

# GROWTH BY RECYCLING

HONKAJOKI

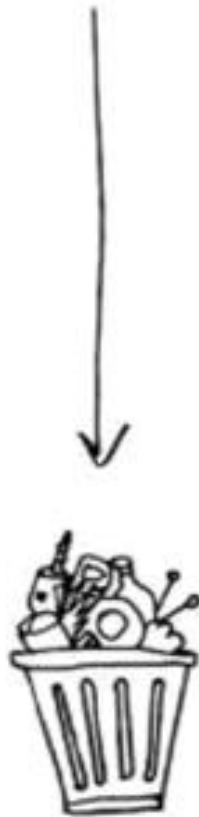
Ms. Reetta Nevala



# TOWARDS CIRCULAR (BIO)ECONOMY

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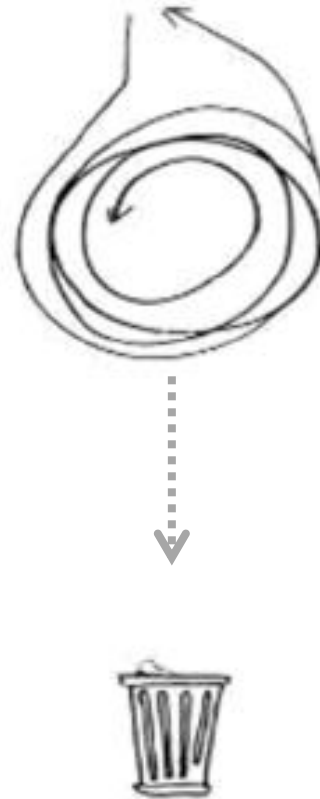
LINEAR ECONOMY



RECYCLING ECONOMY

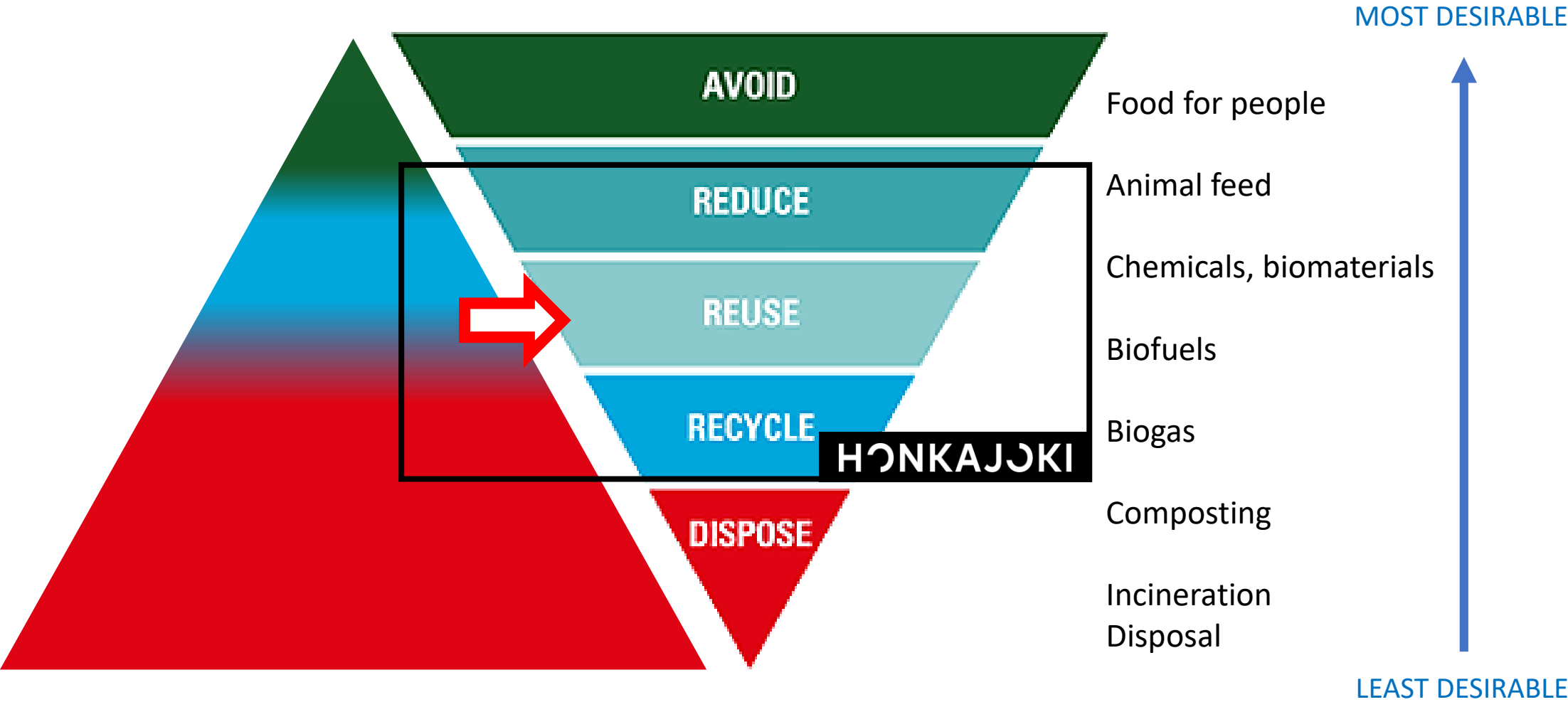


CIRCULAR ECONOMY



**HONKAJOKI®**

# MINIMIZING AND REPURPOSING FOOD WASTE – UPCYCLING



# SUMMARY

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- The Honkajoki Group processes animal by-products from slaughterhouses and meat cutting plants into organic raw materials for feed, pet food, fertilizer and cosmetics industries.
- In addition, we collect and treat dead animals from farms and provide disposal and sterilization services for animal waste facilities.

*“During Honkajoki Oy's 50-year journey, we have created the circular economy concept, which today is one of the most efficient and responsible models of animal raw materials processing in the world.”*

*- Kari Valkosalo, CEO*

- Sustainable agricultural productivity and efficient use of resources are the cornerstones of our operations.
- Our policies are based on the principles of circular economy.

**HONKAJOKI®**



Refines its  
customers organic  
by-products  
according to  
circular economy  
principles

- **Honkajoki Oy, founded 1967**
  - Atria Oyj 50%
  - HKScan 50%
- **Findest Protein Oy, founded 1995**
  - Honkajoki Oy 66,9%
  - Atria Oyj 33,1%
- **Remsoil Oy founded 2018**
  - Honkajoki Oy 60%
  - Private owners 40%
- **GMM Finland Oy, founded 2017**
  - Honkajoki Oy 100%
- **(HonkaLeather Oy, founded 2015)**
  - Honkajoki Oy 45%
  - Family Halkola 55%



Photo: Mika Tuomola

# Rendering process transforms meat industry by-products into safe and useful form

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## WHAT ARE ANIMAL BY-PRODUCTS?

MEAT OR OTHER TISSUES THAT ARE NOT USED AS FOOD

PRODUCTION ANIMALS DIED OR TERMINATED AT FARMS

DESTRUCTION RELATED TO PREVENTION OF EPIDEMICS

FORMER FOODSTUFFS

## WHAT ARE THE BENEFITS?

### SAFETY

Strict traceability criteria across the industry

### HEALTH

Prevents diseases from spreading

### SUSTAINABILITY

Decreases the amount of waste and supports circular economy

### ADDS VALUE

To meat production value chain

# ANIMAL BY-PRODUCTS IN FINLAND

TOTAL AMOUNT ~260.000 TONS

HONKAJOKI OY  
184.000 TONS

PROTEIN MEALS  
42.500 TONS

FERTILIZER  
6.000 T

FEED  
29.500 T

ENERGY  
7.000 T

ANIMAL FAT  
FOR  
BIODIESEL  
PRODUCTION  
27.000 TONS

ANIMAL BY-  
PRODUCTS  
DIRECTLY TO  
FUR ANIMAL  
FEED  
PRODUCTION  
40.000 TONS

TO  
BIOGAS  
PLANTS  
36.000  
TONS



## Category 1 (High risk)

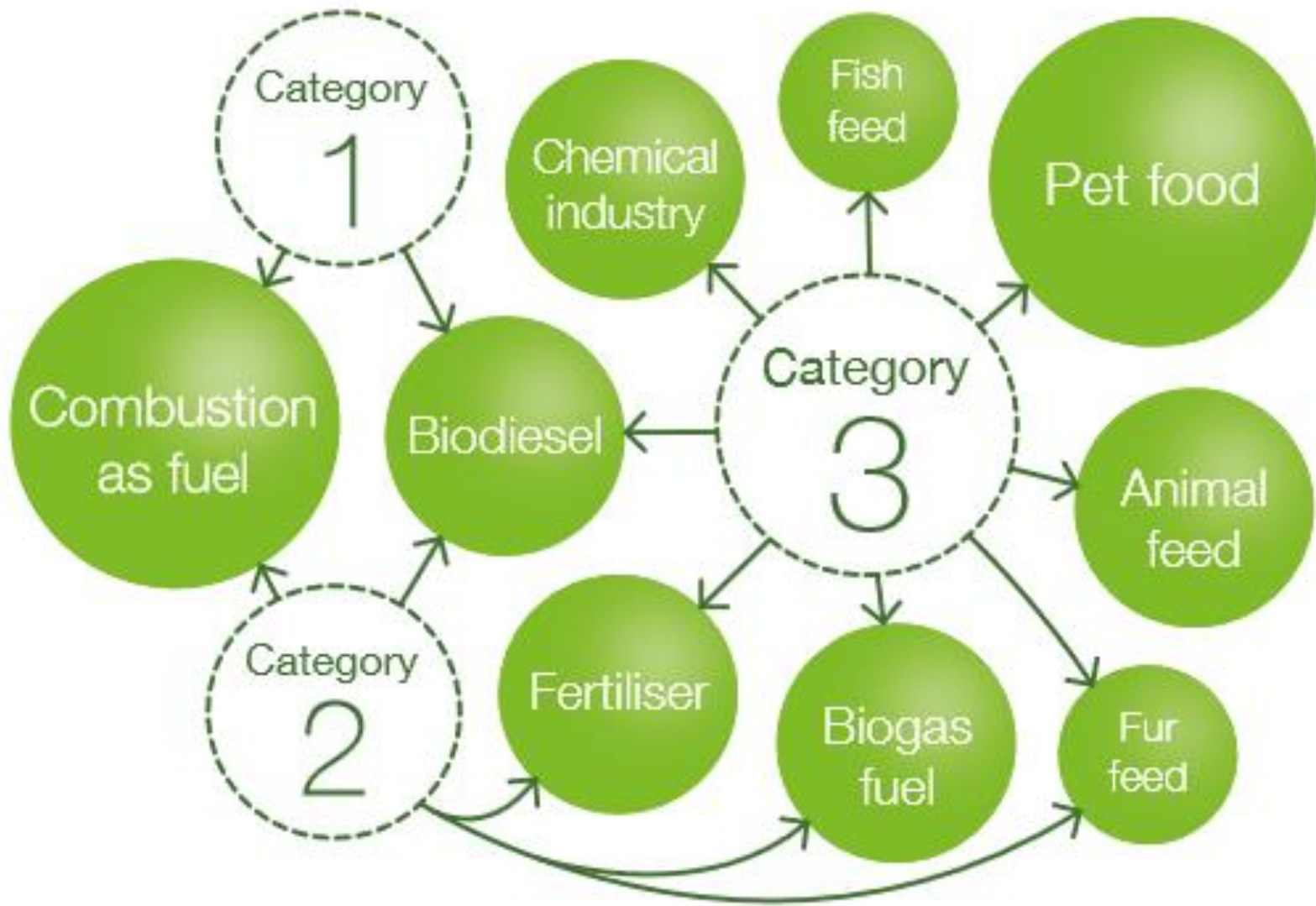
- Specified risk material related to TSE or Scrapie
- Fallen stock (ruminants)
- Bovine spinal cord and brain
- Materials that have been in contact with category 1 material

## Category 2

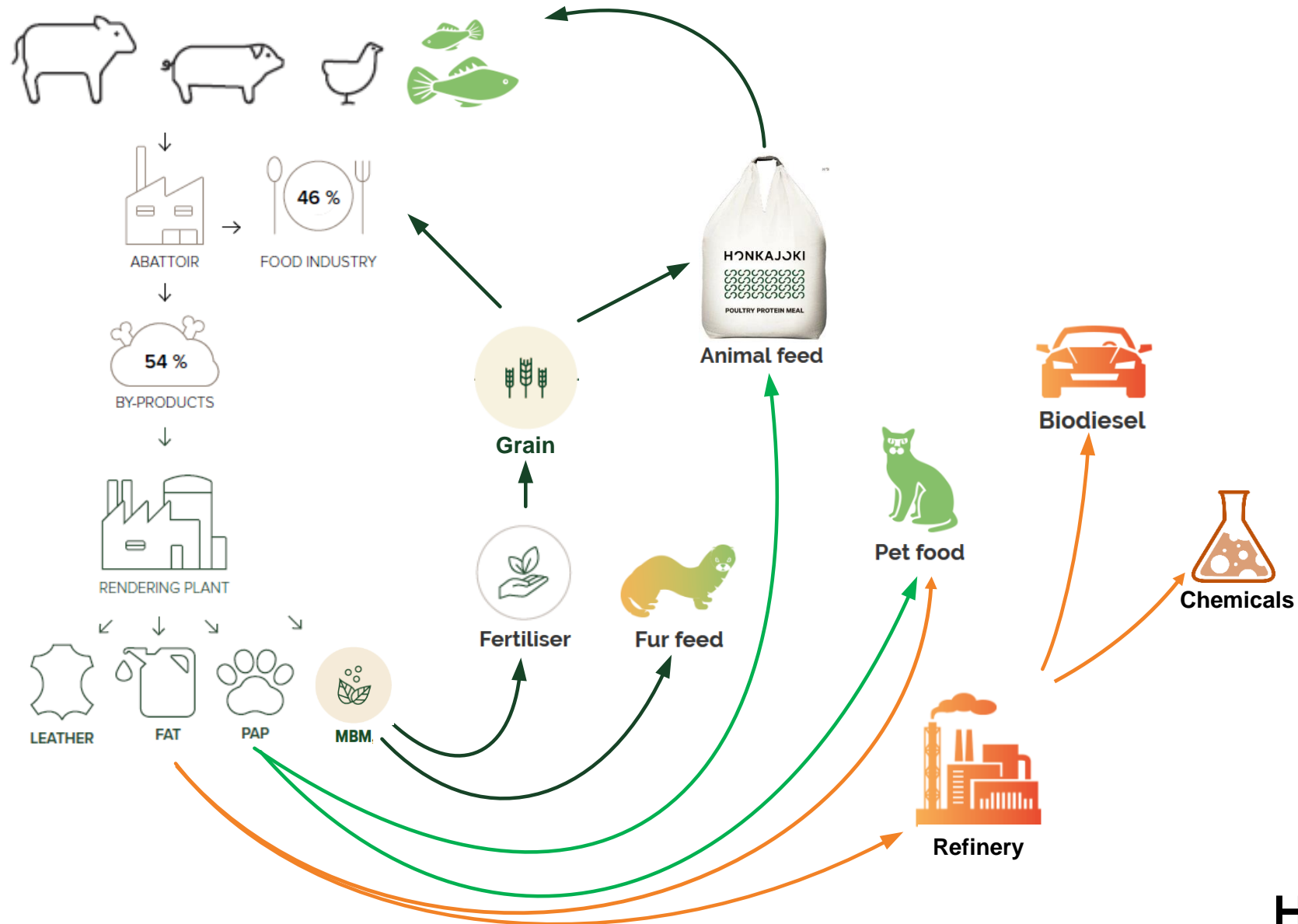
- Animal products that are not suitable for human consumption
- Fallen stock (non-ruminants)

## Category 3 (Low risk)

- *Ante* and *post mortem* inspection accepted material such as bones, organs, fat tissue etc.
- Animal by-products without specific disease risk (hair, horns, feathers, egg shells)
- Former foodstuffs, discarded food



# CIRCULAR BIOECONOMY – NUTRIENT RECYCLING



# VALUABLE END PRODUCTS

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## PURIFIED FAT

- ✓ Animal nutrition: Feed ingredient that contributes to healthy animal diets
- ✓ Raw material for renewable fuels
- ✓ Other technical purposes



## PROCESSED ANIMAL PROTEIN

- ✓ Complex of three key nutrients; protein, fat and minerals.
- ✓ Animal nutrition: Feed ingredient that contributes to healthy animal diets (aquaculture, pet food)





# CAREFUL QUALITY CONTROL PREVENTS RISKS

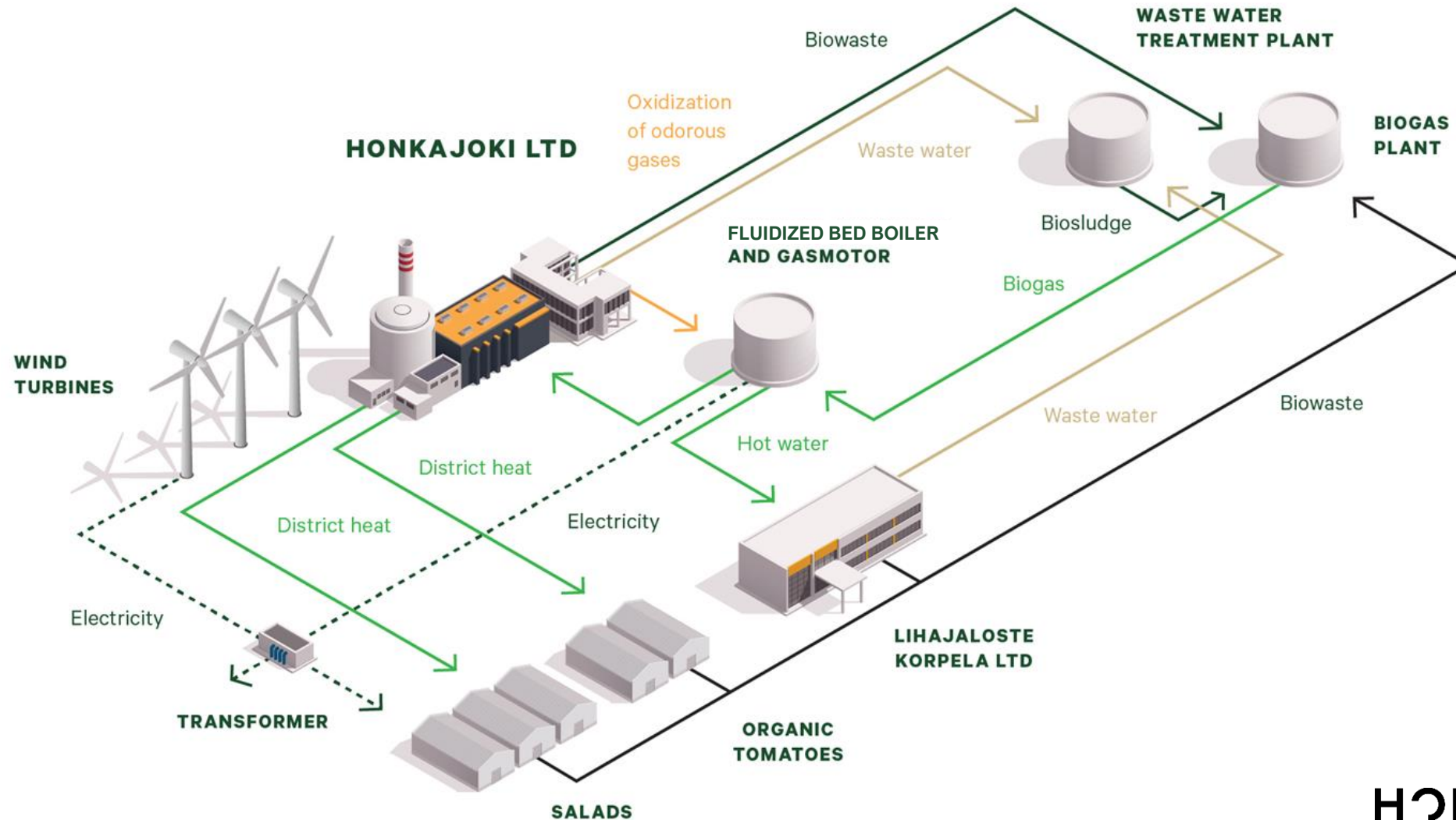
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- **High standards and ethics lead our operations.**
- We comply with the monitoring programs, which define the studies to be carried out, the analytical and sampling methods, the frequency of inspections, the limit values, the results and the corrective and preventive measures.
- The monitoring programme consists of statutory procedures for good hygienic practices and production methods.



# KIRKKOKALLIO AGRO-ECOLOGY PARK

## Industrial symbiosis prevents waste









**THANK YOU!** [reetta.nevala@honkajokioy.fi](mailto:reetta.nevala@honkajokioy.fi)

