

GreenLine

Reduced climate footprint
Up to 100% recycled material



BEWI
for a better everyday

Choose **GreenLine** & step closer to your **sustainability goals**

GreenLine consists of up to 100% recycled material and has the same properties as regular cellular plastic.

Nearly all our products are available as GreenLine

You can already today order almost our entire product range as GreenLine. We're also glad to make custom-made GreenLine products in line with your wishes.

GreenLine is CE marked

The fact that GreenLine has its CE marking is proof of the material's high quality and that it meets the same demands as regular cellular plastic.

Here's the difference

The visible difference between regular cellular plastic and GreenLine is the colour. The important difference is that when you choose GreenLine, you lower the CO² emissions. The product

characteristics are the same as regular cellular plastic, due to the fact that cellular plastic is unaffected by the recycling process.

Learn more about GreenLine and contact us here:

www.bewi.com/greenline

Use-ReUse

GreenLine is made from cellular plastic waste that we collect and recycle. Use-ReUse is our concept created to help you sort and collect your cellular plastic waste, so that we can close the loop together and achieve climate neutrality.

Contact us to discuss how we can tailor a solution to your business.



FAQ

Below you will find common questions and answers about GreenLine. If you can't find the answer to your question, don't hesitate to get in touch.

Properties

When will GreenLine be certified as flame retardant?
We are currently performing production scale trials and hope to have GreenLine certified by the end of 2021. However, volumes will be limited until 2024.

Is GreenLine approved for food contact?
No. Although we're currently investigating it, we expect that we will obtain food approval within the next 2-3 years

Is there a difference in packaging performance compared to virgin material?
No.

Is there a colour difference compared to virgin material?
There is a slight difference in colour, but it's difficult to notice without placing virgin material next to GreenLine.

Are there differences in properties and quality compared to virgin material?
Our target is that GreenLine should have the same properties as virgin material. However there are significant differences in converting properties, and in some cases we have to accept a higher density in order to achieve the targeted properties.

Sustainability
What is the difference in CO² impact compared to virgin material?
The CO² emission from producing GreenLine are 1.6 kg of CO² per kg of EPS. For virgin material it is (according to Plastic Europe raw material figures) LCA 3.1 kg, which equals a saving of approx. 50%. Maximum 3.4kg of CO² savings could also be claimed because of recycled material is not incinerated.

How many times can GreenLine be recycled?
This is not yet clear. If chemical recycling is included the answer would be indefinitely. With today's mechanical recycling the material can be recycled two to three times.

What is the origin of the waste used to produce GreenLine?
There are several different sources depending on the end product. Packaging grades are produced from clean packaging waste and insulation grades are mostly made from recycled fish boxes.

How do you calculate the CO² emission reduction of GreenLine?
3.1 kg CO² (virgin material) minus 1.6 kg CO² (GreenLine) equals savings of 1.5 kg CO² per kg EPS (Calculation made from LCA figures in report from denmark).*

In a CO² savings calculation, what factors have been taken into account? Which are excluded?
Savings are calculated based on the raw material as converting is assumed to be the same. End of life emissions are not applicable because it is the same for virgin and recycled material.

How are savings in oil and resources calculated?
This depends on the converting site. So far we cannot show general savings in gas and utility consumption at the downstream sites.

Price

What is the price level compared to virgin material?
At the moment the price of GreenLine is close to the price of virgin material. Going forward plastic taxes may be introduced, which could mean significant price differences to the benefit of GreenLine.

What is the difference in price compared to competitors' recycled material?
There isn't material comparable to GreenLine available from anyone else. There is mass balanced material on the market, but the volumes are small and the price significantly higher.

Why is Greenline more expensive when it's made from recycled material?
he higher price is due to the collection of waste, raw material prices, processing and utilities costs. As there is competition for the waste streams, we expect prices of recycled material to increase.

Misc.

What is BEWI's capacity to produce and supply Greenline?
For next year we estimate our capacity to 6,000 tonnes. When our EPS extruder in the Netherlands becomes operational in 2023, the capacity will increase to circa 25,000 tonnes yearly.

Are there any other advantages or disadvantages of GreenLine?
Converting is more difficult and the stability of GreenLine can be less than of virgin material. The big advantage is for the future of our planet.

What does transport of EPS waste to recycling mean?
After EPS waste is collected it needs to be shredded and compacted. That can be done either at the collection point or afterwards in the collection centre. From there, compacted blocks are transported to the recycling site for extrusion to GPPS pellets. The GPPS is then extruded to new EPS raw

*CO₂ should be calculated for specific production sites and products for exact figures