Sustainability in the print industry

PrintCity recently published a report on Sustainability, Energy & the Environment, which is available free from the PrintCity website (www.printcity.de). We urge anyone with an interest in print to download it and read it. We also urge readers not to lose hope part way through because although this 24-page report requires some doggedness on the part of the reader, the effort's worth it.

It is often hard for marketing driven organisations to tread a path between explaining the whys and wherefores of something and brazen self-promotion. Unfortunately most companies tend to step on the wrong side of that path, however, PrintCity's report goes almost to the other extreme. There is no positioning statement for the organisation, nor any explanation of why PrintCity has gone to the trouble of producing the report, or what it means for the printing industry. The authors are various chemists and scientists drawn from PrintCity member companies, under the able editorship of Nigel Wells of PrintCity's Webline. Sadly they haven't explained why Print City has invested into producing the report, nor what printers and print buyers, can expect to get out of it. This is a great pity.

This article is part of the Verdigris series of stories about understanding the environmental impact of print. The Verdigris project is supported by Agfa Graphics, Canon Europe, Digital Dots, drupa, Fujifilm, HP, Ricoh and Screen.

PrintCity's Sustainability, Energy & the Environment Report is a solid piece of work, painstakingly detailed, thorough and non-partisan, apart from the use of technology examples from the PrintCity member companies. The report makes some interesting if somewhat ambitious assumptions. The first is that printers and print buyers do indeed want to understand the intricacies of climate change and the surrounding regulation; in our experience, they mostly don't. The second assumption is that printers have the time and inclination to read the various UN, EU and consulting reports that have been published towards the betterment of all of us. Sadly, most people are unaware of the work that's been done, even if they are more than aware of the need for it.

But this brings us to this report's great strength, a strength that vastly outweighs the minor flaws of erudition. Overall this is an excellent piece of work, thoroughly researched and well-presented, and one of the best publications of its kind we have read. The report explains the background to present regulatory constraints and the requirements for sustainable development in the printing industry. It has a battery of statistics and references that defy the reader to even think of questioning its authority.

FAQs

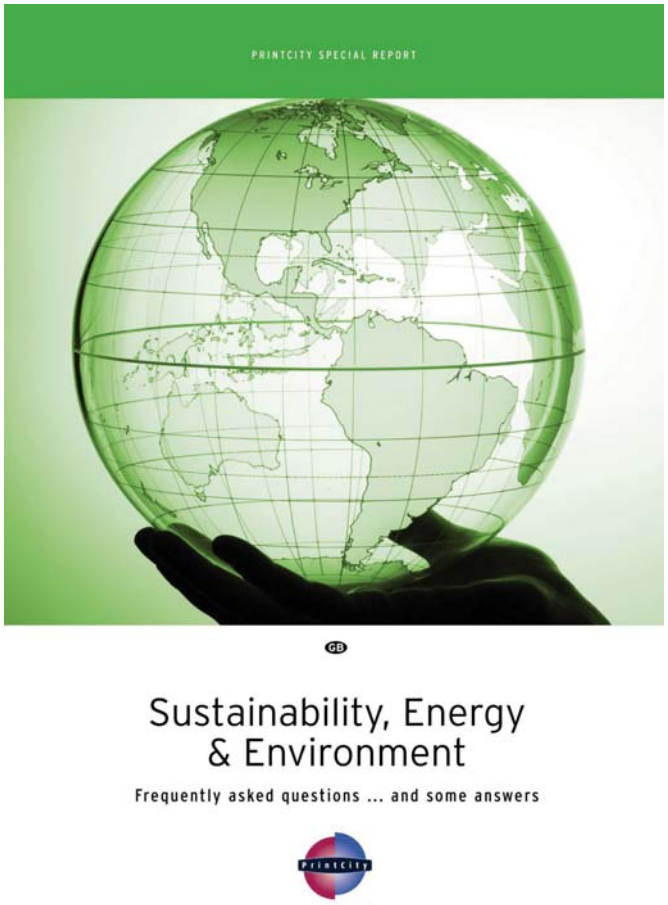
Following its introduction, the report presents sustainability FAQs, a series of quick answers, plus references to where in the report more detailed information can be found. This is a convenient way to present lots of tricky topics quickly and likely to be the most often referenced part of the report. It meets the needs of impatient readers as well as those of the detail junkies.

The report includes a comprehensive description of print's ecosystem, with an evaluation of where improvements to economic and environmental performance are to be had in the supply chain. According to PrintCity's report, waste audits are the starting point for any serious moves towards greater business efficiency. The report explains the four Rs of resource management: redesign, reduce, reuse and recycle, with detailed explanations of why each is important and how they can be collectively implemented towards greater sustainability.

The S Word

The report quotes the World Commission on Environment & Development's 1987 definition of sustainability: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This definition was the basis of the UN's Rio Declaration on Environment and Development in 1992 recognising

that sustainable development balances environmental protection, economic growth and social development. This section gets a bit too detailed for most printers and print buyers, but it's worth plodding through because



PrintCity's Sustainability, Energy and Environment report can be downloaded from the PrintCity website.

it's actually very interesting, with explanations of how paper recycling, forest management, developments in ink and other areas all add up to a more sustainable printing industry. Putting the print and paper industries into context using the Rio Declaration paradigm for sustainability is ambitious for a 24-page report, however, plough through it and you'll learn a lot more than you expected to.

GHGs and Carbon Feet

Complexity is unavoidable when explaining and discussing greenhouse gases (GHGs) and carbon footprinting. For us, a carbon footprint is a measure of the sum of all greenhouse gas emissions an entity generates. The calculation includes electricity used to produce and support the entity, plus direct and indirect emissions. Calculating a carbon footprint isn't simply a matter of checking the electricity bills. Ideally you should calculate two different carbon footprints for your business: one for the premises and one for the transportation it uses. And you should include a full Life Cycle Analysis as you do these calculations to include all contributing technologies and entities.

Franglais

The report has a comprehensive explanation of the two European approaches to carbon measurement. The detail here is fascinating and required reading for anyone who wants to come up with their own carbon calculator. The two approaches are the French Bilan Carbone method and the British. The French method accounts for emissions at a particular site, related transport and all raw materials involved. The British Carbon Trust method measures a given product's carbon emissions from energy used in its manufacture and related transportation. There is also a decent explanation within this section of how carbon offsetting works.

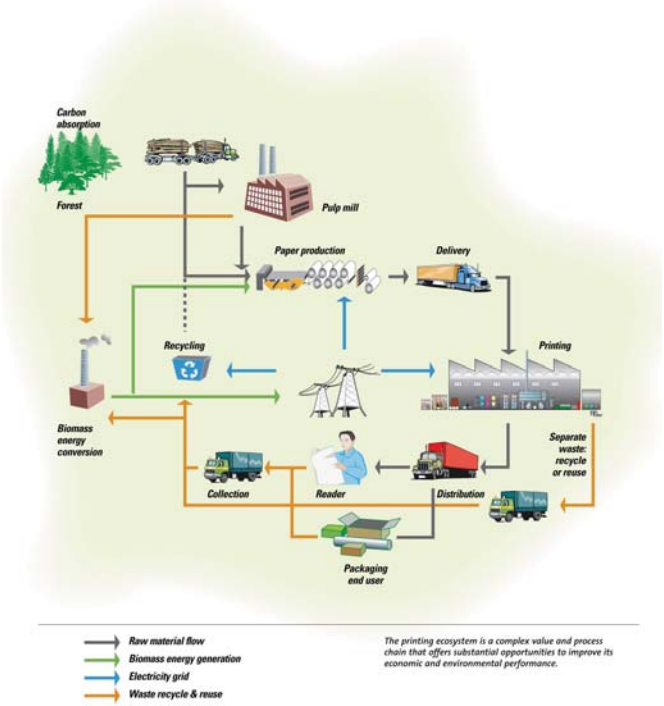
Besides the science, PrintCity's report contains a great deal of useful pragmatism. There is a chapter for example on how printing companies can improve their energy efficiency, based on measuring and monitoring energy usage in buildings and services, transport and production equipment. The report recommends designing an energy strategy and allocating responsibility for implementing and monitoring it. Investing in modern technologies is

The Verdigris Project website is being built and will be live in November!

one of the best ways to keep on top of energy abuse. For example, modern presses are between 25 and 50% more energy efficient than presses older than ten years, and processless printing plates can save 30% of the energy otherwise required for processing plates.

Much as artists and humanists would prefer to ignore it, science and the environment are hand in glove. Science has to be unrelenting for sustainability and it is unrelenting in this report. For example, ozone and Volatile Organic Compounds are not well understood though they are coming to the top of many people's agenda, especially

in the sign and display graphics markets. There's a lot of mythologising about the risks and dangers of both, but not a lot of real understanding around. What exactly is ozone and why are VOCs bad for us? The explanation in this report is clear(-ish) and thorough (very) if a little heavy on the chemistry for many readers. Chemistry is, however, what most green issues come down to, so perhaps it's not such a bad thing to include so much of it is this report.



PrintCity has analysed the printing ecosystem for ways to improve its environmental performance.

Kyoto

The 1997 Kyoto Protocol, and how we as an industry are doing relative to it, also gets a good airing in this report, but perhaps the most important part of it is the last part. It is here that our options for making a positive difference are covered. The friendly 'How Can I Make A Difference' chapter comes as quite a relief after all the science. It includes straightforward suggestions, not for action, but of issues to consider for publishers, print buyers and designers. There are also recommendations for how to evaluate key environmental factors such as waste and recycling rates.

Overall this work is well worth the effort required to read it. It is a balanced and sober evaluation of our industry in the context of green awareness, and as such it's an excellent starting point for getting us all to do better.

– Laurel Brunner