



(Source: SMI)

## Packaging the Future: Greener Choices, Stronger Brands

Sensitivity to the environment has become a defining force in consumer behavior, shaping the way products are perceived and purchased across global markets. Increasingly, buyers favor brands that not only talk about sustainability but also prove it through tangible choices, including the adoption of eco-friendly packaging. Packaging today is no longer seen merely as a protective shell or a marketing tool—it has become a declaration of intent, an expression of responsibility toward the planet and future generations.

Sustainable packaging, by definition, must reduce environmental impact without compromising on the essential roles of protecting goods, conveying information, and enhancing product visibility at the point of sale. Achieving this balance requires innovation, investment, and a willingness to rethink long-established practices. SMI has been at the forefront of this transition, channeling significant resources into research and development to create machinery capable of handling both recycled and renewable materials such as rPET, corrugated cardboard, and lightweight kraft board.

For businesses navigating evolving demands, the choice between paper and plastic has become a central issue. Plastic, long valu-

ed for its durability and versatility, has faced criticism due to post-use disposal challenges. Paper and cardboard, on the other hand, often appear to be the natural “greener” alternatives. Yet studies reveal that both materials can be similar in overall environmental footprint, with modern recycling technologies dramatically improving their sustainability performance. What matters most, therefore, is not the material itself, but how responsibly it is sourced, processed, and reintroduced into the production cycle.

Lightweight kraft cardboard, for instance, is rapidly gaining traction. Its very name derived from the German word for strength captures its durability. It offers strong protection for bottles and other delicate goods, while also providing excellent printability for branding, QR codes, or personalized consumer engagement. Beyond its physical properties, kraft board’s appeal lies in its rapid biodegradability and the lower quantities of material required per package, which translate into cost savings and a reduced carbon footprint. At the same time, operators must recognize that virgin paper and cardboard demand significant energy and water for production. The recycling loop offsets much of this impact, with recycled paper requiring up to 60 percent less energy and 70 percent less water, though its fibers can only be reused five to seven times before losing quality necessitating a careful balance between recycled and virgin input.

SMI has engineered solutions to maximize the benefits of paper packaging. With kraft cardboard, resistant and lightweight containers can be produced at lower cost using

SMI’s WP wrap-around case packers, CM combination machines, and multipack systems for both neck-in and neck-out bottle configurations. Innovative materials such as Arcwise® paperboard from Sweden, derived entirely from renewable sources, push the envelope further. With its beveled design, Arcwise® reduces material use by up to 30 percent compared to traditional board, while improving strength and ensuring snug adherence to products. Machines from SMI’s WP and CM series are fully compatible with this new generation of packaging.

Plastic too, when used responsibly, retains a key role in sustainable packaging strategies. Its impermeability pro-



(Source: SMI)

in the LSK, CSK, SK, and ASW series enable the use of recycled film material, minimizing virgin plastic consumption. Combination machines such as the LCM, CM, and AFCW series merge carton and shrink-film applica-

tions, offering flexibility and sustainability in a single solution. Furthermore, SMI’s SFP stretch film pack-

aging line eliminates the need for energy-intensive shrink

tunnels, reducing consumption during the production cycle.

Ultimately, the debate between paper and plastic should not be framed as a rivalry but as a shared pursuit of sustainability. Both materials, when handled with innovative processes and thoughtful recycling practices,

can make a positive contribution to reducing environmental impact. SMI’s wide-ranging technologies allow manufacturers to choose the most appropriate packaging solution for their product and market needs be it kraft paperboard, recycled PET, or hybrid solutions while ensuring that every choice aligns with the global push toward eco-responsibility.

As consumers demand more transparency and as governments tighten regulations, packaging is no longer a back-office consideration; it is central to a company’s brand identity and long-term viability. With its commitment to innovation, adaptability, and environmental stewardship, SMI continues to prove that sustainability and efficiency are not mutually exclusive but rather complementary forces that create real value for both businesses and consumers.



(Source: SMI)

ducts products from contamination, its strength ensures safe transportation, and modern film technology allows for thinner, lighter rolls that cut both material use and energy consumption. Importantly, plastics can theoretically be recycled indefinitely, making the distinction between recyclable and recycled plastics crucial. Virgin plastic, though technically recyclable, is sourced from petroleum and carries the baggage of non-renewability. Recycled plastic, particularly post-consumer rPET, represents a more sustainable pathway, closing the loop and reducing dependence on new fossil resources.

SMI has pioneered machine solutions that accommodate these needs. Its automatic shrink-wrapping systems



(Source: SMI)