

SUSTAINABILITY

Sustainable flexible packaging



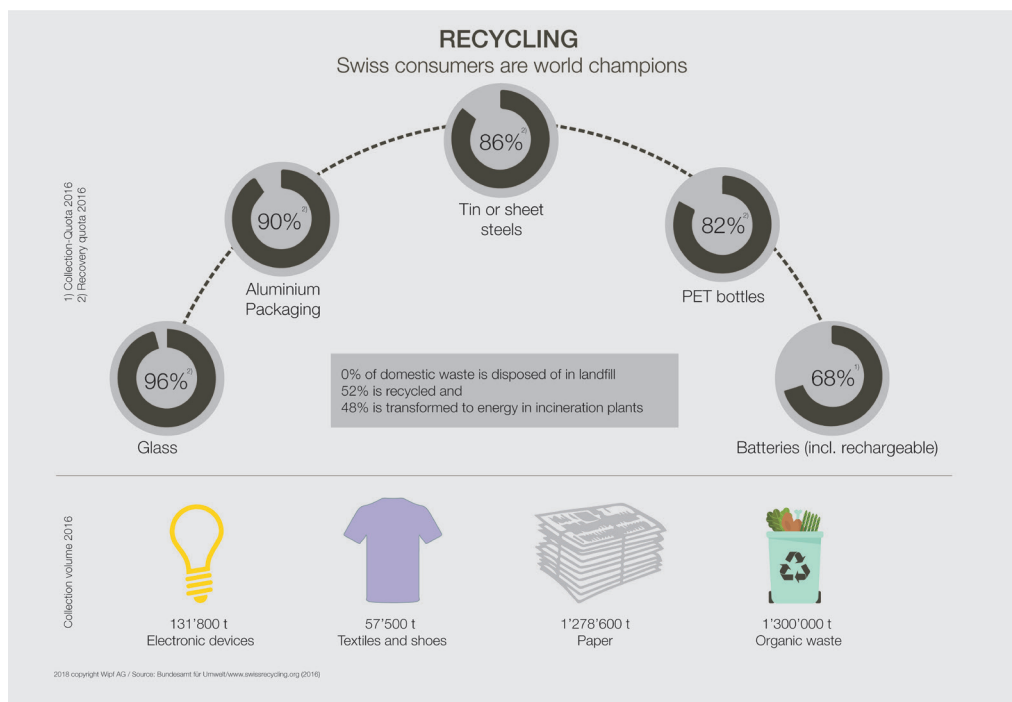
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Innovative Packaging Solutions

SUSTAINABILITY

What does it really mean?

Sustainability is playing an ever greater role for consumers and producers alike. But the topic is highly complex because many factors influence the sustainability of a product. Often, packaging is overlooked as an opportunity to tangibly increase the sustainability of a product with a considerable impact.



To assess the sustainability of a product, it is important first of all to define what the word actually means. As mentioned above, sustainability applies not only to individual items but instead embraces the entire product or system. To achieve sustainability, consumption must be limited to what can be renewed or what can regenerate.

Thus, in production, the use of resources must be limited to what nature or people can replace. For many products, this ideal balance is hardly attainable because given the extremely complex production processes nowadays, it is difficult to estimate the extent of resources required for a specific product.

Of course, this does not mean that efforts undertaken to achieve sustainable production are in vain. Global population growth and an increasing shortage of resources make such efforts indispensable. More and more consumers are aware of this and demand sustainably produced goods.

For companies, this is an opportunity to modify production processes in the direction of greater sustainability – as a unique selling proposition in the competitive environment.

In this context, Wipf AG can support you with sustainable packaging, because sustainable products deserve sustainable packaging!



Dear customers and partners,

Customers love the word “bio”, but most of them are discouraged by the higher prices and poor barrier properties. Biofilms are an excellent sustainable solution for many applications, but the technology cannot be used everywhere. Will biofilms ever really take off? The answer is yes, because respected packaging makers continue to invest in sustainable, innovative solutions and are aiming for 100% reusable, recyclable or compostable packaging by the year 2025.

As a Swiss packaging pioneer, we are also helping to consistently expedite recyclable packaging. To achieve this, we are focused on the use of polymers that allow better recycling quotas and on possibilities of producing packaging with a single material.

Wipf AG is specialised in the implementation of customer-specific, sustainable solutions. Our many years of experience in producing high-grade flexible packaging is backed by a clear future vision. We pursue every development with top-tier quality and superb service.

We look forward to implementing sustainable projects jointly with you.

With kind regards,

Hansruedi Schafflützel
CEO

We are certified

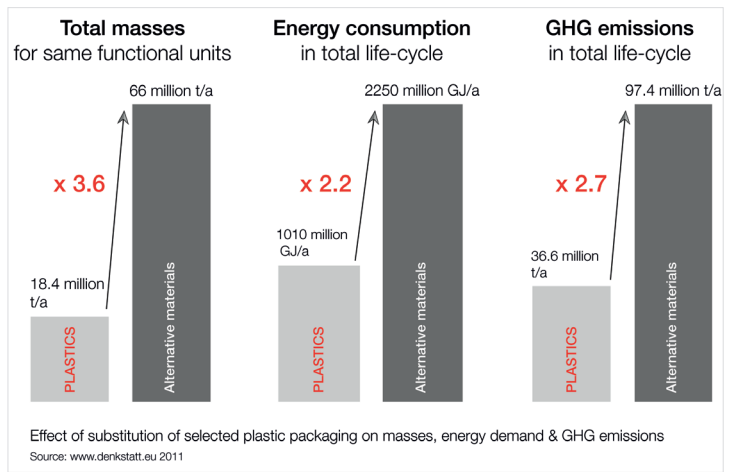


LAMINATES

Much better than their reputation

When the issue is sustainable or climate-neutral packaging, plastics and laminates generally have a poor reputation. At first sight, this may seem obvious. After all, a glass bottle is much easier to recycle than a cardboard beverage container. Do you agree?

Type of packaging	Content weight (olives)	Packaging weight	Product/packaging ratio
Glass with twist-off cap	150 g	188 g	0,8 : 1
Tin can	150 g	56 g	2,7 : 1
Flexible packaging (pouch)	150 g	7 g	21,5 : 1



But it's not that simple – and the stigma of laminate packaging is not justified at all. As far as sustainability is concerned, an assessment must always consider the whole rather than single parts. Even in raw material production, the manufacturing of plastics stands out with lower energy consumption compared with glass and other materials. Additionally, depending on the application, recycled raw materials can already be used in production.

With respect to transportation, flexible laminate packaging is clearly in the lead. It is less voluminous, lower in weight, and more compactly stackable than glass bottles, for example, or the ubiquitous tin cans. For instance, a truck can transport more product and less “ballast” (e.g. packaging) with the same tonnage – much, much more, actually.

Jars with twist-off caps as typically used for fruit preserves account for more than half the total weight of the product; for tin cans, the packaging materials still accounts for 25 per cent of the

weight. Conversely, the weight of flexible laminate packaging has a share of merely 5 per cent. Accordingly, the transportation ecobalance is much better than that of other types of packaging. On average, the energy consumption of other types of packaging in logistics is 150 per cent higher than with flexible laminate packaging and costs are even twice as high.

But laminates not only score well in logistics, they also offer excellent product protection. This is an advantage especially for food products because unfortunately, a third of all purchased foods deteriorate and have to be discarded. Obviously, this wastage has a strong impact on the ecobalance of the respective products.

So, if you want to produce sustainably, you will need sustainable packaging that also provides optimised protection – and that's what flexible laminate packaging does. The packaging assures perfect protection, so that the products still taste convincingly flavourful even after extended storage.

FOR A SUSTAINABLE FUTURE

Flexible monomaterial laminates

The choice of flexible monomaterial packaging is a game-changing ecological evolution in the packaging industry. The choice of same materials in all layers will result in future paybacks.

At first sight, the method is surprisingly simple. Opting for only one ecological material allows selective sorting and optimal recycling. Sounds good, and can certainly be implemented with flexible packaging.

Not least, the list of priorities is headed up with the need for ecologically compatible recycling. Without optimised sorting, all of the effort invested in the last step of the full-circle recycling is lost. This is precisely where flexible monomaterial packaging comes into play: it represents a big step toward a sustainable circular flow economy.

For certain products, we therefore recommend the use of flexible monomaterial laminates. Instead of working with laminates composed of different materials – such as PET/ALU/PE – the selection of only one laminate material is possible and meaningful.

We can produce laminates based on monomaterial PP, with or without barriers, that are easier to recycle. In view of the new packaging legislation, this option is certainly a great alternative to conventional laminate materials.

Film laminate structure of monomaterial packaging



The new German packaging legislation: What is changing?

In Germany, a new packaging legislation will enter into force on 1 January 2019 and will supersede the currently applicable packaging regulation.

What is new?

- Increased recovery quotas §16: recovery of polymers to 58.5% starting in 2019 and to 63% starting in 2022. (today 36%)
- Incremental licence royalties §21: promotion of highly recyclable packaging and packaging made of recyclates as well as renewable raw materials.

According to “A European Strategy for Plastic”, all deployed packaging must be reusable or recyclable by the year 2030.



SUSTAINABLE PRODUCTS

Sustainable production

Packaging is our passion. So we never rest and keep working on the further optimisation of our products. According to the motto „as much as necessary, as perfect as possible“.

If you want to emphasise the sustainability with your products, flexible laminate packaging is a good choice – but obviously only if the packaging is as climate-neutral as possible and has been sustainably produced. Indeed, the production of laminates are quite energy-intensive.

For this reason, Wipf AG has been committed to more efficient production for many years. For instance, the entire cooling system was modernised to reduce overall energy and water consumption. Additionally, Wipf AG reuses solvents originating from the production processes to recover energy. This protects the envi-

ronment in two ways because no solvents are vented into the atmosphere and less energy is consumed.

This measure and others resulted in a significant reduction of CO₂ emissions at Wipf AG. In fact, the target levels were beaten by 50 per cent.

At Wipf AG, products are being constantly adjusted to save resources and energy. Among others, packaging weight is optimised to reduce raw material consumption without affecting filling volumes.

FLEXIBLE PACKAGING

Flexible and ecologically sensible

For years, food producers and consumers have appreciated flexible packaging. The advantages versus other types of packaging such as glass jars or cans are clearly understandable.

Flexible packaging can be tailored to content volumes and be sealed with minimal wastage of product. It is lightweight and space-saving. This results in lower storage and transport costs. After use, flexible packaging can be compacted to minimal volumes.

The residual materials can be disposed of in

waste incineration plants without releasing toxins.

Unopened, flexible packaging provides barrier properties, with positive consequences for the preservation of nutrients, flavour and aroma as well as extended product shelf life.



Bio compostable valve for coffee

The WICOVALVE® W606E and W616E were developed especially for the coffee industry and can be composted according to industrial standard EN 13432 in combination with compostable laminates. The valves are designed for heat-sealing.

- Bean coffee/Ground coffee
- Body material: Ecovio®
- W606E no filter
W616E with filter
- Hole type small
- Pressure level (mbar) 2 - 7
- Flow rate (l/min at 6 mbar)
W606E 2.3 - 2.8
W616E 0.8 - 1.5
- Certified to EN 13432



Bio compostable laminates

Wipf Bio Packaging is based on the latest generation of high-performance films made of 100% organic raw materials.

Biofilms, whether cellophane or PLA (polylactide = lactic acids) can be printed in various colours without any negative impact on industrial composting.

- High aroma protection
- Good barrier properties
- Good fat resistance
- Highly transparent
- Metal free
- Materials with high stiffness
- Suitable for dry filling goods
- Bio compostable (industrial composting)
- Certified to EN 13432



Monomaterial laminates

For certain products, we recommend the use of monomaterial-based flexible packaging. Instead of working with laminates composed of different materials. Wipf produces laminates based on monomaterial PP, with or without barrier, that can be recycled.

- High aroma protection
- Good barrier properties
- Fully recyclable
- Excellent product protection
- Can be completely customised
- Suitable for many filling goods

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