

# **WASTE** TO ENERGY



# Waste acceptance & balancing system



## Energy efficient integrated WWTP & organic solid waste management concept



# **TYPICAL LAYOUT FOR MIXED SOLID WASTE**

#### Material recovery facility



# SUPPLEMENTARY TECHNOLOGY

OPTIMIZING YOUR PRODUCTS TO THE DEMANDS OF THE MARKET

#### **Conditioning of the biogas**

- Biological desulphurization & dewatering
- Biogas upgrading to CNG / LPG
- By product CO<sub>2</sub> & H<sub>2</sub> for the industry

#### **Different usage of biogas**

- Heat → hot water or steam boiler
- Electricity & heat → combined power & heat gas engine, turbine

#### Usage of heat

- Cooling with absorption chiller
- Thermal drying

#### Fertilizer production from solid digestate

- Bio-drying of solid digestate
- Production of ammonia sulfate in combination with exhaust air & liquid digestate treatment

#### Wide possibility of organic waste input streams

- De-packing of expired food waste
- De-stoning of chicken dung with automatic removal before anaerobic treatment
- Optimized waste storage





Renewable energy

Zero-waste



Convert waste to energy

# **INDUSTRIAL APPLICATIONS**

#### Soft & hard drink industry

- Highly COD polluted wastewater
- Residues of beverage production

#### Dairies

- With whey polluted wastewater
- Agricultural residues from milk supplier, cow dung & straw

#### Potato & corn chips production industry

- With starch polluted wastewater
- Residues of potatoes & corn from production

#### **Slaughterhouses**

- With blood & fat polluted wastewater
- Residues of meat

#### Waste management industry

- Organic waste from MSW
- Food waste from restaurants & canteens
- Expired food (packed/unpacked)

# Vegetable & fruit industry Sugar & candy production industry Pulp & paper industry



# **OUR SCOPE OF SERVICES**

- Process flow analysis & feasibility study
- Basic & detailed engineering
- Machinery selection & installation
- Project & construction management
- Commissioning & training
- Service & maintenance



Green infrastructure

## **CONTACT US TO LEARN MORE**

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