SUSTAINABILITY WHITEPAPER

Flint Group Packaging Inks
Sustainability Strategy In Focus

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The Packaging Industry Challenge

Packaging sustainability has become an increasingly important issue in recent years around the world. As heightened awareness of the human impact on the environment has evolved, consumers have become increasingly concerned about packaging and its role in waste and pollution. Today they, along with Governments, NGOs and industry, are seeking ways to achieve a more circular economy.

As a result, brands and their supply chains are investing in new and innovative ways to meet the challenge of developing sustainable packaging solutions that meet the needs of society, and the environment, today and into the future.
Flint Group Packaging Inks’ Sustainability Strategy

As a responsible supplier of printing consumables for the global packaging industry, sustainability is deeply ingrained in Flint Group Packaging Inks’ values and the way we do business. Accordingly, we have established a sustainability vision to guide our activities:

To support packaging markets with responsibly built products and sustainable solutions designed for circular economies.

At Flint Group Packaging Inks, we are fully committed to the well-being of the environment and the growth of packaging markets. We know that the fundamental role of packaging is to protect and preserve goods in the global supply chain, ensuring they reach their final destination with minimal damage and waste. Printed packaging also fulfils a valuable role in consumer communication. It presents important information to the end user, about the pack contents, use, safety or application and ultimately having a direct impact on health, safety and hygiene standards around the world.

Inks are therefore essential to packaging design and we, at Flint Group Packaging Inks, are keen to develop solutions to mitigate the impact they could have on the environment. We have therefore created a Sustainability Task Force to drive our sustainability strategy with four strategic pillars to align our initiatives and efforts.
1 Ethical Management

At Flint Group Packaging Inks, we recognise that maintaining a high degree of economic, environmental and social sustainability is fundamental to delivering value for our key stakeholders – our customers, suppliers, employees, investors and communities. Accordingly, we have signed the United Nations Global Compact and committed to adhere to its Sustainable Development Goals.

A set of 10 core principles addressing human rights, labour, the environment and anti-corruption, our commitment to this internationally recognised standard assures our focus on excellence in ethical business management and provides a framework for company-wide development.

In ensuring we meet our goals, our procurement and supply chains today are designed to connect our key sustainability themes – socio-economic growth, green economy and socio-environmental progress - with elements of the UN Global Compact and Sustainability Goals. For example, we have rolled out policies on human rights, anti-discrimination, established green engineering and waste management projects, as well as tackled anti-corruption and equal opportunities practices.

As well as abiding by key human resource, safety and well-being directives set out by governments wherever we operate, as a responsible and ethical supplier, we also ensure complete supply chain transparency by employing stringent global standards across our supply chains. Any new supplier to Flint Group Packaging Inks must pass a comprehensive sustainable supplier assessment. This includes passing a supplier selection process, communicating on health, safety & environmental considerations, being subject to quality and regulatory auditing, and completing a sustainability assessment that incorporates a questionnaire based on the UN Global Compact standards. All of our suppliers are also subject to regular audits to ensure ongoing compliance.

Four key quadrants comprise our Sustainable Supply Model

Acronyms: REACH (Registration, Authorisation and Restriction of Chemicals); CLP (Classification, Labelling and Packaging); CE (Conformité Européene - EU conformity)
Reduced Ecological Impact

At Flint Group Packaging Inks, we are focused on operating sustainably, as well as supporting our customers’ environmental objectives.

We are on a continuous sustainability improvement journey with a company-wide programme of clear targets established in 2016 to reduce energy consumption (-20%), greenhouse gas emissions (-20%), water consumption (-10%), and landfill waste (-30%) by 2020. The business is on track and we are currently assessing our performance and targets for the future, with the plan to release the next Sustainability Performance Report in Summer 2020, with updated goals for 2025.

Reducing ecological impact means supporting our customers to achieve their sustainability goals too. We have implemented the XtraMile® programme, an initiative to help printers boost connectivity, reduce waste and drive their operational efficiency. Identifying waste reduction opportunities, our print experts provide insight to optimising set up and make-ready times, as well as the best use of printing inks on press. They also help our customers to drive operational improvements through implementation of extended gamut printing and reuse and reworking of post-run inks, wherever possible.

We have also committed to achieving ISO14001 - the international standard that specifies the requirements for an effective environmental management system – at a number of our sites around the world. Reflecting our long-term commitment to reducing our ecological impact, Flint Group Europe has been accredited since 2010 and today, 17 Flint Group sites are certified globally with more in the pipeline to be accredited in the future.
Responsibly Built Products

The third pillar of the Flint Group Packaging Inks sustainability strategy addresses the building blocks of ink formulation, regulatory compliance and the environmental impact associated with their use.

By building products responsibly, we ensure that our products are designed in accordance with the latest regulatory requirements around the world. For example, in Europe, we follow the EuPIA exclusions policy in determining which materials we will and won’t select for ink formulation. Furthermore, we are aligned with key trade associations and comply with appropriate environmental certifications – such as Cradle to Cradle®, Ecolabel, Sedex and EcoVadis – to assure our customers, and their customers, of our commitment to both industry and regulatory requirements.

Importantly, our technical teams are actively developing new sustainable ink formulations utilising non-fossil fuel based raw material sources that do not compete with food resources or contribute to deforestation. Bio-renewable inks are already available; TerraCode, a water-based paper & board ink range for example, is based on bio-renewable raw material technology offering three levels of design – Bio, Hybrid and Balance – to meet a variety of print needs.

For solvent-based inks, Flint Group Packaging Inks’ R&D teams are testing specialist raw materials with a C14 isotope method, driving 60-80% bio-renewable content for nitrocellulose-based ink with the same performance as standard ink formulations. In addition, a range of mono-solvent inks has been commercialised for gravure applications in combination with solvent recovery systems, as well as low ethanol content versions to support VOC reductions.

Finally, for compostable packaging developments that have come to the fore as brands seek alternative solutions for non-recyclable flexible packaging laminates, we have delivered a range of flexo and gravure inks compliant with OK Compost DIN EN13432 compostability standards, making it easy for converters to achieve overall compliance for final printed compostable packaging designs.
4 Designed for Circularity

The final strategic pillar is designing inks for the circular economy; ensuring we are doing our very best as a company to remove the linear ways of thinking that have dominated the past.

Our focus is on contributing to the development of fully recyclable packaging solutions with minimal waste creation. In addition, on understanding and developing recycling technologies – the current feasibilities and obstacles – as well as the impact of printing inks on these systems. Our ultimate contribution is to design packaging ink solutions that minimise any challenges to the recycling of packaging.

There are a number of technologies that can support these efforts already in use today, including the use of water marks in graphics, taggants in ink formulations to alert systems, and use of other printing ‘markers’ to support materials collection and separation. However, Flint Group Packaging Inks is investing in innovation to move this issue forward faster.

Along with a range of solvent and water-based inks for films that are mono-material - supporting the move of the flexible packaging industry to mono-material design to enable recycling - these inks have been cleverly designed for mechanical recycling avoiding the use of chlorine that creates gassing and damage to extruders. In addition, we have developed a range of accredited low VOC inks that are fully de-inkable supporting the physical recycling process.

In terms of designing for circularity, Flint Group Packaging Inks’ most recent innovation is the ZenCode NCG range of shrink label inks certified to the Association of Plastics Recycling (APR) quality criteria in the U.S. These solvent-based inks complement commercialised ranges for floatable OPP mono-web labels and sinkable shrink PET labels, designed to minimise impact on the physical traits of bottle flake recyclate.

Flint Group Packaging Inks has also worked in collaboration with CADEL DEINKING in Europe. Providing an approved flexo solvent-based ink designed for hygiene, collation shrink and outdoor surface printed packaging applications, the CADEL system enables the removal of ink from plastic substrates before they are recycled. This technology results in recycled product with a similar quality to that of virgin plastic.

Finally, in support of fossil-fuel based plastics reduction in packaging design, Flint Group Packaging Inks launched a comprehensive range of new barrier coatings to replace the functionality that plastic films often offer to food, beverage and personal care packaging applications. Coatings, incorporating barriers to oxygen, moisture, aromas and light, enable packaging designers to reduce their use of fossil fuel-based resources, metals, and save waste and energy.
In Conclusion

The journey to sustainability and a circular economy will not be easy, but Flint Group Packaging Inks has the vision, innovation and commitment to succeed.

To ensure our ongoing progress, in 2019 we appointed a dedicated Sustainability Task Force to work with industry bodies, customers, suppliers and key stakeholders to deliver a programme of objectives and milestones in four strategic pillars – Responsibly Built Products, Design for Circular Economies, Ethical Management and Reduced Ecological Impact. Our vision and commitment are clear, and we have invested in the resources to drive both our organisation, and those of our key stakeholders, forward.

To find out more about how Flint Group can support your packaging sustainability, please visit www.flintgroup.com

*1 The environmental effect of printing ink on a printed package is less than 5% according to a EuPIA LCA Study, 2017

*2 The Cradle to Cradle Products Innovation Institute is a global non-profit organization dedicated to transforming the safety, health and sustainability of products through their own product standard

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