



**COMPOSTING & DIGESTION**  
IT'S NOT ABOUT LIMITS.

#ITSABOUT  
**GROWTH.**





**91,000 T**  
ORGANIC/GREEN WASTE



**4-6 WEEKS**  
COMPOSTING  
TIME



**41,000 T**  
COMPOST



**10.8 MN KWH**  
BIOMETHANE



**13,000 T**  
BIOMASS FUELS

KEY FIGURES 2023

**USING COMPOSTING AND DIGESTION TO  
CREATE NEW GROWTH AND GREEN ENERGY.**

#ITSABOUT

# ENDLESS RENEWAL.

What is impressive about nature is how it is the master of the perfect cycle. Things that wither, dry up or rot can ultimately bloom again in new life thanks to air and water. This is what we also do at the composting plant.

**SYSTEMATICALLY WE TURN ORGANIC WASTE INTO ENERGY AND BIOMASS.**

Our digestion technology produces biogas from part of the organic raw material that we receive. This biogas ultimately creates energy. Plus the composting process transforms biowaste into compost using air, moisture and microorganisms.

#ITSABOUT

# NATURAL PROCESSES.



## MANAGE COMPOSTING.

**HUNDREDS OF THOUSANDS OF HOUSEHOLDS DISPOSE OF KITCHEN WASTE AND OLD PLANTS EVERY DAY, AND THIS WASTE IS THE VITAL RAW MATERIAL OF COMPOST.**

However, to turn organic waste into a targeted, nutrient-rich foundation for new plant growth, we optimise the rotting process. This process creates compost in four to six weeks.



## IDENTIFYING, SEPARATING, PROCESSING.

**THE GARDEN AND KITCHEN WASTE, FOOD INDUSTRY SCRAPS AND NON-FOOD-GRADE GRAIN THAT WE RECEIVE ARE UNFORTUNATELY IMPURE.**

Even when people carefully separate their waste, there are still metal, glass, plastic and non-compostable elements that end up in the 'organic waste'. Our drum screens, magnetic separators, star screens and conscientious employees remove impurities from the waste.



## REUSING GREEN WASTE.

**OLD BUT GOLD: STICKS, ROOTS AND BRANCHES DELIVERED BY HOBBY GARDENER OR GARDEN PROFESSIONALS ARE CHOPPED UP AND RETURNED TO NATURE.**

A natural raw material, ideal for agriculture and for recultivating old mine sites. Elements made of wood are suited to making organic fuel for wood-fired power stations. An alternative to fossil fuels that impact the climate.

#ITSABOUT

# SYSTEMATIC BIOLOGY.



## **DRASTICALLY REDUCING ROTTING TIMES.**

**NATURE CREATES EVERYTHING, BUT IT DOES TAKE ITS TIME. UNCONTROLLED ROTTING PROCESSES TAKE SEVERAL YEARS IN NATURE.**

A controlled composting system, on the other hand, makes the rotting process significantly shorter. After four to six weeks, organic waste turns into something extremely useful: an environmentally friendly soil improver. A team of natural helpers – air, water and microorganisms – works permanently to make this happen.



## **DESTROYING GERMS AND ODOURS.**

**THE TEMPERATURE AT THE CENTRE OF THE ROTTING MATERIAL RISES TO APPROXIMATELY 70°C, WHICH KILLS OFF HARMFUL GERMS AND WEED SEEDS NATURALLY.**

The oxygen for the microorganisms flows from below through a perforated floor. The exhaust air are sucked off and go through a filter system that neutralises the disruptive odours organically.



## **TRANSFORMING CLIMATE-DAMAGING GASES.**

**METHANE HAS A CLIMATE IMPACT THAT IS 28 TIMES GREATER THAN CARBON DIOXIDE, YET IT IS ALSO A USEFUL FUEL. WE MAKE IT HARMLESS SO THAT WE CAN PRODUCE ENERGY.**

For this to happen, a variety of microorganisms work together in our digestion system. It creates biogas after two to three weeks and, when 'refined', the gas serves as a source of energy. It is climate-friendly throughout the entire cycle.

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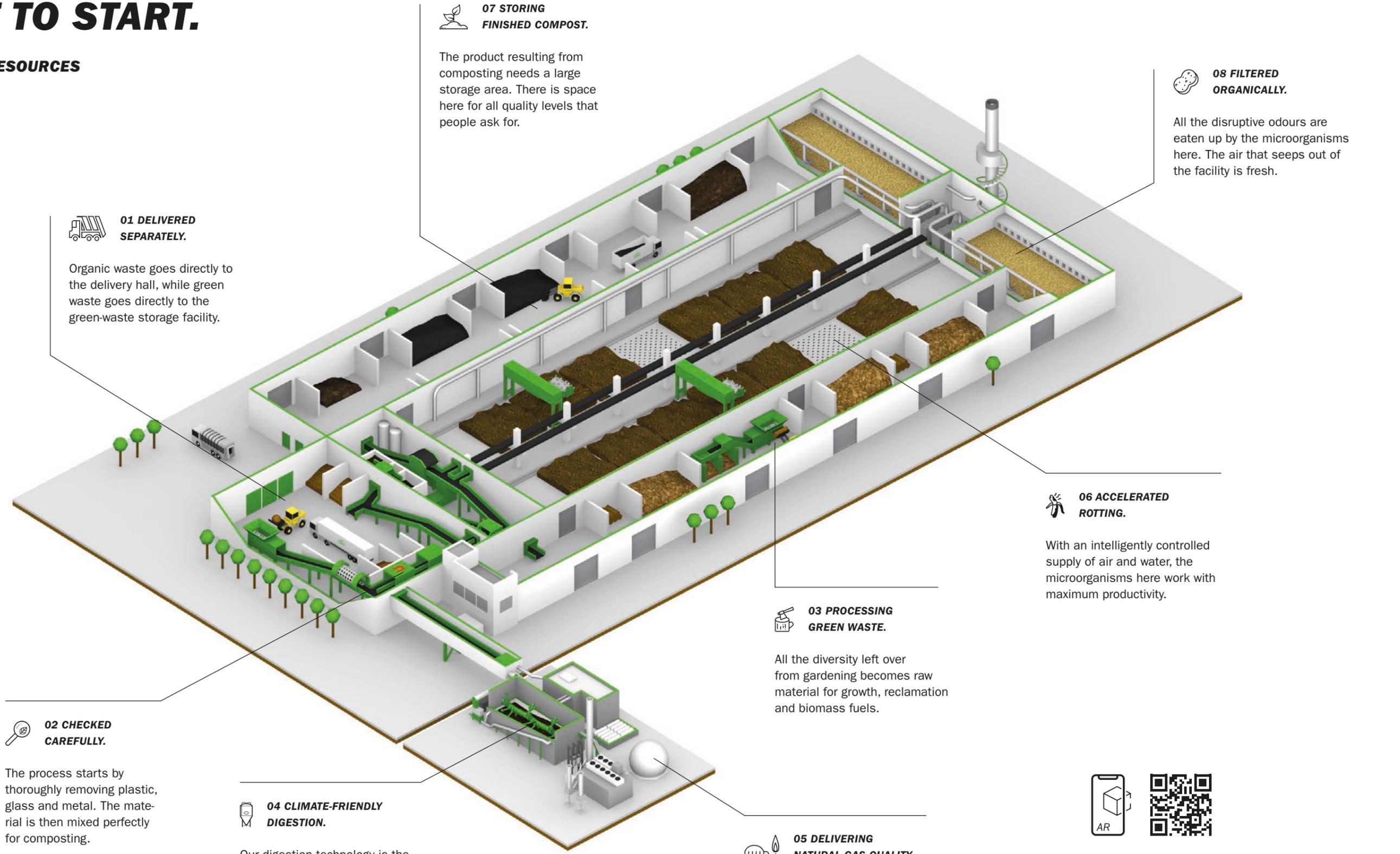
**NATURAL, DOWN TO EARTH AND HONEST:** 'Jupp ech öko' is a genuine Cologne product made sustainably from 100% recycled paper. It has Blue Angel certification.

**#ITSABOUT**

A young boy with curly hair, wearing a plaid shirt over a white t-shirt and blue jeans, is walking through a forest. He is looking down and touching his ear. The forest floor is covered in pine needles and logs, with tall trees in the background.

# EVERYTHING FROM START TO START.

## RECLAIMING RESOURCES STEP BY STEP.



**01 DELIVERED SEPARATELY.**

Organic waste goes directly to the delivery hall, while green waste goes directly to the green-waste storage facility.

**02 CHECKED CAREFULLY.**

The process starts by thoroughly removing plastic, glass and metal. The material is then mixed perfectly for composting.

**04 CLIMATE-FRIENDLY DIGESTION.**

Our digestion technology is the basis for the production of bi-methane, which is fed into the natural gas network.

**07 STORING FINISHED COMPOST.**

The product resulting from composting needs a large storage area. There is space here for all quality levels that people ask for.

**03 PROCESSING GREEN WASTE.**

All the diversity left over from gardening becomes raw material for growth, reclamation and biomass fuels.

**05 DELIVERING NATURAL GAS QUALITY.**

The biogas obtained is brought to the quality of natural gas by drying, desulfurization and amine scrubbing.

**08 FILTERED ORGANICALLY.**

All the disruptive odours are eaten up by the microorganisms here. The air that seeps out of the facility is fresh.

**06 ACCELERATED ROTTING.**

With an intelligently controlled supply of air and water, the microorganisms here work with maximum productivity.



**SCAN THE QR CODE AND EXPLORE THE DETAILS OF THE PLANT, USING THE AUGMENTED-REALITY APP RENE:)**