

Sustainability

Make the right turn





Packaging production

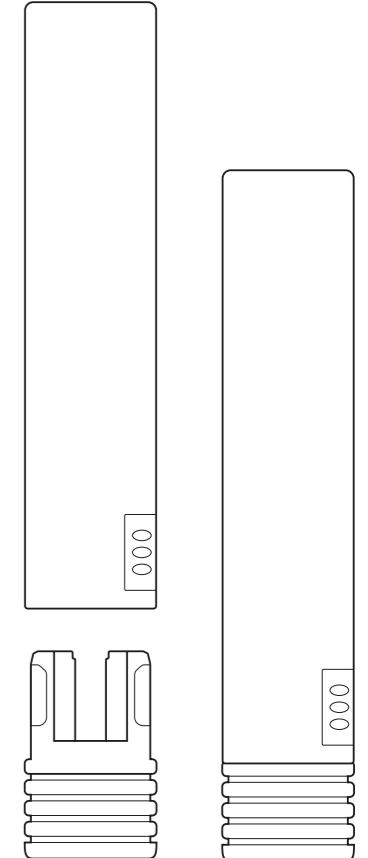
Sustainability – we're on the case

"Another sustainability brochure... just what the world needs." Actually, we think it does! Because this topic is really causing a stir at our company. Yesterday, today, and certainly tomorrow. Which is a good thing. It motivates us to go new ways, to abandon well-trodden paths, and to seek out fresh alternatives.

And we would like to take you, dear customer/reader/critic, with us on this journey. We want to show you what we've already done – and what we have planned for the future. And we hope to enter into a dialog with you, so that you will spur us on to new heights. So share your ideas, tell us what you think – together, we can all make a decisive contribution to our collective future.

We are excited about working together to build a better future.

Thiemo Rösler and the whole team at rose plastic



DID YOU KNOW ...
...that plastic packaging consumes comparatively few resources during its production? And that its low weight helps to reduce unnecessary emissions during transport? Studies show that, if plastic packaging were replaced with suitable alternative materials, energy requirements would more than double and CO₂ emissions would almost triple.



Tubes



Boxes



Cases



Cassettes



Transport &
Storage Systems



Sustainability at rose plastic

More than just a fleeting trend

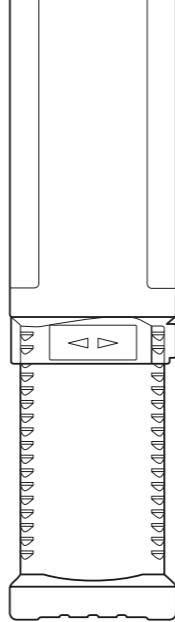
Environmental protection and the responsible use of raw materials – for rose plastic, these topics were high on the agenda long before the recent surge in discussions on sustainability. As a family-run company, we feel a strong obligation towards future generations and are intensively committed to the topic of environmental sustainability.

Since 2011, rose plastic AG has been certified in accordance with the ISO 14001 environmental management system, and has signed up to the Bavarian Environmental Pact (Umwelt-pakt Bayern) in 2010. We use environmentally friendly processes and technologies in the manufacture of our products. Waste heat from production is used to heat our office buildings and electricity flows mainly from renewable sources.

Furthermore, we only use plastics that are fully recyclable – our internal recycling rate is thus almost 100 percent.

"rose plastic has been setting new standards with our innovative packaging for 70 years."

THIEMO RÖSLER



What are
we already
doing?

100%
of our electricity comes from renewable sources

350 kWp
photovoltaic system



SHORT DISTRIBUTION ↗ PATHS

We send our expertise around the world, not our products – thanks to our 5 production sites worldwide. This global presence means we can avoid international shipping, saving not only time but also unnecessary CO₂ emissions.

We thus reduce our CO₂ emissions by **1,890 tons** every year. This amount equals the CO₂ emissions produced through combustion of **805.043 liters of gasoline**. Underlying assumption: 10% air freight / 90% sea freight

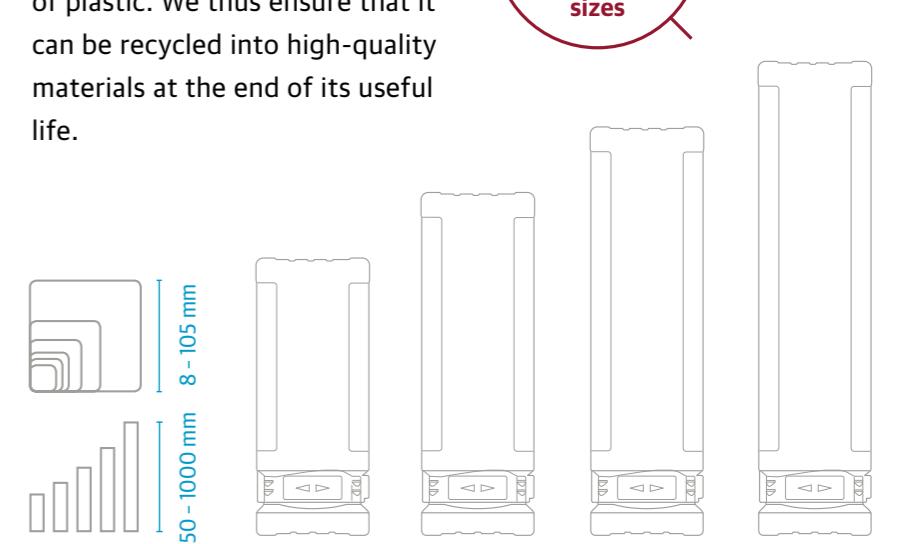
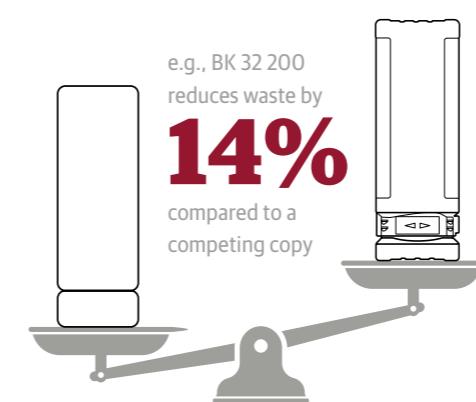
Resource-saving product design

Intelligent, well thought-out designs ensure that our packaging solutions are strong, sturdy and robust to protect your products. Nevertheless, they are lighter than our competitors' products. Our BlockPack is a good example of resource-saving product design. It is available in so many sizes that you will definitely find the right one for your product. For a perfect fit.

Because packaging doesn't always need to be full of air.

Added bonus – most of our packaging consists of only one type of plastic. We thus ensure that it can be recycled into high-quality materials at the end of its useful life.

BlockPack
in around
90
sizes





Recycled material

Turning waste into valuable resources

Packaging must fulfill multiple requirements – e.g., by protecting the contents, getting them safely from A to B, and putting the enclosed products in the right light thanks to an appealing design. Despite the various technical and functional requirements, sustainable product design should always be kept in mind.

Plastic packaging and sustainability are not mutually exclusive. On the contrary, plastic packaging actually helps to conserve resources. And not just for food (for which it ensures a longer shelf life). Many other consumer goods – whose production requires valuable resources – also benefit from packaging that safely protects them from damage. After all, product protection means environmental protection.

In line with the circular economy concept, we rely on the use of recycled material, which is for example plastic waste from private households. This is collected in many ways depending on where you live, it is then separated from other materials, sorted by size and type of plastic, and then ground, washed, melted, filtered, and re-granulated and then converted into valuable new materials.

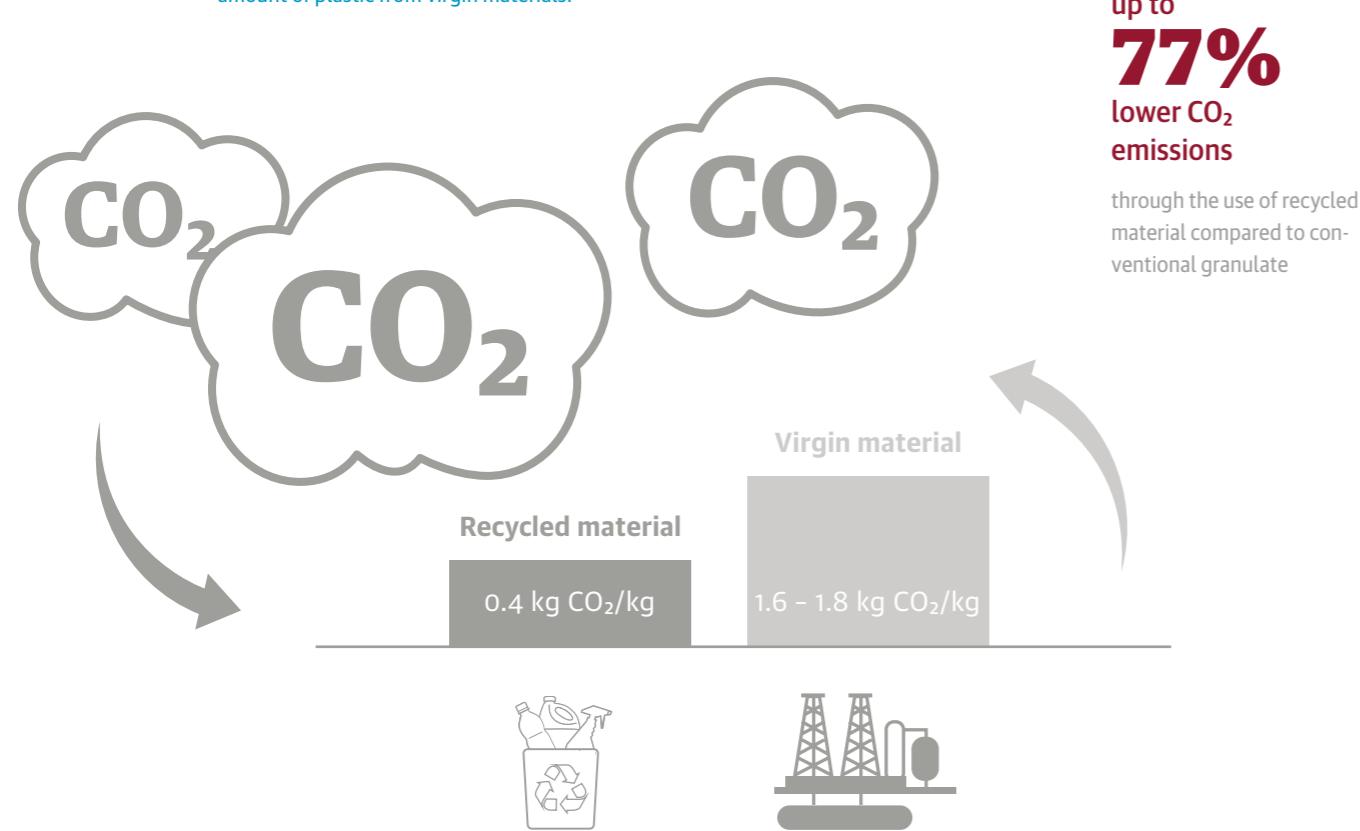
And by the way, our recycled-plastic solutions perform just as well as our products based on virgin raw materials.



We breathe new life into recycled plastic.



↓ Producing 1 ton of recycled material reduces emissions by 1.2 – 1.3 tons of CO₂ compared to producing the same amount of plastic from virgin materials.¹



Here's what you need to know:

Compared to virgin raw materials, products made from recycled material have some distinguishing features.

- The packaging may contain small, visible inclusions.
- Blow-molded articles have a slightly textured internal surface.
- Stress whitening is more pronounced with film hinges. Nevertheless, the hinges are functionally sound.
- The packaging has a slight odor.

For us, this is not a sign of inferiority. On the contrary, it shows your customers that you give sustainability a high priority when choosing packaging for your products.

Printing and colors

Creative designs made easy

Our packaging made of recycled material gives you a wide range of creative design options. Need a customized print on your packaging? We offer exactly the same printing solutions as for our virgin-material products. For example, you can let your customers know that they are getting sustainably packaged goods by choosing our recycled packaging.

While we think gray always looks good, our packaging made of recycled material is also available in select custom colors. Prefer to create your own packaging concept? Then please don't hesitate to ask us. Together, we're sure to find the perfect solution for your product.



↗ Choose packaging made of recycled material and show your customers that sustainability is important to you.



Gray is chic But if you prefer a splash of color, our recycled packaging is also available in selected colors.

The closed-loop economy at rose plastic. Is a reality.



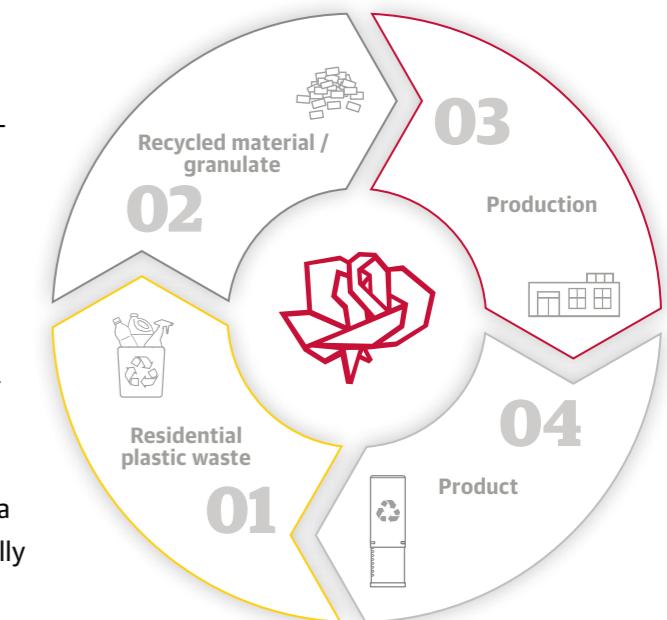
This is just the beginning

Imitators welcome!

Two market leaders, one project: In cooperation with our long-standing customer Würth, we are proving the viability of recyclable packaging solutions. Our new cutting-tool packaging for Würth is even Cradle to Cradle® certified.

To underline this point, rose plastic and Würth are making a clear statement through this joint project: We don't cherry-pick our raw materials. Which is why everything inside the household recycling is used. The fact that the resulting packaging is gray and has a slightly perceptible odor is not a shortcoming. On the contrary, it shows that sustainability really matters to us.

Do you also want to launch a sustainable project with us? No problem. Simply give us a call! Truth be told, we hope to see as many imitators as possible across many different industries!



 **Moving in a continuous circle.**
When it comes to **sustainability**,
we're giving the circular economy
a strong boost with our recycled
packaging.





**Sweet packaging?
We have a taste for it.**

Sugarcane

Powered by plants

For many years, rose plastic has been actively researching the use of alternative materials for plastic packaging. For example, did you know that sugarcane not only provides sweet juice, but is also the basis for bioplastics?

We already use sugarcane as a renewable raw material. From a purely visual point of view, our organic-HDPE packaging differs in no way from its conventionally manufactured "twins". These products are also equally robust and flexible in practical applications. And yet there is one major difference: The production of organic HDPE is not only emission-free, but actually binds a whopping 2.15 kilograms of CO₂ per kilogram of material.

Despite being a bioplastic, our organic-HDPE packaging is not compostable. However, the organic HDPE we use is 100% recyclable and can be recycled together with HDPE produced from fossil raw materials. In this context, we follow the recommendations of the German Federal Environment Agency, which states that recycling – or if this is not possible, even thermal recovery – is preferable to composting from an ecological point of view.

Signed and sealed

The raw material itself (HDPE), our supplier's production plant, and the production process for the raw material for our organic-HDPE products are all certified accordingly. The ISCC Plus seal – International Sustainability and Carbon Certification – stipulates specific production standards.

The raw material used in our organic-HDPE products has been analyzed by the internationally renowned laboratory, Beta Analytic Inc. This analysis showed that this raw material is derived from 100% renewable resources.



↑
BlockPack made
from bioplastic



↑
Quality seal
Two quality seals serve
as transparent proof that
our sugarcane production
and the rest of the supply
chain comply with strict
quality standards.



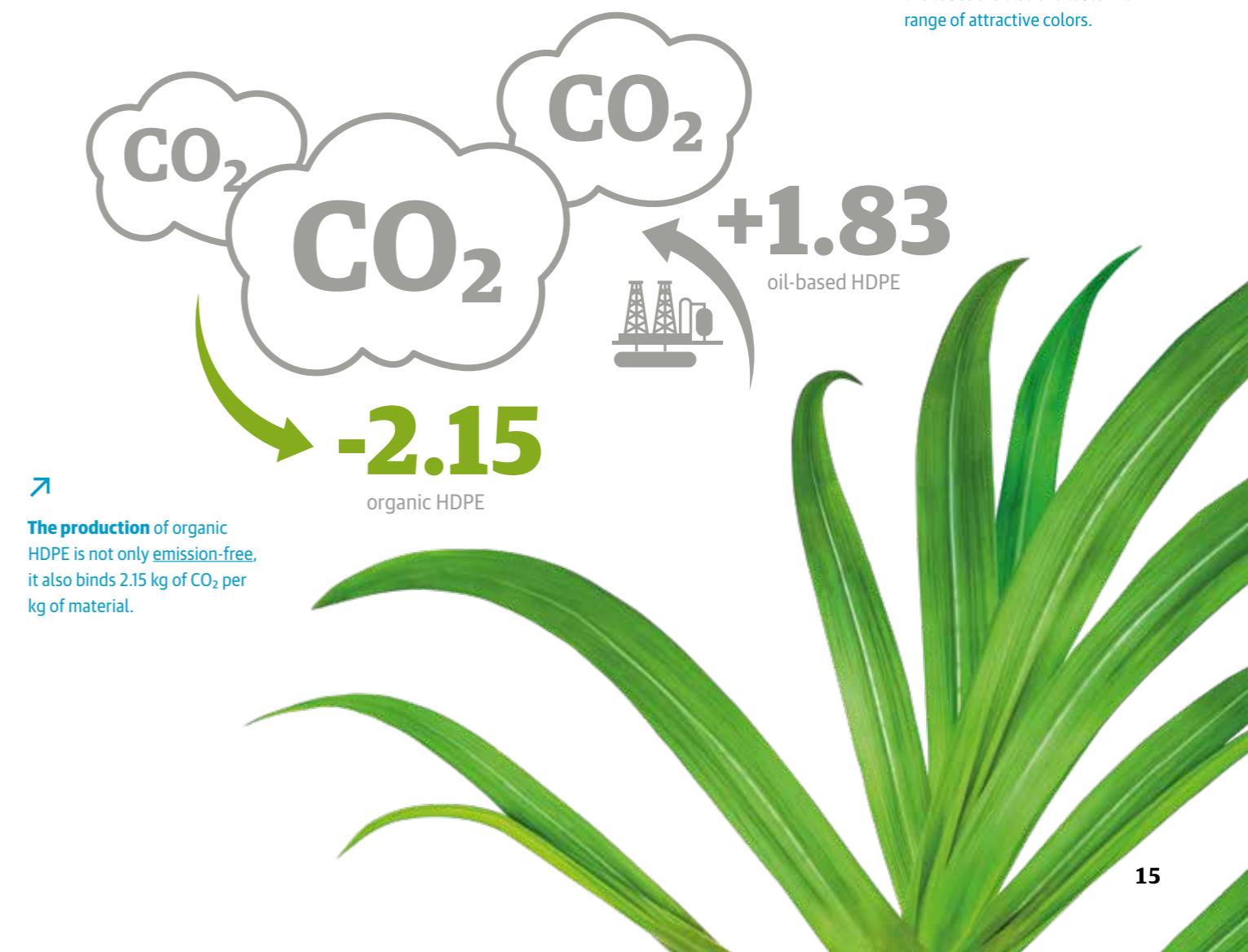
Sugarcane

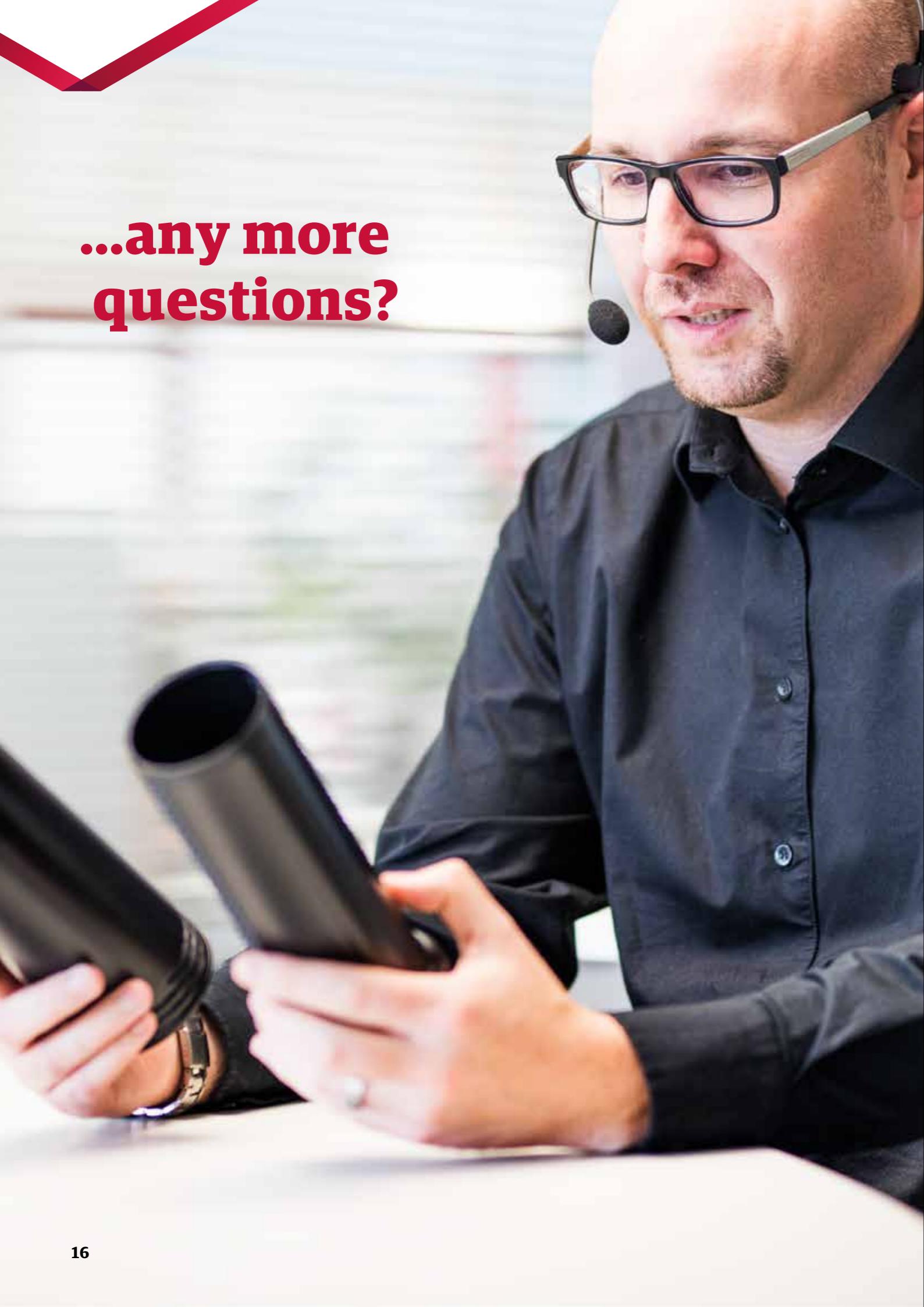
The benefits at a glance

- Sugarcane already binds CO₂ as it grows.
- It is identical to conventionally manufactured packaging in terms of its appearance and use.
- The organic HDPE we use is 100% recyclable and can be returned to the material loop together with HDPE produced from fossil raw materials.
- Two quality seals prove that our sugarcane production and the rest of the supply chain meet strict quality requirements.



You can now order all our blown tubes in organic HDPE. Naturally, the tubes are also available in a range of attractive colors.





...any more questions?

FAQ

You ask – we answer

Here you will find answers to frequently asked questions about our sustainable products. If your query is not listed here, please feel free to contact us. We look forward to hearing from you!

1

WHAT DOES "CIRCULAR ECONOMY" MEAN?

The goal of a circular economy is to extend the useful life of products and raw materials for as long as possible. If this is not possible, they are broken down into their starting materials, i.e., the raw materials, and these are recycled.

2

IS RECYCLED PACKAGING AS ROBUST AS ITS VIRGIN-PLASTIC EQUIVALENT?

Compared to virgin material, products made from recycled material have several distinguishing features. Despite the fact that (for example) stress whitening is more pronounced on hinges or a slight odor is detectable, this does not affect the functionality of the packaging.

3

DOES RECYCLED PACKAGING FROM ROSE PLASTICS CONTAIN 100% RECYCLED PLASTIC?

We always use as much recycled content as possible. Because for us, the concept of sustainability comes first. For most products this goes up to 100%.

4

WHERE AND HOW CAN I DISPOSE OF RECYCLED PACKAGING?

Our products made from recycled material can be returned to the material loop via existing local recycling infrastructure.

5

IS RECYCLED PACKAGING FROM ROSE PLASTICS ALSO AVAILABLE IN A TRANSPARENT DESIGN?

Currently, transparent recycled products made of PP or PE are only possible through complex separation processes and the exclusion of valuable raw materials. Therefore we recommend the use of grey non-transparent material to avoid recycling left-overs. Where this is not possible, we can also supply transparent material options.

6

IS YOUR RECYCLED PACKAGING AVAILABLE IN ALL COLORS?

Our packaging made of recycled material is available in selected custom colors. Feel free to contact us if you wish to implement your own idea. Together, we will find the right solution.

7

WHAT IS THE DIFFERENCE BETWEEN BIOPLASTICS AND BIODEGRADABLE PLASTICS?

Bioplastics are made from plant biomass, such as sugarcane. They have the same properties as conventional plastics. Biodegradable plastics, on the other hand, are plastics that decompose under certain conditions, leaving behind essentially nothing but CO₂ and water as they break down.

8

IS YOUR ORGANIC-HDPE PACKAGING COMPOSTABLE?

No. The organic HDPE we use is 100% recyclable and can be returned to the material loop together with HDPE produced from fossil raw materials. In this context, we follow the recommendations of the German Federal Environment Agency, which sees no advantage in using compostable materials for packaging.

9

HOW CAN I BE SURE THAT THE RAW MATERIAL USED FOR YOUR ORGANIC-HDPE PACKAGING COMES FROM RENEWABLE RESOURCES?

We source the raw materials for our sustainable packaging from certified suppliers who have made an explicit commitment to preserving the rainforests, for example. This is guaranteed through certification by independent bodies.

10

WHAT OTHER SUSTAINABILITY MEASURES ARE IN PLACE AT ROSE PLASTIC?

Since 2011, rose plastic AG has been certified in accordance with the ISO 14001 environmental management system, and has signed up to the Bavarian Environmental Pact (Umweltpakt Bayern). We use electricity from renewable sources and operate a 350 kWp solar installation. As a result, operations at our Hergensweiler site are virtually CO₂-neutral. Because we only use plastics that are fully recyclable, our internal recycling rate is around 100 percent. rose plastic has undergone an independent audit with its protective packaging made for transport, storage and organization and received the Cradle to Cradle® Silver certification.



Facts

Plastics are pretty useful!

They are lightweight, sturdy, and protect their contents from damage. Below, we'll explain some key advantages offered by plastic packaging:

1

CO₂ EMISSIONS

According to a life-cycle-assessment study by "Denkstatt", if we were to replace plastic packaging with other materials, the amount of waste would increase by up to 360 percent. Energy consumption would more than double. And CO₂ emissions would be 2.7 times higher.

2

LOW WEIGHT

Plastics are lightweight materials and therefore also reduce the weight of the packaged product. This, in turn, can help to reduce fuel consumption when transporting the goods. It also reduces CO₂ emissions.

3

HIGHLY EFFECTIVE PROTECTION

Plastic packaging is much sturdier and more durable than other materials. In other words, it does a better job of protecting the enclosed products. Without this packaging, consumer goods would often arrive damaged at the point of sale. And replacing damaged goods places an additional burden on the environment – and the wallet.

4

INTEGRATED PROTECTIVE BARRIER

Many applications require an additional barrier layer, which can cause problems later on when it's time to recycle the packaging. Thanks to the moisture-resistant and oil and grease-repellent properties of plastic, we can dispense with additional barriers and thus help to close the material loop.

5

THE MYTH OF WASTED RESOURCES

The starting materials for the production of most plastic packaging are oil and gas. In Western Europe, approximately 1.5% of oil and gas consumption is due to the production of plastic packaging. Transportation, power generation and heating alone consume nearly 90%.



Blue Angel

Guiding light for environmentally friendly products



Since 1978, the German government's eco-label "Blue Angel" has provided consumers with assistance and guidance when buying sustainable products. Our packaging made from recycled material can now also bear this quality seal. The "Blue Angel" recognizes products that are manufactured ecologically and sustainably and are subsequently returned to the raw material cycle. The entire life cycle of a product is therefore considered when awarding this quality seal. As a prerequisite for this certification, proof that the end products consist of more than 80% recycled material must be provided.

The seal is awarded by the independent "Eco-Label Jury". The trademark owner is the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety. The final certification is issued by RAL GmbH, the state-authorized body responsible for awarding this seal.

The Federal Environment Agency reviews these criteria every three to four years. This process requires companies to continually ensure and improve the environmental performance of their products over time.

German Sustainability Award for Design

Our packaging makes it to the final



In collaboration with Adolf Würth GmbH & Co. KG, rose plastic has designed a circular packaging solution made from 100% recycled material. Würth entered this packaging in the

Design category of the German Sustainability Award. Our packaging had made it to the final round among many participants.

The award is presented by the Foundation Deutscher Nachhaltigkeitspreis e.V. in cooperation with the Federal Government, municipal umbrella organizations, business associations, civil society organizations and research institutions.



The German Sustainability Award is the national award for excellence in sustainability in business, municipalities and research and is the largest prize of its kind in Europe.

Cradle to Cradle®

Thinking about tomorrow, today



Seals of approval and certificates are important. They provide consumers with valuable guidance and create transparency out there in the "product jungle". Especially when it comes

to the topic of sustainability, customers are increasingly reliant on independent quality certificates.

rose plastic has undergone an independent audit with its protective packaging made for transport, storage and organization and received the Cradle to Cradle Certified® Silver certification. Cradle to Cradle Certified® is a registered trademark of the Cradle to Cradle Products Innovation Institute.

It all starts with the design

The term "Cradle to Cradle®" essentially means thinking in terms of complete product cycles from the outset. This means giving careful thought to the product's disposal at the end of its life – before it even exists. With the product line made from recycled material, rose plastic puts this principle into practice. Plastic waste becomes the raw material for new products and the material cycle is closed. The recyclate is obtained, for example, from residential plastic waste, also referred to as "yellow bag" or "yellow bin".

Which aspects are considered?

Cradle to Cradle® includes a holistic assessment of the respective products and the company that manufactures them. The criteria cover several areas: the origin and nature of the ingredients used, the recyclability of the product in the technical or biological material cycle, the use of renewable energy, responsible water management, and compliance with social standards. There are five achievable standards: Basic, Bronze, Silver, Gold, and Platinum.

The Cradle to Cradle concept was created in the late 1990s by Michael Braungart, a chemist from Schwäbisch Hall, Germany, together with the US architect William McDonough.



Wherever you are, we are close by

At home all over the world

With around 800 employees at 10 locations around the world, we are also near to our customers.

For short distances, reliable logistics, and sustainable business practices. We supply companies all over the world from our locations in Europe, Asia, North America and South America.

Thanks to our production capacity and efficient logistics, we can naturally supply our customers quickly and reliably with smaller quantities. However, we can also process large-volume orders on time with high process and product quality.



OUR FULL PRODUCT RANGE

An overview of our entire product range with around 4,000 different packaging solutions can be found on our website at www.rose-plastic.com

You can view our general catalog (PDF) directly via the following QR code:



Production locations

GERMANY

rose plastic AG

Rupolzer Strasse 53
88138 Hergensweiler/Lindau
Phone: +49 8388 9200-0
info@rose-plastic.de

USA

rose plastic USA, L.L.C.

P.O. Box 698
California, PA 15419-0698
Phone: +1 724 938 8530
info@rose-plastic.us

CHINA

rose plastic (Kunshan) Co., Ltd.

Donghui Road No. 101, Zhoushi Town,
Kunshan, Jiangsu Province
Phone: +86 512 5766 7700
info@rose-plastic.cn

BRAZIL

rose plastic Brasil **Embalagens Plásticas Ltda.**

Av. Garabed Gananism 514, Jardim Topázio
CEP 18087-340 Sorocaba SP
Phone: +55 15 3238 1900
info@rose-plastic.com.br

INDIA

rose plastic India Pvt. Ltd.

Pargaon, Khandala, Satara - 412802
Maharashtra - India
Tel. +91 21 6929 9151
info@rose-plastic.in

Subsidiaries

UNITED KINGDOM

rose plastic UK Ltd.

Unit 4, Bessemer Way, Bessemer
Business Park, Rotherham, S60 1EN
Phone: +44 1709 7217 94
info@rose-plastic.co.uk

FRANCE

rose plastic France S.A.R.L.

Parc d'Activités du Rotey
73460 Notre Dame des Millières
Phone: +33 479 3848 01
info@rose-plastic.fr

SPAIN

rose plastic Iberia, S.L.U.

P.A.E. Ibarra Barri, Pab. 15B
48940 Leioa (Vizcaya)
Phone: +34 94 480 66 61
info@rose-plastic.es

REPUBLIC OF KOREA

rose plastic Korea Co., Ltd.

Bucheon Techno Park 402-B01, B02,
Pyung-Cheon Ro 655, Won-mi-gu,
Bucheon City, Gyeonggi-do, ROK 14502
Phone: +82 32 324-8332
info@rose-plastic.kr

ITALY

rose plastic Italia S.r.l.

Viale De Gasperi 103
20017 Rho (MI)
Phone: +39 02 9390 9450
info@rose-plastic.it

Sales partners

JAPAN

Honda Plus Co.Ltd.

23-2 Kawaji Yato
Shinshiro Pref. Aichi 441-13
Phone: +81 5362 31351
info.jp@rose-plastic.com

POLAND

Leniar International Sp. z o.o. Sp.K.

UL.Szlak 67
31-153 Kraków
Phone: +48 12 6331 670
info.pl@rose-plastic.com

TURKEY

Tureks Endüstriyel Ürünler Pazarlama Ve Dış Ticaret A.Ş.

1471 Sokak No. 7 K:5 D:13
Kenet Sitesi
35220 Alsancak - Izmir
Phone: +90 232 464 5220
info.tr@rose-plastic.com



09/2023

www.rose-plastic.com

rose  plastic®
protective packaging pioneers