carbon innovators network

CARBON MATTERS

Newsletter 2 April 2008

IN THIS ISSUE:

Update on the CARBON INNOVATORS NETWORK

It has been an exciting first year for the Carbon Innovators Network. Kicking off with the Carbon Innovators Network Roundtable in May 2007, the network has run a series of engaging events aimed at helping organisations strategically and practically address their carbon emissions. There has been some very stimulating debate, great examples of innovation in carbon management, and many valuable networking opportunities.

Our events have included; carbon inventory workshop's, sessions on the practicalities of establishing an organisation wide greenhouse gas inventory, greenhouse gas management considerations in the transport and logistics sectors, and a discussion on the implications of the UNFCCC Conference in Bali December 2007.

Our membership has climbed to over three hundred, and we welcome all new members. We are planning many more exciting events and will continue to provide and update the support and tools businesses need to develop sound carbon management strategies. It is our goal to help you transform climate change from a business cost to a business opportunity.

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

What do we learn from Bali?

It seems that not a month goes by without another conference, meeting or process relating to climate change. Within this context the UN Framework Convention on Climate Change Conference in Bali last December was much awaited. It came at the end of a year when climate change had risen to the top of the political agenda in Australia; the Intergovernmental Panel on Climate Change had released its fourth assessment report and a certain former Vice President had become the first person to win a Nobel prize and an Oscar in the same year. Expectations were high - so now the dust has settled - what do we learn from Bali?

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Neil Maynard, Sales Manager for Mystique Printing, says the company first discussed an environmental strategy about five years ago, knowing it was "the right step for the future" and believing it could create a clear point of difference with existing and potential clients.

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International wine industry launches Carbon footprint calculation tool

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"The protocol document sets out emission sources to be included in carbon footprint calculations, and required international agreement to ensure that all wine companies used the same inclusions and exclusions," according to Amy Russell, National Resource Management Coordinator with the WFA.

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Melbourne's new 'green' convention centre attracts growing international interest

The 6 Star Green Star environmental rating recently awarded to Melbourne's new Convention Centre is a world first for the convention sector, and is already attracting growing levels of interest from national and international buyers in the meetings and events industry.

The rating was awarded by the Green Building Council of Australia for the innovative environmental design and operational features of the Convention Centre, which will open next year.

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Bali achieved all it possibly could

As the science of the human induced climate problem becomes ever clearer, it is easy to feel frustrated by the lack of political breakthrough. Just when the need for urgency is clear, the global political and policy response seems to lag. However, when you realise the world hasn't faced a problem like this before - a complex issue with no boundaries, and potentially significant impacts on all countries - it is easier to understand why it takes so long for all involved to agree.

Ratification of Kyoto can no longer be seen as a badge of honour in international climate diplomacy

Serious constraints to reaching agreement on a post 2012 global climate treaty still remain. The United States was joined at Bali in their resistance to legally binding emissions targets by two major developed economies that have ratified Kyoto: Japan and Canada. Among the many reasons for this, Japan already have a comparatively energy efficient economy and fear how binding targets might affect their position in relation to other Asian economies. While Canada have an emissions intensive economy, a government now less progressive on climate change, and are far from achieving their emissions target under the Kyoto Protocol.

Bali did result in some positive and substantive agreement

There were positive developments on the elements of an effective post 2012 treaty. These elements will now be developed through the UN process to:

- include agreement on the need to transfer new low emissions energy supply-and-demand technologies to developing economies
- establish a process to include avoided deforestation as part of a future global climate treaty
- and reach agreement that new investments in adaptation to the effects of climate change would be established.

Business engagement and leadership remains vital

Many of the constraints to progress at a diplomatic level are to do with the relationship between the developing and the developed world. One side considers it unreasonable for the developed world to demand emissions reduction from countries seeking to grow and alleviate poverty. Alternatively, the other side views exponential energy and emissions growth in developing countries as unbalanced, when developed countries are being asked to constrain.

Many major businesses operate in this setting, and have influence in both the developed and developing world. Businesses not only stand to be effected by the direct impacts of climate change, but the lack of policy clarity means that investment decisions cannot be guided by clear, legally based rules and direction. A powerful means of overcoming this is ensuring they understand both the risks associated with inaction and the opportunities presented by greater policy clarity. Business needs to articulate the benefits of clear policy, and can be part of framing what those policies are.

Looking to the future

The focus will now shift to the Copenhagen UN meeting in December 2009. This two year process will spur countries and negotiators to agree on the parameters of the post 2012 global climate treaty. The meeting will also occur after a likely change in perspective from the world's largest economy. The new United States administration takes office in January 2009, and Clinton, Obama or McCain would all have significantly different perspectives on climate change than President Bush. A shift in position by the world's largest emitter will be a powerful factor in increasing the likelihood of agreement from other nations.

In conclusion Bali was no giant leap, not the breakthrough many were hoping for, but a positive step forward that has laid the foundations for a new, more effective international climate treaty to be agreed in 2009 that can come into force in 2012. As little as two years ago many believed that international climate diplomacy might peter out in disarray. This is now very unlikely. Two years isn't a long time to get agreement on a new global climate treaty, however considering the recent dramatic increase in domestic and international recognition of the severity of the issue, there is now a strong likelihood it can be achieved.

Nick Rowley attended the UN meeting in Bali and is a Director of Kinesis, a Sydney based firm working with business and government on climate change and sustainability. He is also Strategic Director of the Copenhagen Climate Council, a group chaired by former Australian of the Year Professor Tim Flannery. Kinesis is working with the Victorian EPA to assist the work of the Carbon Innovators Network.

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"At this point E-Crete™ is really in the proving ground," Mr Brice says. "We have a lot of regulatory barriers to overcome, and we're entering a market that's heavily competitive. At this stage there are certain applications where E-Crete™ is more effective than others, for example, its high acid resistance makes it appropriate for chemicals handling, and its high fire resistance for heavy industry where there's a lot of heat."

According to the World Business Council for Sustainable Development, "concrete is the most widely used material on earth apart from water". Demand is likely double in the next decade, particularly as developing nations step up infrastructure projects.

The manufacture of concrete is responsible for between five and eight per cent of global greenhouse gas emissions, created both from the high temperatures required to calcinate the limestone in cement and from the calcination chemical reactions. For every kilogram of cement produced, about 0.9 kilogram of CO2 is generated.

In E-Crete™, geopolymers are formed at room temperature by using industrial waste to form a solid binder that has a similar appearance and performance to conventional cement.

The waste materials used by Zeobond are fly ash and bottom ash from power stations, blast furnace slag from iron-making plants and concrete waste. Aluminates and silicates are extracted from the waste, and alkali, gravel and sand added to make geopolymer concrete.

While the activators in geopolymers do produce some CO2, the absence of high-temperature calcination reduces overall CO2 production by 80 per cent, according to independent tests of E-Crete™.

E-Crete™ was developed by Zeobond's CEO and founder, Jannie van Deventer, a former Dean of Engineering at Melbourne University. It is price competitive with conventional concrete.

For more information visit www.zeobond.com

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Neil Maynard, Sales Manager for Mystique Printing, says the company first discussed an environmental strategy about five years ago, knowing it was "the right step for the future" and believing it could create a clear point of difference with existing and potential clients.

Already a certified Forestry Stewardship Council supplier, Mystique joined the Greenhouse Challenge Plus program and initially established a framework for improving the company's environmental position. This then encouraged Mystique to become completely carbon neutral.

The company is now so committed to its environmental policies that it will shortly achieve its target of ISO 14002 environmental management standards.

Mr Maynard says the biggest challenges in achieving carbon neutrality were in changing internal processes, chemicals and general procedures that were long embedded in the plant.

"There was a significant amount of testing done, and we invested a lot of time, money and research to get to a peak position where we could be audited," he says.

Key costs have been the appointment of a full time environmental manager to control policies internally, the installation of water tanks, the chemical recycling plant, the cost of soy-based inks and chemistry and the down-time on printing presses as new processes and chemistry were tested.

Although confident that Mystique is achieving a return on investment in terms of business growth, Mr Maynard says it's hard to put a precise figure on it.

"Enquiries are coming through on a regular basis, and the common point discussed on each occasion is the environmental impact of various projects.

"There is no doubt that the Mystique story is a much more powerful one because of our environmental credentials. It's a subject of interest to all customers who are now concerned about utilising the most environmentally friendly print processes in the industry today."

For more information visit
www.mystique.com.au/environment.php

[1] *Offset printing is a commonly used technique where the inked image is transferred from metal plates to rubber rollers, then to the printing surface.*

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"It also lists data sources and standards used in developing the tool, and provides sufficient detail for its methodology to be independently peer reviewed by groups such as the World Resources Institute, which administers the International Greenhouse Gas Protocol."

The Excel-based calculation tool, which was refined after trials by four Australian wine companies in January, allows companies to immediately identify the carbon footprint of their operations. By next year the tool will be developed into a more sophisticated online version, which will be suitable for independent verification.

Ms Russell says the major challenges in developing the protocol included the differing regulations and voluntary reporting schemes in different countries, and the issue of which emissions should be included.

"For example, we looked very closely at the British Standards Institution draft PAS 2050 for calculating embodied GHG emissions before deciding to take an industry stance against including in-use phase emissions.

"These are the emissions caused by the use of the product, such as emissions arising from producing detergent that is used to wash wine glasses in the hospitality industry."

Any emissions that constitute more than one per cent of the mass of the finished product, or account for more than one per cent of the total greenhouse gas emissions, have been included.

Ms Russell says that climate change is a growing issue in the international wine marketplace, particularly in the UK, with many retailers citing environmental responsibility as a major factor in choosing new suppliers.

"Although debate continues as to whether or not consumers understand and respond to environmental labels, some retailers already use them to edit the range of products offered to consumers," she says.

The Greenhouse Gas Accounting Protocol and Calculator is now available free to all wine industry members through the Winemakers' Federation of Australia (WFA) website at www.wfa.org.au/environment.htm. It was developed by wine industry consulting firm Provisor in partnership with the Yalumba Wine Company.

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