



oryzite

Adding value to primary sector

INNOVATION & SUSTAINIBILITY



Euroopa Maalelu Arengu
Põllumajandusfondi
Euroopa Investeeringud
maapiirkondadesse

oryzite

Rice cultivation & Research

After 10 years of research and development, we have created Oryzite, a plastic substitute made from rice husks. With this innovation we convert rice by-products into highly valued co-products and new raw materials.



oryzite

Facts

RICE

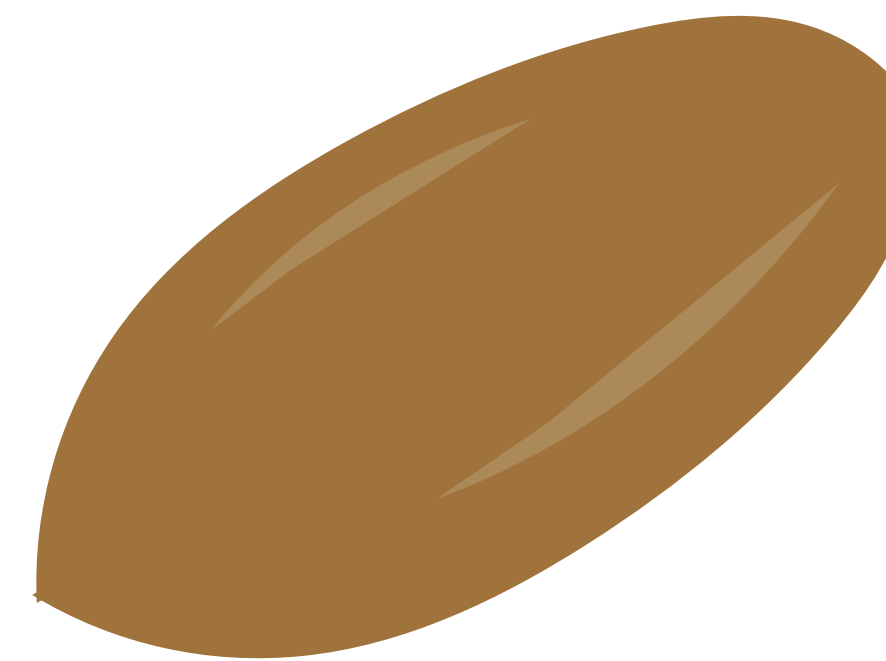
- ▶ Rice is the second most cultivated cereal in the world
- ▶ Nearly 800 million tons per year
- ▶ It is the source of one fifth of the calories consumed by humans



Rice husk. What is it?

It is the outer shell of the grain obtained during the first processing phase of parboiled rice, commonly called “husking”.

The rice then moves on to subsequent processing while the rice husk follows its own path.





and husk is the
20%!



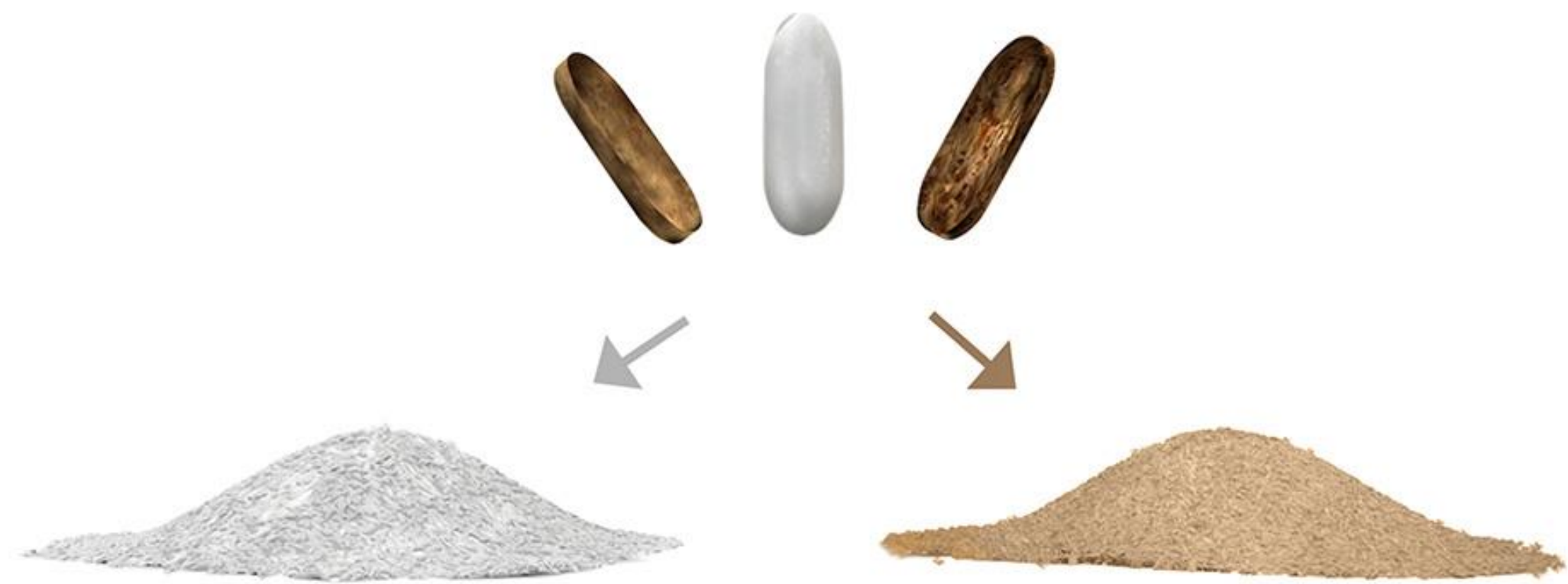
Euroopa Maaelu Arengu
Põllumajandusfond:
Euroopa investeeingud
maapiirkondadesse

oryzite

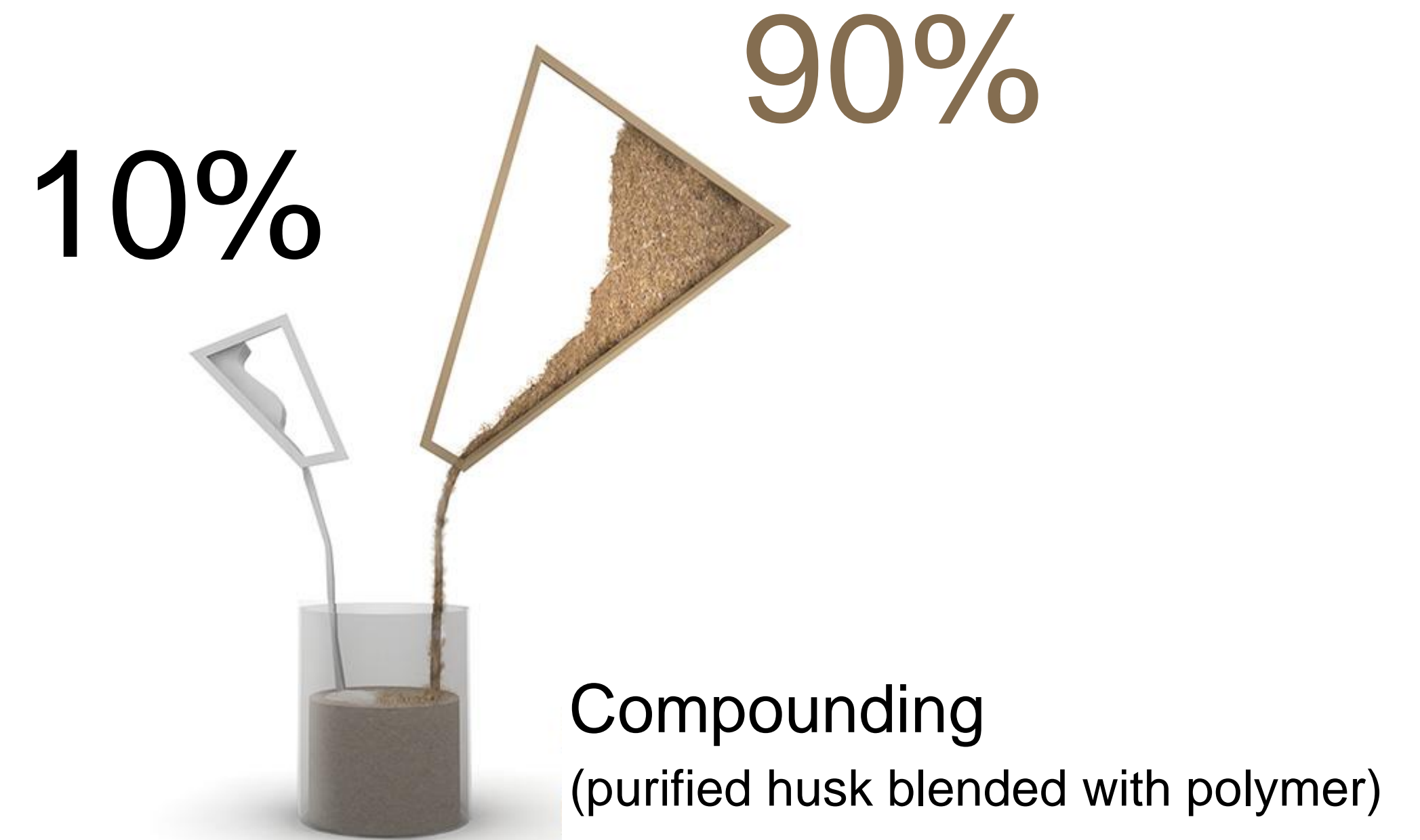
Rice husk. Some applications up to now

1. Compost Production and Soil Improvement
2. Biochar Production
3. Fuel and Briquette Production
4. Supplemental Construction Material
5. Bedding for Hog/Chicken Deep Litter Systems
6. Livestock Feed Supplement
7. Potting Mix Production
8. Mushroom Production Substrate

With our innovativ efforts we have been able to reconvert this by-product into a new material to replace PLASTIC



Collection of rice husks from mills



To produce with low energy cost and less weight
many kind of pieces



This revolutionary material will replace plastic not only in our value chains, but also in several other industries such as automotive, logistics, textiles, packaging or furniture.



Euroopa Maaelu Arengu
Põllumajandusfond:
Euroopa Investeeringud
maapiirkondadesse

oryzite

Many companies already see **Oryzite** as a present and future solution to make their production plants more sustainable



Euroopa Maaelu Arengu
Põllumajandusfond:
Euroopa Investeeringud
maapiirkondadesse

oryzite

Our goal is to **close the loop** with our circular economy strategic mindset



Euroopa Maaelu Arengu
Põllumajandusfond:
Euroopa Investeeringud
maapiirkondadesse

oryzite

Our innovation has **multiple benefits** such as:

- reducing CO₂, the carbon footprint
- and energy consumption



We are able to minimize the amount of resources and produce the **least waste.**



More facts

CO₂

- ▶ Every kg of Oryzite replaces 1 of plastic
- ▶ To produce 1 kg of plastic (700 W) are emitted 0,217 kg of CO₂
- ▶ To produce r 1 kg of Oryzite **16 times less!**



oryzite

Let's expand Oryzite

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite
a [re]defined material

oryzite



Euroopa Maaelu Arengu
Põllumajandusfond:
Euroopa Investeeringud
maapiirkondadesse

Not many years ago if we were here to introduce a new raw material that would replace plastic and reduce the amount of CO₂ in the atmosphere we would all think: and why is that?

Today we have shared an answer.





oryzite
a [re] defined material



Euroopa Maaelu Arengu
Põllumajandusfond:
Euroopa investeeringud
maapiirkondadesse