

Study by Fraunhofer UMSICHT confirms

that the ERDE agricultural film recovery system allows significant greenhouse gas savings

A recent study by Fraunhofer UMSICHT shows that – with 2,170 tonnes of agricultural film collected – the ERDE system allowed greenhouse gas savings of 2,762 tonnes of CO₂ equivalent in 2014. The saving corresponds to the annual amount of carbon dioxide bound by 200,000 trees.

Every user of the Crop Plastics Recycling Germany (ERDE) initiative, launched in April 2014 to organise the recovery and eco-efficient recycling of used agricultural films across Germany, makes a significant contribution to reducing greenhouse gas emissions. This is the finding of a study completed by Fraunhofer UMSICHT in February 2015. In it, this internationally-renowned research institution produced greenhouse gas balances for each of the two fractions collected, PE-LD (silo foils, underlayer films and foil hoses) and PE-LLD (stretch and net replacement films). All aspects of collection and recycling were examined.

At the heart of the balance is the comparison of greenhouse gas emissions caused by collecting and recycling with the greenhouse gas savings resulting from the reduced production of primary plastic granulates.



The result was extremely positive. The average greenhouse gas saving is 1,273 kg of CO₂ equivalent per tonne of agricultural film collected and recycled. Calculated for the 2,170 tonnes of agricultural film recorded in the ERDE system in 2014, this means a total saving of 2,762 tonnes of CO₂ equivalent. That is the same amount of greenhouse gas emitted by 1,326 newly-registered vehicles in Germany with an average annual mileage of 14,300 kilometres; or the amount bound by around 200,000 trees in a year.



IK Industrievereinigung
Kunststoffverpackungen e.V.

Franz-Josef Lichte, CEO of TRIOPLAST Folienvertriebs GmbH, a founding member of the ERDE initiative: "For us as manufacturers of agricultural films and due to our close links to agriculture, sustainability is one of the core principles of everything we do. Our commitment to ERDE is a logical consequence for us in this environment. This makes the results that have now been made available by the Fraunhofer UMSICHT even more pleasing, as they clearly show that savings in CO₂ emissions can be achieved not only in production, but also to a significant extent through responsible recycling."

A total of 130 collections were conducted in ERDE's first year. More than 100 new collections have already been planned for 2015. Information on when and where, sorted by postcode, can be found on www.erde-recycling.de. Poster calendars are also displayed at the participating collection points.

ERDE offers patron membership in order to further reinforce both the environmental and the economic efficiency of the collection system and to broaden public awareness of this. These memberships are open to all companies with links to crop plastics who want to intensify their commitment in the fields of resource and environmental protection in agriculture. The website www.erde-recycling.de provides further information and the opportunity to register.

About ERDE

Under the umbrella of IK Industrievereinigung Kunststoffverpackungen e.V. and in cooperation with RIGK as a system operator, ERDE organises the separate recovery and eco-efficient recycling of used agricultural films made from PE-LD (fraction 1) and PE-LLD (fraction 2) across Germany through collection partners. Agricultural services companies and farmers collect their crop plastics and take them – swept and cleaned of significant dirt – together to a collection point. The collection price is defined by the collection point directly. Recycling companies then process the collected material into new plastic raw materials. The members of ERDE are Manuli Stretch Deutschland GmbH, POLIFILM EXTRUSION GmbH, RKW Agri GmbH & Co. KG and TRIOPLAST Folienvertriebs GmbH.

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www.erde-recycling.de