Carbon Conundrums

PrintCity, the nebulous alliance of industry suppliers offering advice to the industry, has published another of its cross industry special reports. This one is called "Carbon Footprinting & Energy Reduction" and we were flattered to have had the chance to peer review it. We also provided reference material for the authors through the Verdigris project, some of which is included in the report.

This latest PrintCity report is long on text, charts and tables, but it is definitely not for the fainthearted. It takes the reader very quickly deep into the weeds of climate change and emissions, covering everything from politics and standards and specifications, through to a smattering of case studies. The report has a mass of information with numerous useful summaries throughout the text, which offer a sort of safe haven when it all gets too much. The initial conclusions on page 5, the definitions (mostly), and the inclusion of many charts and tables, all help to make it easier to get through this otherwise very dense and turgid subject matter.

This is in essence a collection of material from diverse sources gathered together into a single reference volume, so there are lots of facts and a few random opinions. If you are willing to battle your way through the mass of details, you will gain a good understanding of where the printing industry fits in the endlessly shifting and complex environmental and footprinting matrix. As such, it is more of a reference work than something one might read from start to finish.

What Got Left Behind

Annoyingly, PrintCity's report has a few omissions, some of which are serious and some of which are not. We have to declare an interest here, because despite timely input from us, the report does not include any description of ISO 16759, the international standard on carbon footprinting with which we have been closely involved. This is very disappointing and we feel it does a bit of

a disservice to the reader, because it is a standard that many print buyers are asking for.

PrintCity has thoroughly described the sterling efforts of organisations such as Intergraf, CEPI and WAN-Ifra to develop carbon footprinting tools. But to completely omit the work of ISO TC130 (Graphics Technology) in general and TC130's Working Group 11 (the environmental impact of print) in particular, is a great shame. So, before we go any further, we've rectified this with a brief description of ISO 16759.

Calculating the Carbon Footprint of Print Media

Working Group 11 is authoring ISO 16759, which outlines and explains the requirements for calculating the carbon footprint of print media products, rather than

organisations. The idea is to provide printers, print buyers, industry associations and anyone else who is interested with a framework methodology for carbon calculating tools. The goal with ISO 16759 is to provide a standard that unifies all of the efforts underway worldwide to create carbon footprinting tools. The idea is that these tools are transparent for print buyers, printers and consumers and that their results can be compared like for like.

This standard marks an extremely important step in creating a basis for comparing the carbon footprint of print media with that of electronic media delivered to e-readers such as the iPad or mobile phones. It is also an important step for the industry, since it positions print at the forefront of industry sectors developing carbon footprinting standards. This is a key message for printers struggling to reinvent themselves in the new digital world.

All together

As one would expect there are masses of statistics and historical references, some of which are more interesting than others. But, most important of all, this publication recognises the fact that "only coordinated international action can resolve [climate change]". It is indeed vital that everyone who cares about the future of the planet and of
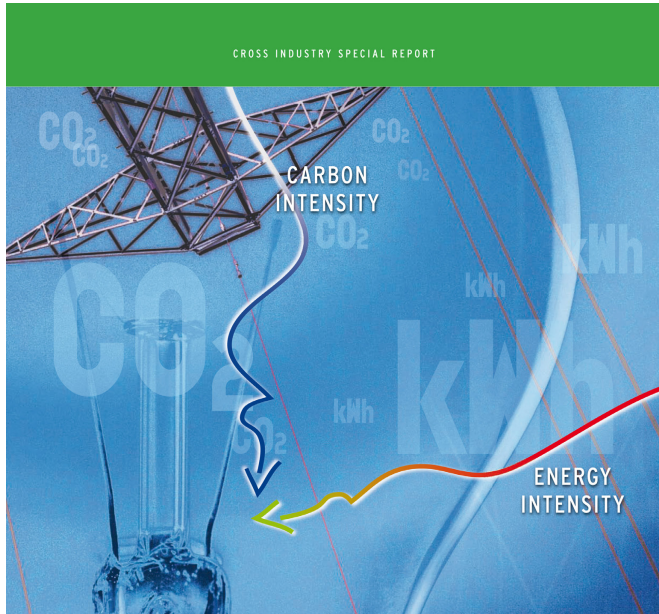
All you ever wanted to know about carbon but were are afraid to ask.

their industry pulls together. This is what initiatives such as the Verdigris project is all about, and it is what print industry associations worldwide recognise as they work with their governments towards a common goal.

The Digital Challenge

PrintCity's report raises some important questions for the industry, such as how electronic and print media can coexist. It also points out that supply chain management is a key tool for emissions reduction, but supply chain efficiencies are also important for business effectiveness and profitability. The message here, unfortunately omitted, is that emissions reductions go hand in hand with process automation, digital delivery and output close to the point of use.

The report mentions the Internet's future role managing smart energy grids, but it overlooks the Internet's more immediate value as a commercial and production environment. It provides print producers and buyers with an efficient on-demand platform for creating and buying print media so they can do more of it with a reduced environmental impact. The use of the Internet for rapid content development and approval is also positive since it helps to drive more jobs with greater diversity, frequency and purpose to presses large and small, near and far.

These may be trivial omissions given the sheer quantities of verbiage in this report, and the lack of insight into larger print industry and social trends can perhaps be forgiven. However, it is a great shame that workflow advances, the role of databases, variable data, XML and web tools are not addressed. Nor is there any reference to the contribution ink optimisation tools and preflight checking make to workflow efficiency. There is a single reference to "a standardised JDF format" (but remember the Job Definition Format is a specification not a standard), but that's about it.

Any discussion of PDF has been forgotten, along with references to how the various PDF-X flavours can help improve workflow for specific output targets, because publishers and printers can get their files right the first time. Impact reduction is possible through reduced proofing cycles because it inevitably produces less waste.

Process efficiency is what it is all about when it comes to emissions reductions. As the authors state: "The cheapest kWh of energy is the one not used". Short run digital colour presses can be set up to print a run of one as effectively as a run of thousands, yet the only references to digital presses in PrintCity's report are negative and variable data isn't even mentioned.

Perhaps some of these gaps reflect the interests of PrintCity members, but even so it is hard to accept that as far as this report goes digital printing technologies, on-demand production and variable data have no significant role to play in environmental impact reduction. Digital printing reduces environmental impacts because these presses produce only what is required, and are not designed for industrial scale production. They are capable of it, but they are not constrained to such a production model.

Taking steps towards a lower footprint.

It is a pity that these things were not included in the 34 pages of this report, because digital processing tools combined with digital delivery and output of static or variable data on demand are the foundation of the future of print media. Nothing of this is addressed in this otherwise extremely thorough report. Perhaps PrintCity is planning a revision to address these gaps. Version 2.0 could be a bug-free alternative that will really help advance the print industry. Print is sustainable and effective, and this is a message that all organisations serving this industry should be shouting loud and clear.

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