

Hug a tree

One of the biggest ways in which printers and publishers can make a difference to the environment is through the paper they use. Wood is a renewable resource but some wood is more sustainable than others so responsible sourcing of wood, and by extension paper, can make a big difference. The paper industry relies heavily on virgin wood fibre, but the trees need to be carefully managed, to ensure that they are harvested and replaced responsibly. Sourcing paper from renewable sources can significantly cut down on harmful deforestation, and avoids risks associated with illegal logging, such as inadvertently funding local conflicts.

This article is part of the Verdigris series of stories about understanding the environmental impact of print. The Verdigris project is supported by founder members Agfa Graphics, Canon Europe, Digital Dots, drupa, Fujifilm, HP, Kodak, Océ, Ricoh and Unity Publishing, and associate members Presstek and Strålfors.

So printers need a way to track the paper that they use back to a renewable forestry source, and this means relying on some form of forestry certification scheme. There are currently two main certification schemes that operate internationally and although they broadly cover similar areas there are some differences between them.

FSC and PEFC

The Forestry Stewardship Council is an independent, not for profit organisation with offices in over 50 countries worldwide. The name dates back to a 1990 meeting of timber users, traders and environmental campaigners in California, though the FSC itself wasn't established until March 1992, and it was October 1993 before the first meeting took place and elected the first full board of members.

It's a non-governmental organisation and is therefore largely self-funded. Roughly a third of its money comes from a mixture of charitable donations, government grants and business contributions, with the remaining funding coming from its membership fees, accreditations and charges for services rendered.

The main alternative to the FSC is the Programme for the Endorsement of Forest Certification schemes, or PEFC. As with the FSC, this is an independent, non-governmental organisation. It was set up in 1999 as an umbrella organisation to assess and recognise the various national forestry certification schemes that have sprung up. It is supported by 149 governments worldwide, covering some 85 percent of the world's forested areas.

There are slightly different standards between the FSC and PEFC, as Rosie Teasdale, deputy director of FSC UK, explains: "There's a social aspect to the FSC and generally some of the criteria are slightly more stricter for the FSC." She adds: "We look at a lot more than just replanting trees, things like looking at the whole management, it's a lot more holistic than that, looking at social aspects, looking at workers rights, indigenous people's rights, things like that as well."



Forests are important to maintaining the ecological balance of the planet, so certification schemes govern how we harvest the wood within these forests.

However, Hilary Khawam, communications director for PEFC UK, says that the difference between the two is more a question of governance: "The FSC was established by a green retailer coalition and it was designed to deal with deforestation in the tropical south. PEFC's roots were more from the forestry side and with very strong European roots."

Khawam says that this has resulted in a different approach: "When FSC was established it was the kind of scheme that suited very big areas of forests such as regional and national forests and it made demands such



as a ten per cent set aside, which means that you couldn't touch ten per cent of the certified area. The European model of forestry was very different where you tend to get in countries like Finland something like 200,000 forest owners who own less than 20 hectares, and might harvest a couple of trees probably once in a lifetime. So PEFC introduced a group certification scheme so that the small forest owners weren't debarred from the market for certified products." She adds: "Of course since then things have moved on and FSC also offers group forest certification as well and PEFC works in tropical areas now."

The certification from both the FSC and PEFC covers three main areas: virgin fibres taken direct from a certified forestry source; recycled paper based on post-consumer waste; and paper made from a mixture of recycled matter and virgin timber, and possibly with other sources such as preconsumer paper waste, though strangely the FSC does discourage printers from recycling unused waste paper. This is because waste paper is only considered as being part of the finishing process, and so printers are only allowed to count 15% of their trimmings, offcuts and reprints for recycling. This is in the misguided belief

Why do forests matter?

Trees can soak up an enormous amount of carbon dioxide, which can be released when those trees are cut down so that means that large forest areas can have an enormous impact on the overall well-being of the planet. According to Greenpeace, deforestation accounts for 18 per cent of all emissions. Some types of trees take a very long time to grow, and some forests, particularly rain forests will be very hard to replace.

In addition, forests support up to 1.6 billion of the poorest people in the world, and 60 million indigenous people and countless species of plants and animals are wholly dependent on forests for their lives. This includes many endangered species such as tigers and gorillas that need large forest areas to survive. But the big picture is simply that a world without woodlands and forests is something unimaginable.

Good management at the very least means ensuring that those trees that are harvested are replanted or allowed to regenerate naturally. But realistically it should also be about respecting the ecological systems that surround forests, as well as the planet's natural balance.

that printers need an incentive not to waste but this 15% limit could have the opposite effect to that intended.

Besides energy efficiency, the main way that the paper industry can reduce its environmental impact is by making greater use of recycled material, and so in order to promote this, most certification schemes stop at ensuring that the pulp has come from post-consumer waste, regardless of where the original fibres came from.

Local schemes

While the FSC and PEFC provide an international umbrella, there are also local schemes that operate within most countries. As a general rule, the PEFC seeks to work within existing frameworks and as such usually endorses established national standards.

By contrast, the FSC has developed its own international standards, which tend to reflect the interests of the various groups that form its membership. These standards are then interpreted on the national level to make sure they are applicable in each situation, so that a local body is not trying to meet a standard that's not relevant in that country.

In many cases, a local standard will satisfy the demands of both the FSC and PEFC. So for example, all UK forestry certification is done to a standard developed by the Woodland Assurance and which is authorised by both international schemes.

In North America there is the SFI, or Sustainable Forestry Initiative, which covers both the United States and Canada. Greenpeace is particularly scathing about this scheme, accusing the SFI of allowing some wood from other forests to be SFI-labelled without actually assessing the source. Greenpeace also points out that it is developed by the industry rather than a balance of environmental, social and economic interest groups. However, the SFI does also include some conservation groups. And as Khawam observes: "Forest certification is not a perfect science."

Clearly, the way that we use forests is more of an issue in some areas than others, depending both on the type



of trees and the reasons for harvesting them. Teasdale points out that not all trees are sustainable, adding: "People tend to think of it in terms of tropical hardwood but FSC covers all different types of forest and wood. You can have good and bad management anywhere."



Products such as paper will only carry one logo, PEFC or FSC, though printers can be certified under both schemes.

Chain of custody

As well as covering the forest management itself, most of these certification schemes also extend to the way that the wood is used, thereby controlling both the demand and the supply of timber. This is done through chain of custody certification, as Teasdale explains: "The chain of custody works that the timber is tracked from the forest all the way through the supply chain and every link in the supply chain is independently audited by a verification body so that the consumer can have that peace of mind that when they see that FSC logo they know that it has been independently certified."

She adds: "Independent verification is for making sure that their claims are genuine, because there's nothing to stop a printer saying that they are using FSC paper and if no one's independently auditing that then there's no way that people could know that that's true."

Since the system depends on every part of the chain carrying its own certification that means that the printer needs to have the chain of custody certification as well. Teasdale says: "Printers can have chain of custody for both PEFC and FSC but they wouldn't be labelling any one product under both, it would be one or the other.

Anything that a printer printed would carry the label but there wouldn't necessarily be a need for anyone further down the supply chain to require further verification unless they were selling to a wholesaler."

Products such as paper can only be certified by one or the other scheme, but not both, though Teasdale notes: "Some paper may carry dual certification but they would only ever label it as one. It will be certified against a standard and certification bodies would approve it for a particular label." She adds: "We wouldn't allow the two labels next to each other because it would imply that there were some links between the two of them."

But Khawam points out that the chain of custody certification between the two organisations is very similar: "In practice, certainly in the UK, most auditors who conduct chain of custody certifications conduct them for both companies and as far as I know most of them will conduct a dual FSC and PEFC audit at the same time and I think that some people offer it as a buy one get one free so it doesn't cost you anymore to get both."



You can see these logos on all sorts of products, from toilet roll to till receipts, as companies use them to demonstrate their green credentials to consumers

Conclusion

The weakness in the forestry certification scheme is that it is primarily concerned with the trees themselves, and doesn't take into account other environmental factors, or the products that result from using those trees. So there are no brownie points for sourcing paper locally, despite the fact that transport of timber and paper is a significant issue in its own right.



Why does all this matter? Well, with more and more printers aiming to achieve and maintain the ISO14001 environmental standard, understanding where paper is sourced from is becoming increasingly important. It is also becoming a useful business tool as many companies now want to be seen promoting their own environmental policies, which can include using an appropriately certified printer.

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