

PRESS RELEASE

PVC CLING FILMS: ENHANCED SUSTAINABILITY, LESS FOOD WASTE

A new LCA study confirms that PVC cling films preserve food and contribute to avoiding food waste, in line with the priorities and targets set by the UN SDGs (Sustainable Development Goals). This thanks to their environmental / physical / mechanical advantages that ensure a safe and sustainable packaging.

Brussels xx June 2019 – According to recent estimates, food waste in the EU-28 amounts to around 88 million tonnes/year, a 20% of the total food produced.

Packaging has a vital role to play in containing and protecting food as it moves through the supply chain to the consumer, and it reduces food waste in transport and storage.

PVC cling films, in particular, represent a sustainable choice for fresh food packaging, not only for their technical, functional and environmental performance, but overall because they contribute to reducing the environmental impact of the food itself, extending its useful life and minimising food waste, mainly at consumer and retail levels, where main losses occur in developed countries.

A Life Cycle Assessment – applied to the PVC cling film production of Vinyl Films & Sheets Europe (VFSE) member companies and carried out in 2018 by the independent consulting firm Life Cycle Engineering (LCE – www.lcengineering.eu) – shows the benefits provided by PVC cling films in terms of avoided food waste and reduced environmental impact.

The LCA study shows, for example, that the environmental impact related to GWP (Global Warming Potential) associated to packaging production (PVC film and EPS tray) and its disposal at the end of life is very small compared with the packaged food impact (see for example the meat case graph). Similar considerations can be carried out also for energy and water consumption. In other words, PVC cling film saves much more resources than it consumes.



Comparing PVC cling films with the existing alternatives, the LCA study confirms that:

- despite slightly different physical properties, both alternative plastic and PVC films are able to provide an effective and reliable protection;
- while GWP (Global Warming Potential – potential contribution to climate change due to the amount of greenhouse gases released by the production chain processes) is generally aligned for both alternative plastic and PVC films, CED (Cumulative Energy Demand – direct and indirect energy consumed along the production chain of the product) and fossil resource consumptions are lower for PVC.

In addition, one of the main advantages of PVC films is the high permeability to water vapour compared to existing alternatives. This feature is particularly important in the packaging of fresh products such as vegetables or meat. A low permeability to vapour, in fact, can lead to the formation of condensation that

favours the proliferation of bacteria and micro-organisms, as well as altering the product from a qualitative and sensorial point of view.

Finally, the recognised excellent machinability of the PVC cling films utilised in the food industry or by retailers generates further benefits in terms of lower machine maintenance, reduced consumption of materials, reduced waste of materials and efficient use of natural resources.

Through their participation in VinylPlus® – the European PVC industry’s 10-year sustainability programme – VFSE members are proactively contributing to enhance the PVC value chain’s sustainability.

In terms of reduction of raw materials environmental impact – which according to the LCA study accounts for more than 80% of the total impact of PVC cling films – the VinylPlus Voluntary Commitment targets include:

- 20% reduction in energy consumption for the production of PVC resins by 2020
- the development of the ASF (Additives Sustainability Footprint) methodology to assesses the sustainable use of additives.

Furthermore, VFSE members do not use of Substances of Very High Concern (SVHC) of the REACH candidate list, and are committed to continuously improving the environmental impact of their formulations.

PVC cling films are fully recyclable: more than 90% of the waste generated in the production process is recycled either internally or externally. Since post-use cling film recycling is currently more difficult due to the weakness of the collection systems and possible contamination by food residues, VFSE members contribute to the VinylPlus collection and recycling schemes, aiming at recycling 800,000 tonnes/years of PVC by 2020, as well as to studies and research for difficult to collect and/or recycle PVC waste streams.

The contribution to the SDGs of the PVC cling film industry represented in VFSE is summarised here below:

PVC CLING FILMS FUNCTIONAL CONTRIBUTION



- Food waste reduction
- Food preservation
- Longer shelf-life
- Food safety (low bacterial proliferation)
- Lower risk of contamination during shelf-life

RAW MATERIALS, FORMULATIONS AND PRODUCTION



- Reduced energy consumption
- Sustainable use of additives
- No SVHC
- Reduced fossil resources depletion

RECYCLING



- Recycling 800,000 tonnes/year of PVC by 2020
- CO₂ savings from PVC recycling



For more information:

Maria Estela Izquierdo – Tel. +32 (0)2 739 63 89 – maria.estela.izquierdo@pceu.eu

Andrea Lupo, Zelian srl – Tel +39 02 29414807 – andrea.lupo@zelian.it

Note to editors:

Vinyl Films & Sheets Europe (VFSE) is the European association representing the European suppliers of plastics sheets and foils. VFSE's mission is to provide a network for European manufacturers, to stimulate the industry's scientific advancement and to promote its sustainable development.

VFSE members of the Packaging Working Group in 2018 were:



In 2019, Flexia Films also joined VFSE.

www.vfse.org

VinylPlus® is the 10-year Voluntary Commitment to sustainable development by the European PVC industry. The regional scope of the programme is the EU-28 plus Norway and Switzerland.

Through the VinylPlus initiative, the European PVC industry is creating a long-term sustainability framework for the entire PVC value chain. It aims to:

- *recycle 800,000 tonnes of PVC per year by 2020, at least 900,000 tonnes by 2025 and a minimum of one million tonnes by 2030*
- *promote a sustainable use of additives*
- *improve PVC products sustainability and their contribution to sustainable development*
- *reduce progressively GHG (greenhouse gas) emissions as well as energy and resource consumption along the entire production chain, and move towards a low-carbon circular economy*
- *build sustainability awareness along the value chain and among stakeholders.*

www.vinylplus.eu