

## LIGARE COMMITS TO SUSTAINABILITY ADVANTAGE PROGRAM

Sustainability Advantage is a business support service from the Department of Environment and Climate Change NSW (DECC). It is designed to help organisations successfully manage for a better environment and add business value.

The 18 month commitment by Ligare is another step towards improving innovation and productivity, lowering costs, and building a plan for environmental action. There are seven modules in the program:

- Vision Commitment and Strategic Planning
- Risk Compliance and Risk Management
- Resource Efficiency – reduction in energy, water and waste
- Supply Chain – working with suppliers and customers
- Staff and External Stakeholder Engagement
- Climate Change – GHG inventory (Greenhouse Gas), adaptation and mitigation

DECC provide business specialists, experts in environmental management who will work with Ligare with practical support, technical assistance and training. Ligare has already taken significant steps towards sustainability vision and action over the past six-eighteen months; this program will help solidify and improve upon actions already taken and provide us with a road map for further action.

CEO Cliff Brigstocke says: “With the kind of diagnostic tools and expertise provided by the DECC Ligare will have the ability move to the next level in our commitment to sustainability action. We are all looking forward to working with the DECC over the next 18 months, and we will report on the steps we are taking through this newsletter.”

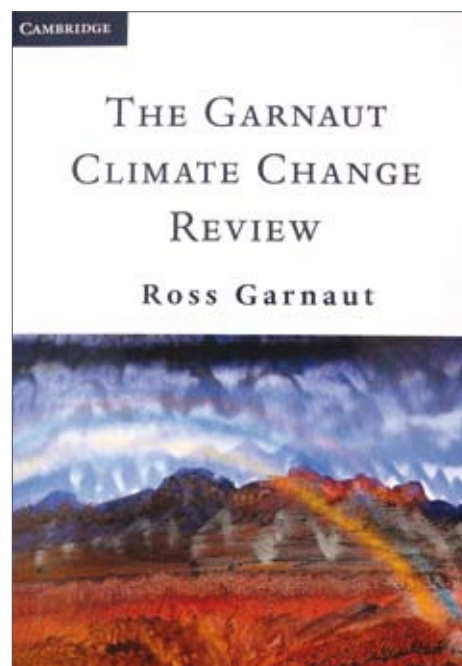
## SUSTAINABILITY NEWS IN BRIEF

### SUSTAINABILITY SEMINARS

Sustainability Manager, Karen Morrison, has given a series of seminars on sustainability in printing and paper to some of Ligare’s customers over the past few months both at Ligare’s premises and within publishers’ offices. These short seminars have been well received and will continue from February 2009, along with the Book Production Workshops conducted in house at Ligare by David Edwards. Please contact Karen for inquiries about either the Sustainability Seminars or the Book Production Workshops. [karenm@ligare.com.au](mailto:karenm@ligare.com.au)

### GARNAUT REPORT PRINTED ON ENVI

*The Garnaut Climate Change Review* published by Cambridge University Press was printed at Ligare on Envi Silk Art Paper. Envi is a recent range of papers available from Dalton and is Australia’s first carbon-neutral paper. Accredited through the Australian Government’s Department of Climate Change Envi has its greenhouse gas emissions calculated and offset with carbon credits. A rigorous Life Cycle Analysis (LCA) was conducted on Impress art paper and then significant changes were undertaken to reduce energy usage such as the move from oil to gas fired boilers. Then the offsets were purchased against the paper’s production for the residual energy use. This process will be audited annually. Envi is available in many different paper types all made in Australia.



## PAPER REPORT

### AUSTRALIAN PAPER – VISITING A PAPER MILL

As a key partner supplier to Ligare, PaperlinX's sustainability message and program are very important to us and our customers. A significant percentage of our offset web and sheet press paper is sourced from Australian Paper (AP) as well as our digital text paper. We thought it might be useful for our readers to share our findings about AP as I viewed for myself their largest mill.

AP is Australia's principal manufacturer of publication paper and is a subsidiary of PaperlinX which also owns Spicers and Dalton. There are four mills in the group, one in NSW, two in Tasmania and one in Victoria. All mills have both ISO14001 and ISO9001 certifications. Last month I visited the Maryvale Mill in Victoria's Gippsland region which has been operating since 1939.

Maryvale is the largest mill producing papers such as Reflex, and packaging paper which contains recycled fibre. Some facts about the Maryvale mill:

- └ 907 employees
- └ 3 pulp mills
- └ 5 paper making machines – the largest machine "No5" makes Reflex at the astonishing rate of 900 metres per minute.
- └ A waste paper processing plant
- └ Wastewater treatment ponds
- └ Covers 440 hectares
- └ Operates 24 hours a day, 7 days a week
- └ Produces around 500,000 tonnes of paper per year which includes 160,000 tonnes per year of copy paper, such as Reflex
- └ Major upgrade began in 2003 with an investment of \$310m and is about to be completed
- └ FSC certification

### WATER

As well as complying with the environmental regulations with continual monitoring of its environmental impact, AP also minimises bleaching agents that contain chlorine with the discharge of chlorine being now almost negligible. The vast water treatment ponds are habitats for over 40 native bird species. Paper making uses vast amounts of water; water is recycled five times within the process before being discharged into the ponds. Once the quality of the water in the ponds reaches EPA standards, in a 28 day treatment cycle through the ponds, it is then discharged back into the La Trobe River. Only 7% of the water taken from the catchment is retained in paper, 6% is lost as steam, 67% goes back into the river and the rest is sent to the local water authority treatment plant. The next initiative Maryvale will undertake is the use of recycled industrial and household waste water supplied by the Gippsland Water Factory.

### FIBRE

All wood fibre (eucalypt and pine) used at Maryvale pulp mill is sourced from sustainably managed forests and plantations. Apart from the FSC and PEFC wood and pulp supplied AP seeks evidence from suppliers that these sources are managed for long-term sustainability and that none of the fibre is sourced from old-growth forests. This is supplemented by recycled waste paper; this

process diverted 60,000 tonnes of waste fibre away from landfill in 2006/07. After the pulp mill upgrade is complete, Maryvale will be self-sufficient for all short fibre requirements and will only import bleach long fibre which is less than 5% of the total fibre needs. Maryvale will also supply most of the short fibre requirements for the Burnie Mill. Maryvale maximises its energy self sufficiency by using the refuse from the pulping process as a fuel for recover boilers. This produces all of the steam requirements and approximately 50% of the mill's electricity requirements.

### ENERGY

The commitment to reducing greenhouse gas (GHG) emissions has been on the agenda since the planned upgrade began in 2003. Reducing a reliance on fossil fuels and increasing use of wind power, hydro-power and power recovery from manufacturing processes are some aspects of this initiative. For example the Wesley Vale mill (where Impress coated papers are manufactured) reduced its GHG emissions by 22% in 2007 with the completion of the new gas-fired boiler replacing the oil-fired boiler. In total across the four mills purchased electricity is now down to 30% of its energy consumption. In total GHG emissions were reduced by 11% in 2007 by the PaperlinX group in Australia.

### SOCIAL RESPONSIBILITY

Both the Maryvale and the Shoalhaven paper mills have FSC certification and the Wesley Vale and Burnie mills have PEFC certification. The cash cow of AP is Reflex which now comes in 100% recycled grades along with FSC certification. Employing over 1,400 people at the mills and in the head office in Melbourne, plus a large component of contractors used by all the mills in areas such as engineering and maintenance, AP are large employers in their respective regional centres and take this responsibility as central to its existence. Stringent OH&S programs along with mentorship and leadership programs are conducted within each mill; AP is also an active contributor to the sustainability of the communities in which they operate.

The impact of my visit to the mill will stay with me for a long time. The vastness, the stringency and the commitment of its people to the highest standards to reducing environmental impacts were the key ingredients which impressed me personally. The openness with which information was shared was exemplified in this statement by one of Maryvale's employees: "We don't have it perfect yet, but we're committed to getting as close to perfection as possible over time." This sentiment echoes Ligare's sustainability message. As long as everyone along the manufacturing supply chain is committed to the best sustainable outcomes for the production of your books then the culture of innovation which this attitude fosters will guide this purpose.

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## SUSTAINABILITY OF THE PAPER INDUSTRY

For those readers interested in the full independent study of the pulp and paper industries prepared for the World Business Council for Sustainable Development by the International Institute for Environment and Development, titled *A Changing Future for Paper* you can download it from [www.wbcasd.org](http://www.wbcasd.org)

This study was delivered in 1996 to give a balanced analysis of the paper cycle from the perspective of sustainable development. It was intended to create a focal point for further debate and consultation at global and local levels. Some interesting findings contained in the study are:

- There are advantages and disadvantages in using non-wood fibres for paper production: it can support smaller mills which can be important for rural livelihoods; but production is more expensive and more polluting than for wood-based fibre.
- Alternative inks (such as those based on water and/or those that use vegetable oils) tend to be harder to remove and make the de-inking process more difficult and/or costly. However, their use cuts Volatile Organic Compounds (VOC) emissions during printing.
- It is impractical to suggest that enough trees could be planted to remove all the CO<sub>2</sub> currently emitted into the atmosphere. We would have to double the current forests and plantations to balance current emissions.
- Paper can only be recycled up to 5 times before the fibres breakdown. All efforts should be employed to divert paper away from landfill and be manufactured into something else, including paper. Efforts towards finding uses such as fertiliser for waste paper have value, but there will always be a need for virgin fibres in the life cycle of paper.

The study called for changes such as increased recycled content, elimination of chlorine and an increase independent forest certification. The paper industry in developed countries, and in some developing countries, has taken up these challenges and to some degree is meeting these calls to change.

Karen Morrison, December 2008



*Finished reel of copy paper from the No5 machine*



*Water treatment ponds before release into the La Trobe River*



*Entrance to the Maryvale mill*

*Opening of the new Ligare  
Digital Print Facility –  
L-R Daryl Melham MP, Richard  
Celarc, Cliff Brigstocke*



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## LIGARE DIGITAL PRINT FACILITY (LDPF) THE SUSTAINABLE CHOICE

Daryl Melham MP (Banks) officially opened the LDPF Wednesday 19<sup>th</sup> November attended by guests and all Ligare staff. Daryl, who emphasised his commitment to SME (Small and Medium Enterprise) development and support in Australia, commented further on the sustained employment opportunities organisations such as Ligare offer. The good news story of Ligare's growth in times of economic uncertainty is supported by this new Facility and the efficiencies it offers.

CEO Cliff Brigstocke outlined the scope of the investment which means that Ligare is now able to offer an unparalleled range of printing and binding solutions with an improved turn around time for our customers.

### **SUSTAINABILITY AND LDPF**

LDPF can sustain the life of publications – keeping them in print longer.

LDPF can be a sustainably economic solution to wasted warehouse space full of overly long print runs.

LDPF can sustain our client's relationships with their niche markets by offering sustainable run lengths in short time frames.

LDPF can be the most environmentally sustainable digital printing solution because we have partnered with Océ who have an environmental sustainability focus for their printers such as reduced energy needs and end-of-life projections.

LDPF can offer sustainable paper options including PEFC or FSC certified papers.

### **THE MACHINES**

Ligare has partnered with Océ to fit out the facility with an Océ VarioStream 7450 web printer, a Océ VarioPrint 6250 sheet printer (with more to come) and an additional Océ 620 colour printer. These new machines will support the existing Océ CS900 colour printer and confirm Ligare's status as one of the leading Australian Book Printers. To improve turnaround time and offer a more sustainable binding solution, Ligare has also invested in a new Horizon BQ-270 – a heavy duty, fully automated short run perfect binding machine. The Horizon is a more environmentally responsible way to perfect bind short runs (under 500) as there is very little 'make ready' wastage taking place.

Ligare's Sitma mailing machine is also located within the same facility. The Sitma mailing machine completes the offering by providing an individualised mailing service to Ligare's customers. "Our enhanced capability means our customers' digitally printed products can go straight to either the square back saddle stitcher that sits at the end of the Océ VarioPrint 6250, or to the Horizon perfect binder. They can then be sent directly to Australia Post or the required delivery point in record time," Brigstocke said.

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*Merry Christmas  
and a  
Happy New Year*

*from everyone  
at Ligare.*

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We are open for business right through the holiday period except for Christmas Day, Boxing Day and New Years Day.