenant for manufacture of energy-efficient glass
- Carbon neutral consumer products
- » Business tools for carbon management
- Tips for purchasing carbon offsets
- Ecological Footprint Calculator identifies improvements for PACIA
- Carbon Alert

### Introducing the CARBON INNOVATORS NETWORK

An EPA Victoria initiative, the Carbon Innovators Network is a forum for organisations which want to address the strategic and practical issues of carbon emissions. The network aims to stimulate debate and innovation in carbon management, provide the support and tools organisations need to develop sound carbon management strategies, and transform climate change from a business cost to a business opportunity.

The 'Carbon Matters' newsletter updates members on Australian and international carbon management and climate change issues, useful resources and case studies on businesses that have taken up the carbon management challenge.

If you have stories to contribute that profile innovative actions in carbon management, we would love to hear them, please email us

carbon.innovators@epa.vic.gov.au

## WANT MORE INFORMATION?

More information on the Carbon

Innovators Network and how to join is available.

## YOUR PRIVACY

EPA Victoria respects your privacy. Read EPA's privacy statement.

address: [email]

This email was sent to you at this

## Unsubscribe if you have received this

UNSUBSCRIBE

email by error, or no longer wish to receive Carbon Matters.

### FORWARD TO A FRIEND Forward them this issue of Carbon

Matters.

## EXPERIENCING DIFFICULITIES

READING THIS EMAIL?

If you are experiencing technical

### difficulties reading this email, please contact carbonhelpdesk@epa.vic.gov.au

BEST VIEWING EXPERIENCE

Please add carbon.innovators@epa.vic.gov.au to

your approved senders list for best display results.

# CARBON MATTERS

### Welcome to the first edition of Carbon Matters

Climate change is one of the biggest issues facing our environment - one that will impact on many generations to come. There has been extensive debate about how we should respond to this challenge, and how this will affect our economy



both in the short and long term. How we manage and reduce carbon emissions is central to this debate.

EPA Victoria believes that there are great opportunities for those businesses which tackle this challenge early. We want to support businesses who appreciate the benefits of managing future risk associated with carbon, and those who understand that early action not only has better environmental outcomes, but will also place their business in a stronger position to take advantage of future economic conditions.

More...

### Pilkington signs Sustainability Covenant for manufacture of energy-efficient glass

Australia's largest glass manufacturer, Pilkington, has become the first manufacturer to sign a Sustainability Covenant with EPA Victoria, and will become the first company to produce energyefficient coated glass (EECG) in Australia.

Signatories to the Covenant (EPA Victoria, Pilkington Australia, The Australian Industry Group and Sustainability Victoria) will support Pilkington in increasing the resource efficiency of its products and services, and in achieving sustainable business growth.

More...

### Carbon neutral consumer products

A challenge for many manufacturers, is delivering the quality consumers expect of a product, whilst reducing the overall environmental impact of the product and its manufacturing process.

Making paint is just one example of this. Dulux has always been active in using technology to improve the environmental performance of their products, and most recently have created EnvirO2® - a premium interior paint range, that is low in solvent vapours, and through a certified carbon abatement scheme, is 100% carbon neutral.

More...

## Business tools for carbon management

When EPA Victoria decided in mid-2006 to go carbon neutral, it needed a set of principles that would guide strategic decision-making in relation to energy and greenhouse gas management.

Its draft Carbon Management Principles, designed to achieve continuous improvement in carbon management, have been circulated to Carbon Innovators Network members, and revised to incorporate member feedback.

More...

# Tips for purchasing carbon offsets

grows, a range of products is emerging to offset greenhouse gas emissions. EPA has used its experience in navigating this market to develop guidance for businesses purchasing carbon offsets. More...

As concern about the impact of climate change

# improvements for PACIA

**Ecological Footprint Calculator identifies** 

two biggest environmental impacts when the Plastics and Chemicals Industry Association (PACIA) used an online Ecological Footprint calculator to measure the environmental performance of its Melbourne office. More...

Electricity and domestic travel were identified as the

Carbon Alert

Carbon Alert is a round-up of resources, initiatives, events and publications from around the world.

Visit Carbon Alert for the following topics:

- New international publications
- New Australian resources
  - Australian carbon initiatives Global government initiatives







August 2007

#### IN THIS ISSUE:

- Welcome to the first edition of Carbon Matters
- Introducing the Carbon Innovators Network
- » <u>Pilkington signs</u> <u>Sustainability Covenant for</u> <u>manufacture of energy-</u> efficient glass
- » <u>Carbon neutral consumer</u> products
- » Business tools for carbon management
- Tips for purchasing carbon offsets
- Ecological Footprint
   <u>Calculator identifies</u>
   improvements for PACIA
- » Carbon Alert
- » Home

## **CARBON MATTERS**

#### Welcome to the first edition of Carbon Matters

Climate change is one of the biggest issues facing our environment - one that will impact on many generations to come. There has been extensive debate about how we should respond to this challenge, and how this will affect our economy both in the



short and long term. How we manage and reduce carbon emissions is central to this debate.

EPA Victoria believes that there are great opportunities for those businesses which tackle this challenge early. We want to support businesses who appreciate the benefits of managing future risk associated with carbon, and those who understand that early action not only has better environmental outcomes, but will also place their business in a stronger position to take advantage of future economic conditions.

In order to provide practical support to businesses interested in tackling climate change, we knew that EPA needed to experience the challenges of going carbon neutral ourselves. We approached it like any other business would have to, making cost-effective direct emissions reduction projects a priority. The process highlighted a need for a comprehensive decision-making framework. We therefore developed and applied the Carbon Management Principles profiled in this newsletter.

We have been transparent about our process and decisions in order to share what we have learnt with others. EPA established the Carbon Innovators

Network to help organisations deal with the challenges of carbon management. You may want to manage carbon emissions, plan a robust strategy for carbon neutrality if that is your goal, collate your inventory for reporting requirements, or develop low-carbon products and services. Whatever approach you choose, we hope the Carbon Innovators Network will help you develop strategies and actions that suit your business.

With emissions trading commitments forecast for the future, greenhouse emissions reporting will become an integral part of business practice. For business and industry with significant emissions it will be compulsory to report. State and Territory governments have agreed that if a new reporting system under Federal legislation is not in place by 1 July 2008, the National Pollutant Inventory (NPI) will expand to include greenhouse gases in the interim. Mandatory emissions reporting is a fundamental step in preparing for a future carbon market, and will help inform future State and Federal government policy in this area.

After working through the process of going carbon neutral ourselves, I know how challenging and complex the experience can be. There are rewards for businesses taking advantage of the opportunities now, and a strong economy requires a healthy environment. We don't have all the answers yet, but we're beginning to ask the right questions.

### Mick Bourke

Chairman EPA Victoria







Newsletter 1

August 2007

#### IN THIS ISSUE:

- Welcome to the first edition of Carbon Matters
- Introducing the Carbon Innovators Network
- » <u>Pilkington signs</u> <u>Sustainability Covenant for</u> <u>manufacture of energy-</u> <u>efficient glass</u>
- » Carbon neutral consumer products
- » <u>Business tools for carbon</u> management
- Tips for purchasing carbon offsets
- <u>Ecological Footprint</u>
  <u>Calculator identifies</u>
  improvements for PACIA
- » Carbon Alert

### **Introducing the Carbon Innovators Network**

An EPA Victoria initiative, the Carbon Innovators

Network is a forum for organisations which want to
address the strategic and practical issues of carbon
emissions. The network aims to stimulate debate and
innovation in carbon management, provide the support
and tools organisations need to develop sound carbon
management strategies, and transform climate change
from a business cost to a business opportunity.

The 'Carbon Matters' newsletter updates members on Australian and international carbon management and climate change issues, useful resources and case studies on businesses that have taken up the carbon management challenge.

If you have stories to contribute that profile innovative actions in carbon management, we would love to hear them, please email us at

carbon.innovators@epa.vic.gov.au

» Home







August 2007

#### IN THIS ISSUE:

- Welcome to the first edition of Carbon Matters
- » Introducing the Carbon Innovators Network
- Pilkington signs Sustainability Covenant for manufacture of energy-efficient glass
- Carbon neutral consumer products
- » <u>Business tools for carbon</u> management
- Tips for purchasing carbon offsets
- Ecological Footprint
   <u>Calculator identifies</u>
   improvements for PACIA
- » Carbon Alert
- » Home

## **CARBON MATTERS**

Pilkington signs Sustainability Covenant for manufacture of energy-efficient glass

Australia's largest glass manufacturer, Pilkington, has become the first manufacturer to sign a Sustainability Covenant with EPA Victoria, and will become the first company to produce energy-efficient coated glass (EECG) in Australia.

Signatories to the Covenant (EPA Victoria, Pilkington Australia, The Australian Industry Group and Sustainability Victoria) will support Pilkington in increasing the resource efficiency of its products and services, and in achieving sustainable business growth.

The Pilkington business case for sustainability will also be used as a model to inspire Victorian businesses to achieve sustainable growth by demonstrating the impressive economic, environmental and social benefits of this approach, and will include a baseline for measurement of success.

The announcement of a \$130 million upgrade of Pilkington's Dandenong plant will enable Australian production of new products including energy-saving glass for buildings, self-cleaning glass and glass for solar energy production.

By reducing heat loss in winter and heat absorption in summer, EECG can reduce energy use of heating and cooling by almost 40% in homes<sup>†</sup>.

Although more energy is used in the production of EECG, it is estimated that, over a typical 25 year lifetime, this glass will save up to 48 times the amount of energy taken to manufacture it\*. The upgrade will also make the plant more efficient in its use of energy and natural resources.

Pilkington Australia's President, Laurie Kruger, says the plant upgrade, which has attracted investment support from the Victorian Government, will transform Pilkington from a manufacturer of commodity products to a source of innovative value-added products.

"New glass products will also support future systems of renewable energy generation and other emerging high-tech environmental businesses in Victoria," Mr Kruger says.

"From an international trade perspective, this investment will allow Pilkington to better differentiate our products and enhance our ability to penetrate export markets."

Each signatory partner to the sustainability covenant will play a valuable role in spreading knowledge among key decision-makers about energy-efficient glass products.

More information on <u>Sustainability Covenants</u> and <u>Pilkington</u> is available from EPA's website.

- \* The life cycle assessment of energy-efficient glass was conducted by the Centre for Design at RMIT University as part of the Sustainability Covenant.
- † Energy savings based on Energy Partners Australia report "Evaluation of Energy Enhancements from Pilkington Glazing" July 2006.

Pilkington is a member of the Carbon Innovators Network.







August 2007

#### IN THIS ISSUE:

- Welcome to the first edition of Carbon Matters
- Introducing the Carbon Innovators Network
- » Pilkington signs Sustainability Covenant for manufacture of energyefficient glass
- Carbon neutral consumer products
- » <u>Business tools for carbon</u> <u>management</u>
- Tips for purchasing carbon offsets
- Ecological Footprint Calculator identifies improvements for PACIA
- » Carbon Alert
- » Home

## CARBON MATTERS

#### Carbon neutral consumer products

A challenge for many manufacturers, is delivering the quality consumers expect of a product, whilst reducing the overall environmental impact of the product and its manufacturing process.

Making paint is just one example of this. Dulux has always been active in using technology to improve the environmental performance of their products, and most recently have created EnvirO2® – a premium interior paint range, that is low in solvent vapours, and through a certified carbon abatement scheme, is 100% carbon neutral.

Additives classified as Volatile Organics Compounds (VOC) are included in paint to achieve good coverage, easy application and washability. However, these petroleum-based solvents evaporate from paint films while the paint is drying, resulting in unpleasant solvent fumes that may trigger respiratory reactions, and add to air pollution.

Dulux, a consumer product brand of Australian owned Orica, has developed a paint that is low in VOC, but still maintains outstanding performance. EnvirO2® not only reduces fumes, but it is washable (reducing need for frequent reapplication and thereby quantity used), available in a full range of colours, comes as a complete solution (preparation and top coat products), and through the 'Greenhouse Friendly™' scheme has been certified greenhouse neutral. Using the principles of lifecycle assessment, greenhouse gas emissions associated with production, use and disposal are fully offset by approved 'greenhouse friendly' abatement projects.

The company led the move from traditional oil based paints with approximately 50% solvent content, to water-borne paints - which have a solvent level of around 7% - and now Low-VOC paints like EnvirO2® - which have a solvent level of less than 5 grams per litre (<0.5%). This significantly reduces the quantity of VOC released into the atmosphere, and conforms with the low VOC content required by the Green Building Council for Green Stars ratings.

By thinking creatively about how they produce their core products, Dulux have taken positive action against climate change, without compromising the quality of the product they produce.

Orica is a member of the Carbon Innovators Network







#### Newsletter 1

August 2007

#### IN THIS ISSUE:

- Welcome to the first edition of Carbon Matters
- » Introducing the Carbon Innovators Network
- » <u>Pilkington signs</u> <u>Sustainability Covenant for</u> <u>manufacture of energy-</u> <u>efficient glass</u>
- » <u>Carbon neutral consumer</u> products
- Business tools for carbon management
- Tips for purchasing carbon offsets
- Ecological Footprint Calculator identifies improvements for PACIA
- » Carbon Alert

### **Business tools for carbon management**

When EPA Victoria decided in mid-2006 to go carbon neutral, it needed a set of principles that would guide strategic decision-making in relation to energy and greenhouse gas management.

Its draft Carbon Management Principles, designed to achieve continuous improvement in carbon management, have been revised to incorporate member feedback.

Stuart McConnell, Director, Science and Technology with EPA Victoria, says "The development of such a decision-making framework will help industry prepare for emerging carbon markets and other business opportunities."

The Carbon Management Principles provide a starting point for taking action on carbon, whether the goal is carbon emissions reduction, or carbon neutrality.

View the <u>Carbon Management Principles</u>, and please provide any <u>feedback</u> to EPA.

» Home







Newsletter 1

August 2007

#### IN THIS ISSUE:

- Welcome to the first edition of Carbon Matters
- Introducing the Carbon Innovators Network
- » <u>Pilkington signs</u> <u>Sustainability Covenant for</u> <u>manufacture of energy-</u> <u>efficient glass</u>
- » <u>Carbon neutral consumer</u> products
- » <u>Business tools for carbon</u> management
- Tips for purchasing carbon offsets
- Ecological Footprint
   <u>Calculator identifies</u>
   improvements for PACIA
- » Carbon Alert

» Home

### Tips for purchasing carbon offsets

As concern about the impact of climate change grows, a range of products is emerging to offset greenhouse gas emissions. EPA has used its experience in navigating this market to develop guidance for businesses purchasing carbon offsets.

The carbon offsets section of EPA's website answers 'frequently asked questions', links to other important resources on offsets - such as offset standards - and suggests issues to consider when investigating individual offset products.

Ideas discussed include: why offsets have become such a hot commodity; where they fit within a carbon management strategy; and the difference between regulatory and voluntary carbon offset markets. As the field of carbon offsets is constantly evolving, EPA welcomes feedback to assist in keeping the information accurate, up to date and relevant for businesses wishing to purchase offsets. So if you are planing a carbon neutral strategy, or simply interested in how offsets work, visit the <u>carbon offsets</u> section of EPA's website.







#### Newsletter 1

August 2007

#### IN THIS ISSUE:

- Welcome to the first edition of Carbon Matters
- » Introducing the Carbon Innovators Network
- » <u>Pilkington signs</u> <u>Sustainability Covenant for</u> <u>manufacture of energy-</u> efficient glass
- » <u>Carbon neutral consumer</u> products
- » Business tools for carbon management
- Tips for purchasing carbon offsets
- Ecological Footprint Calculator identifies improvements for PACIA
- » Carbon Alert
- » Home

### Ecological Footprint Calculator identifies improvements for PACIA

Electricity and domestic travel were identified as the two biggest environmental impacts when the Plastics and Chemicals Industry Association (PACIA) used an online Ecological Footprint calculator to measure the environmental performance of its Melbourne office.

#### PACIA found that:

- Electricity was the largest contributor (43 per cent) to the office Ecological Footprint.
- Domestic travel (primarily air) was the second largest contributor (26 per cent).
- Building life and paper each contributed about 6 per cent to the Ecological Footprint.

As a result, the organisation now purchases 100 per cent green power, strives to maintain a minimum level of interstate travel through extensive use of teleconferencing, and incorporates energy efficient criteria into office purchasing decisions. To encourage sustainable transport choices, staff have the option to salary sacrifice yearly public transport tickets.

The intent of the Calculator is to establish a baseline from which improvements can be measured, with annual changes being more important than the absolute number. The Ecological Footprint is also an excellent vehicle for communicating the environmental impact and performance of an office to staff.

Visit <u>Ecological Footprint</u> to find out more, or to calculate your personal, home, office or events footprint.

PACIA is a member of the Carbon Innovators Network.







#### Newsletter 1

August 2007

#### IN THIS ISSUE:

- Welcome to the first edition of Carbon Matters
- Introducing the Carbon Innovators Network
- » <u>Pilkington signs</u> <u>Sustainability Covenant for</u> <u>manufacture of energy-</u> <u>efficient glass</u>
- Carbon neutral consumer products
- » <u>Business tools for carbon</u> management
- Tips for purchasing carbon offsets
- Ecological Footprint Calculator identifies improvements for PACIA
- » Carbon Alert

#### Carbon Alert

Carbon Alert is a round-up of resources, initiatives, events and publications from around the world.

Visit Carbon Alert for the following topics:

- · New international publications
- New Australian resources
- Australian carbon initiatives
- · Global government initiatives

» Home



