

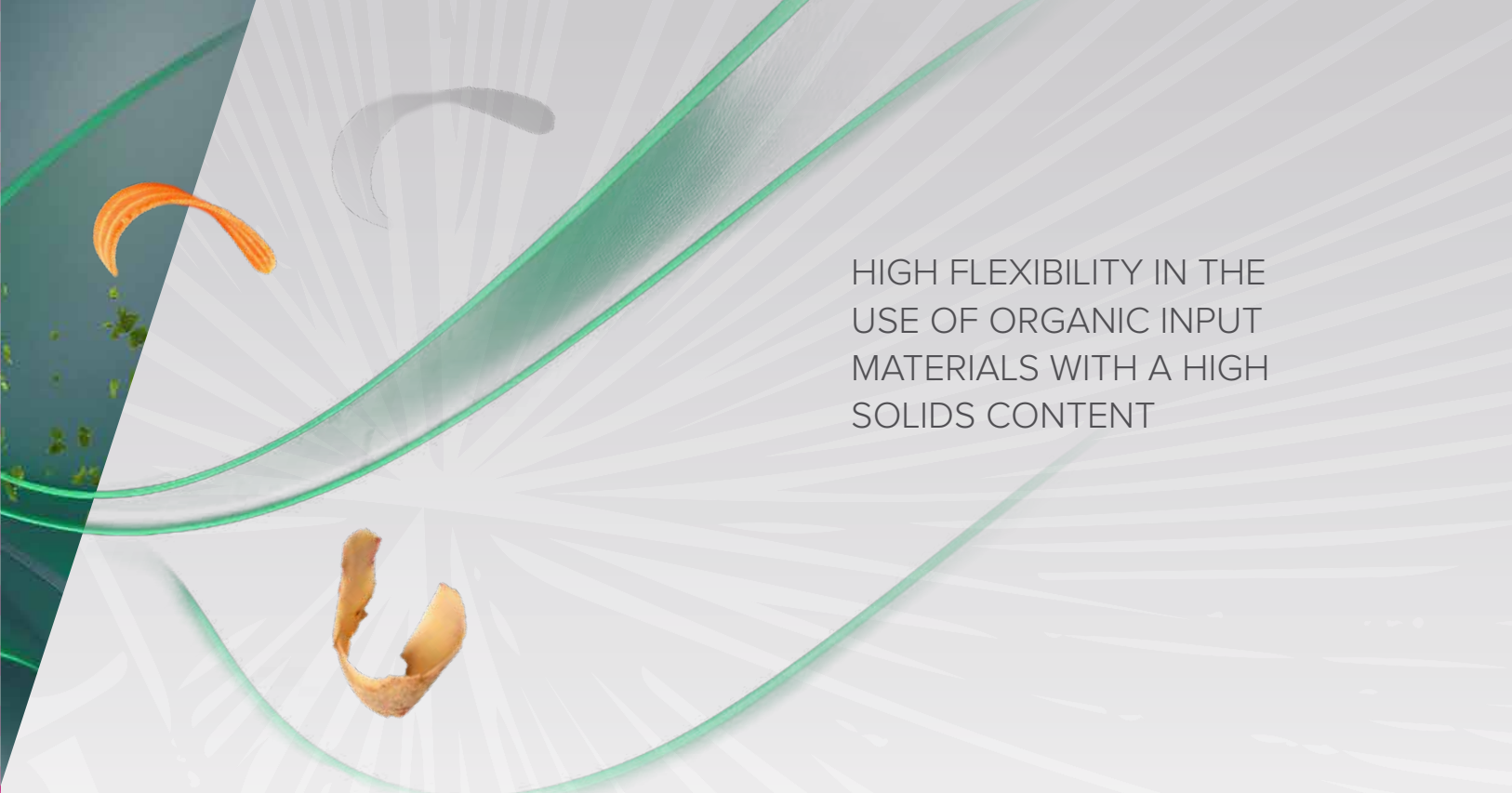
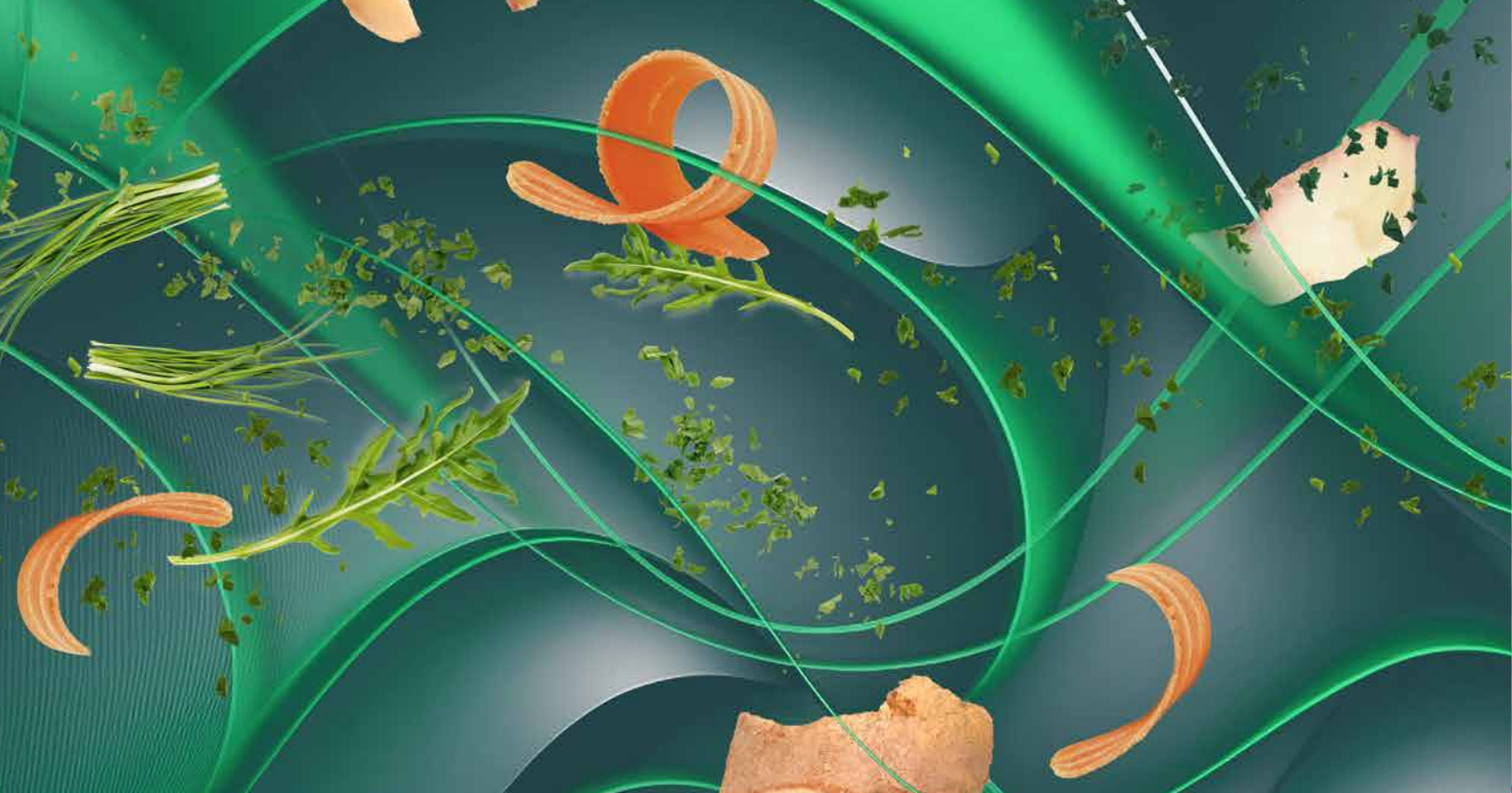
A close-up, low-angle shot of industrial machinery, likely a conveyor system or a sorting machine, featuring a complex arrangement of metal beams and rollers. Two bright green laser lines curve across the scene, adding a futuristic or high-tech feel. The background is dark and out of focus.

THÖNI ENVIRONMENTAL ENGINEERING

TNV WET DIGESTION SEMI DRY

HIGHEST GAS YIELDS

- Input materials with a high dry matter content
- Flexible feeding technology
- Optimum mixing of the input
- High degree of degradation of the substrates
- Maximum energy production
- Low maintenance requirements



HIGH FLEXIBILITY IN THE
USE OF ORGANIC INPUT
MATERIALS WITH A HIGH
SOLIDS CONTENT

VALUABLE GREEN ENERGY

SOPHISTICATED AND INNOVATIVE TECHNOLOGY

The TNV Thöni Wet Digestion Semi Dry system is characterised in particular by a high degree of flexibility in the use of organic input materials with a high solids content and a low proportion of impurities.

The centrepiece of these digestion plants is the TNV Thöni wet digester which is continuously filled with liquid and solid input materials using a special feeding technique. Slowly rotating paddle agitators mix the substrate optimally and thus enable high biogas yields.

TREATMENT AND FEEDING TECHNOLOGY

After delivery, input materials are shredded, freed of impurities and then transferred to an intermediate container, where they are mixed and homogenised. From there, the processed, semi-liquid material mixture is pumped into the digester.

The digester is fed with solid input materials via the TNV Thöni feedhopper. The substrate quantities are dosed into the digester fully automatically via an integrated weighing system using screw conveyors.

PUMP TECHNOLOGY AND HEATING

The central pumping station, the heating distribution system and the electrical control system are located in the Thöni technical container or in a fixed building located in between the digesters.

The pumping station enables liquids and substrates to be pumped from one location to another. This saves energy, time and costs.

The digester heating is a heating system with several independent heating circuits that guarantees ideal, even and efficient heat distribution.

TNV PADDLE AGITATOR

The patented TNV paddle agitator is ideal for efficiently mixing a wide variety of input materials with a very high dry matter content.

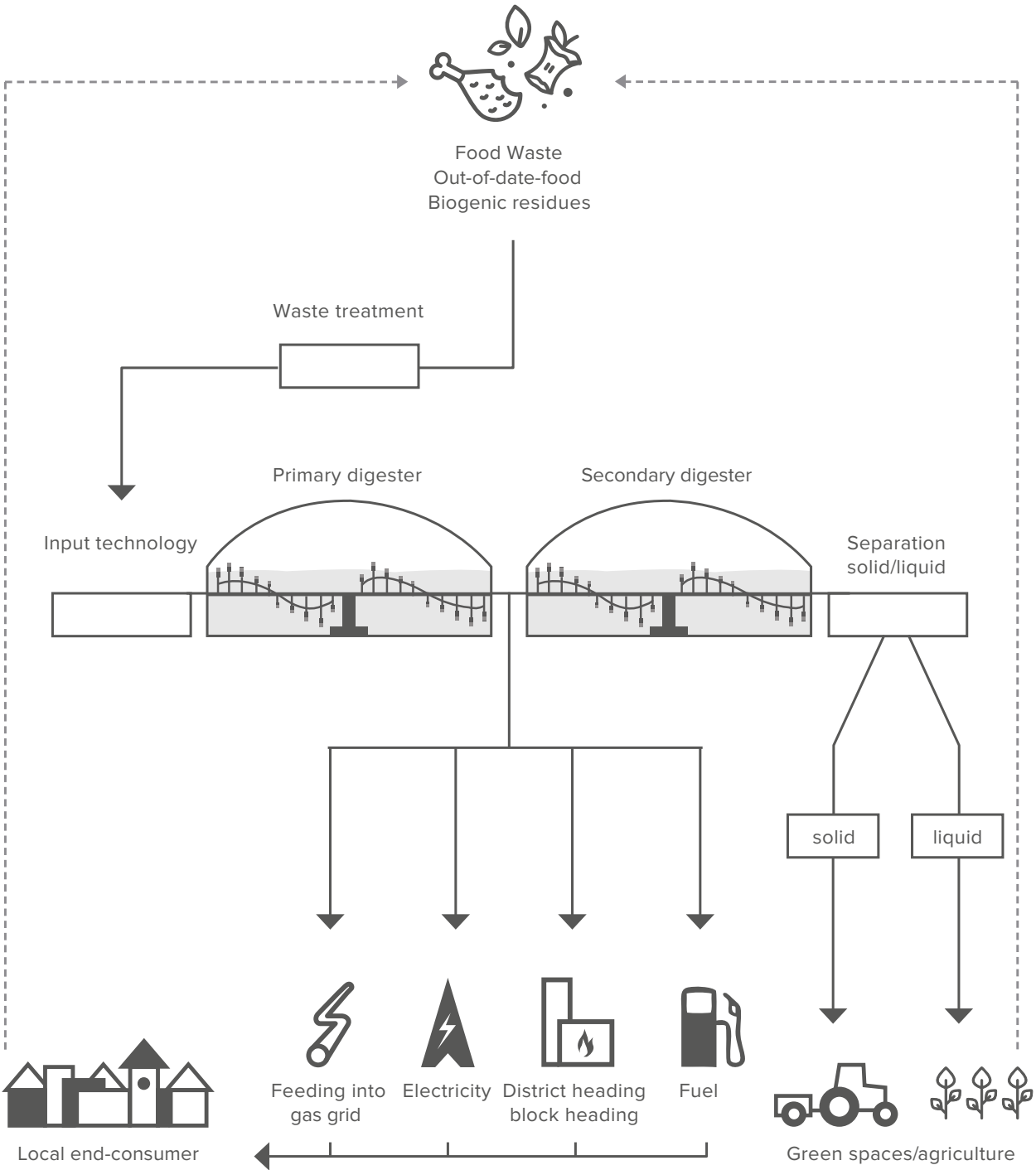
Specially designed paddles homogenise the material and keep it in motion so that heavy impurities are largely prevented from settling on the digester floor and potential suspended matter cannot form any floating layers. This efficient stirring performance keeps input quantities low and at the same time delivers a high biogas yield with minimum energy consumption.

TNV PADDLE
AGITATORS ENSURE
OPTIMUM MIXING OF
THE SUBSTRATE.



ECOLOGICAL CYCLE

There is power in agricultural by-products and biogenic residues (e.g. food waste, out-of-date food). We use them to produce renewable bioenergy and fertiliser.



certifications: ISO 9001, ISO 14001

THÖNI ENVIRONMENTAL ENGINEERING

We have been developing, realising and operating biogas plants for over 30 years. We design innovative system solutions world-wide to utilise organic waste and renewable raw materials as a source of renewable energy. Our team advises and supports you from concept to successful commissioning of the biogas plant.

30 YEARS OF EXPERIENCE IN DESIGNING WASTE TREATMENT PLANTS

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INDEPENDENT, STRONG FAMILY BUSINESS
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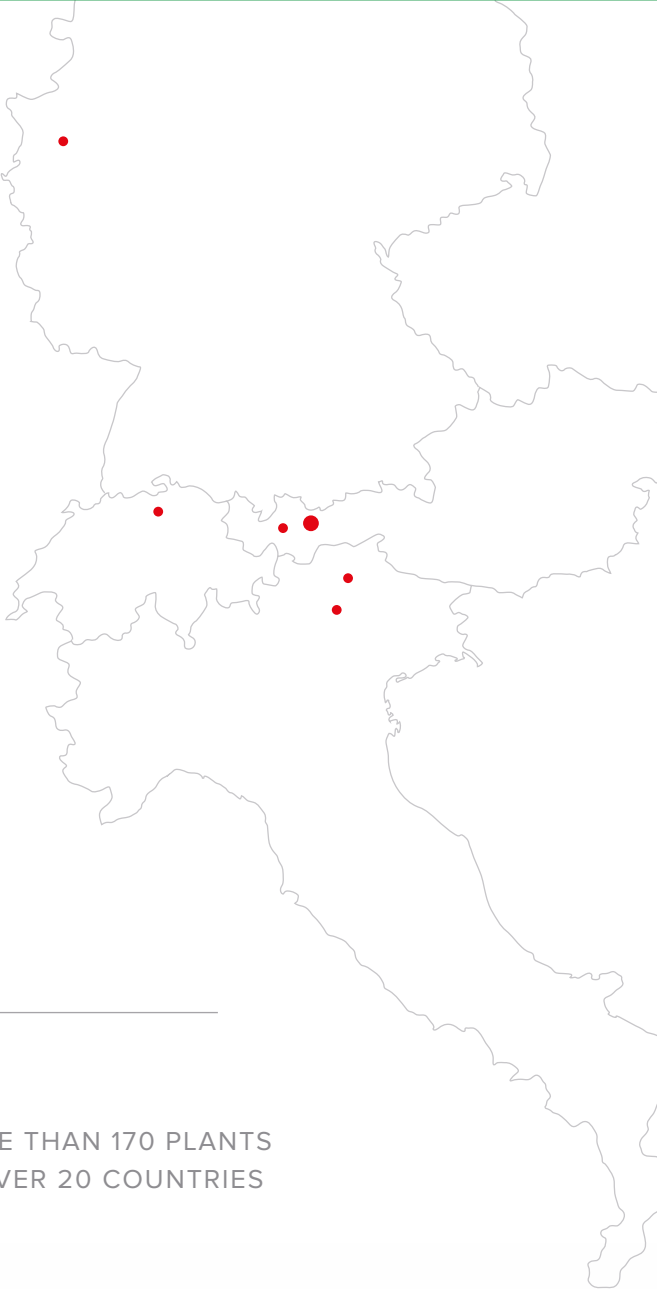
MORE THAN 170 PLANTS IN OVER 20 COUNTRIES
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PRODUCTION OF KEY COMPONENTS IN-HOUSE
- 

TEAM OF HIGHLY QUALIFIED SPECIALISTS
- 

ALL-ROUND SERVICE FROM CONCEPTION TO COMMISSIONING
- 

THÖNI CARE FOR SUCCESSFUL PLANT OPERATION





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