



CARBON NEUTRALITY – AN INCREASINGLY IMPORTANT FACTOR IN THE PRINTING INDUSTRY

As customer expectations are rising, printing professionals can no longer overlook the importance of sustainability, and more specifically carbon neutrality, throughout their production processes. But this is not just a market-driven trend – it is a must-have because of regulations as well. Carbon reduction and carbon neutrality are core elements of true sustainability and directives are more and more demanding. In a world where the term 'greenwashing' is sadly still relevant, let's examine the misconceptions and true solutions, as well as how a print software developer can help with this transition.

Why is CO₂ reduction so important?

The "CO₂ emission" figure is used because it is a widely accepted standard for measuring the environmental impact across all industries. It captures the greenhouse gas emissions throughout the production, and in better cases, throughout the entire lifecycle of a product. Therefore, it is a key factor to consider when talking about sustainability and also complying to regulations.

In 2023, a Carbon Trust report revealed that 67 % of consumers wanted to know the carbon footprint of the products that they bought, and 59 % were more likely to purchase from companies that were transparent about their emissions (Carbon Trust, 2023). These expectations extend to the B2B sector as well, with companies looking for reliable and verified suppliers.

According to GelatoConnect's 2025 State of Print Production report, producing customized and on-demand goods instead of mass production not only reduces waste, but also meets consumer demand. Therefore, GelatoConnect claims that 2025 is the year when the printing industry will prioritize sustainability:

“The rise of the creator economy, coupled with the explosive growth of e-commerce and production on demand, is reshaping the future of print. The days of overproduction are quickly becoming outliers, ‘just-in-time’ and ‘just what’s needed’ are the terms we need to embrace. [...] The winners in the print industry will embrace technology – from ecommerce integration to automation – to unlock new revenue opportunities and long-term growth.” – 2025 State of Print Production, GelatoConnect.

The power of substrates

Recycling is important. However, some materials, such as PVC used in wide-format printing, are difficult to recycle, especially if they are glued, printed, or have finishing like lamination. In such cases, the key lies in prevention. But be aware: eco-friendly is an overused term. If possible, always have a look at the components or even the manufacturing process of the substrate itself. The entire material lifecycle matters if you want to produce sustainable and recyclable products. While carbon offsetting is useful, it is better to already reduce the emission by focusing on more sustainable manufacturing, e.g., using less energy for the production, reusable and easily disposable materials, and more eco-friendly inks. This brings us to the next point.

The power of intelligent nesting and ganging

One of the most obvious steps to take is to use less substrate, or to use the existing substrate more efficiently. By using an automation software, nesting and ganging becomes easier and faster. The most efficient layout is generated automatically, so no one has to manually determine the best arrangement. This increases profitability by maximizing substrate efficiency, minimizing waste, and streamlining the finishing process. Nowadays automatic labelling with barcodes or QR codes is available to make tracking and job sorting seamless and efficient as well.

Since most print producers can meet the general needs of a customer, sustainability during manufacturing can be a key differentiator factor. It ensures competitiveness. Automation software can help print businesses to cut material usage, saving ink and chemicals while achieving the expected quality. Thus, production costs and energy are both reduced.

Every job is different – every operation is different. There is no off-the-shelf solution that can solve all challenges of a printer. And that’s where modular solutions come into play. Explore your existing software to see what you can achieve with intelligent ganging or have a look at your possible upgrades.

The power of people and culture

First, everyone involved in production must fully understand the purpose and know how to use the tools provided. Besides education, it is very important to ensure that employees and colleagues actually want to take steps to achieve carbon-neutral production. Legislation and policies already require a certain level of sustainability, like greenhouse gas emission quotas or the EPR (Extended Producer Responsibility) obligation – which all need the staff to be involved. In the end, good figures can only be achieved, audited, and approved, if everyone in the company is reliable and considers these guidelines as rules for everyday production. And keep in mind, accountability and communication on these matters must be clear and transparent.

The benefits of sustainability

In addition to the previously mentioned guidelines, a more sustainable production should not be considered as a burden. It has significant benefits for printing houses:

1. Minimized material waste by intelligent nesting, ganging and job batching; automated file checks to reduce errors, and therefore reruns; and ink usage optimization.
2. More efficient energy consumption thanks to streamlined workflows that decrease machine downtime and prevent unnecessary starts and stops.
3. Sustainable decision-making with real-time data and analytics on ink and substrate consumption, as well as other sustainability metrics.
4. Digital processes can replace the printed proof cycles and eliminate the need for physical transportation of proof files.
5. Cost savings from waste tracking and sorting help manage and recycle production waste more effectively. This enables to identify common errors and prevent future waste.
6. Brand image: If a company can support its claims with quantifiable results, it builds trust and strengthens its brand reputation. Greenwashing is definitely something to avoid – the reputational damage can hurt more than one can think of!
7. Customer loyalty: Conscious clients will stick with providers that demonstrate meaningful engagement with sustainability.
8. Compliance, transparency, and trust are not only beneficial from a sales perspective; if a company can adapt slowly but surely to regulations, no need to say – it will save a lot of money in the future. Verified data can be used in tenders and ESG (Environmental, Social, and Governance) reports to help ensure compliance with ever-stricter regulations.

Producers should consider not only the sustainability of their production processes but also that of their facilities, and the produced good's end-of-life recyclability. These are other aspects of sustainability that need to be considered.

The power of OneVision...

The benefits of our automation software are unambiguous.

First, filtering out problematic files before printing reduces the need for reprints and avoids unnecessary processing steps. Furthermore, intelligent job batching, nesting and ganging help to economize material. OneVision software also saves ink during printing, while maintaining the necessary quality and also reduces the effort of recycling the paper substrate.

Automation software optimizes every step of the print production process, transforming environmental sustainability from a manual, reactive task into an integrated, proactive strategy. It not only reduces the carbon footprint directly but also empowers print shops to measure, monitor, and offset their environmental impact – a critical step toward true carbon neutrality.

...in everyday life

Of course, we do what we can, one step at a time, to lead sustainability and not just write about it. We recently moved our office to a newly constructed building that was built according to the latest regulations regarding insulation and energy efficiency, among others.

Even though our electricity and heating run on 100 % green energy, we still pay attention to save energy with energy-efficient LED lighting, motion detectors and try to save water in our sanitary facilities, reduce waste, and encourage recycling.

Moreover, we participate with a great number of employees in the city cycling competition every year, and encourage our employees to favor more sustainable ways when commuting.

Small steps can lead to a bigger win – not just in production, but in the everyday life as well.

More information about OneVision Software's automation solutions can be found on the website: www.onevision.com

Sources:

- [*How Smart Job Ganging Cuts Costs and Reduces Waste – Printing Impressions*](#)
- [*No Longer Optional: What PSPs Need to Know about Sustainability to Stay Compliant and Competitive – Printing Impressions*](#)
- [*A revised look at sustainability in wide format print – Printing Connect Online*](#)
- [*Carbon Transparency: The new superpower in manufacturing – Printing Connect Online*](#)
- [*2025 State of Print Production - GelatoConnect*](#)