



getliņi eko

Getliņi EKO experience in waste recycling, energy production and its use

27.04.2022

Key Statistics

- ▲ Size – 87 ha (32 ha old recultivated landfill)
- ▲ Serves 11 municipalities
- ▲ Served population ~50% of Latvian inhabitants
- ▲ Total waste ~ 500 000 t/a
- ▲ MSW ~ 300 000 t/a



Key Statistics (2)

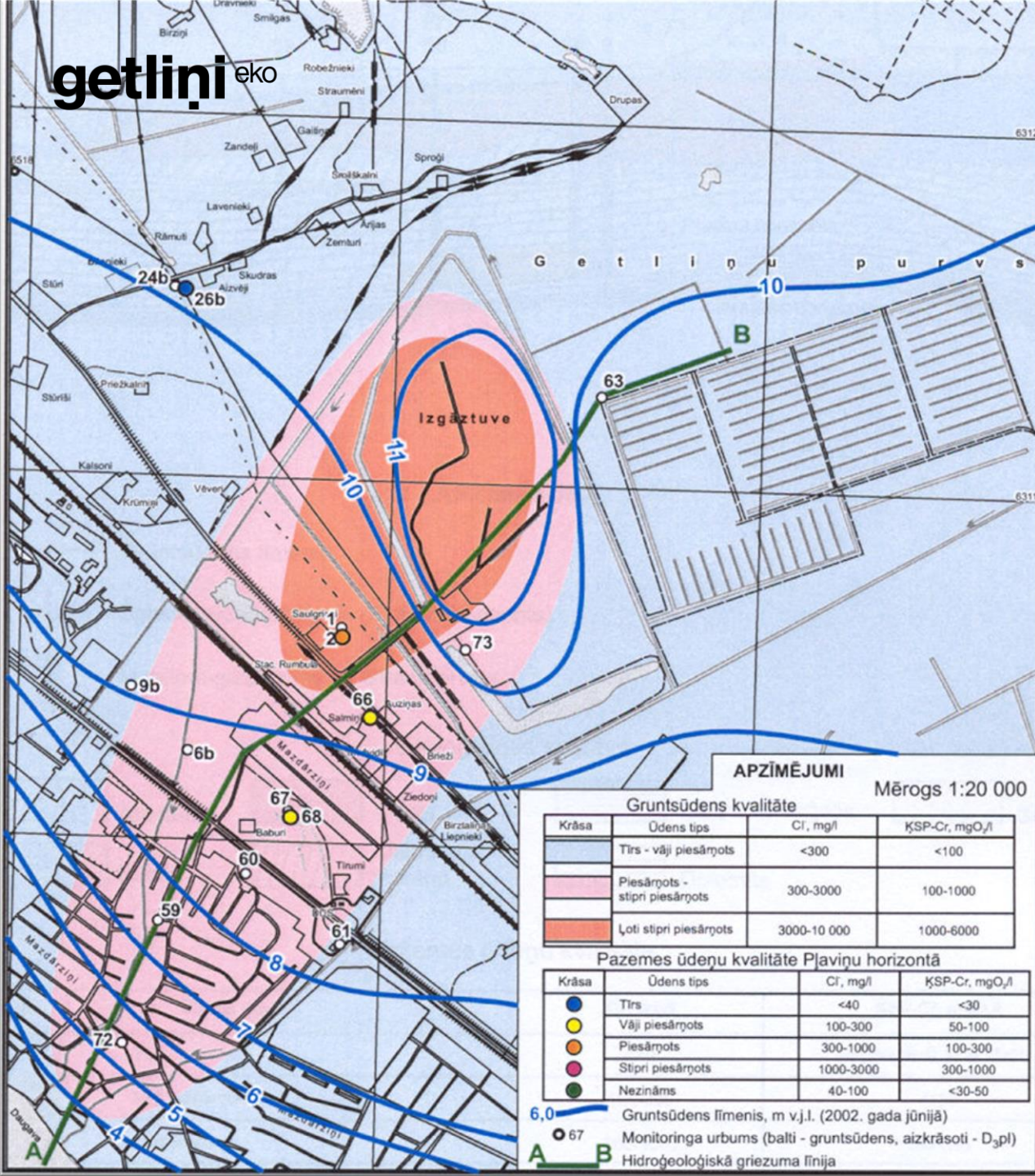
- ▲ Shareholders – 2 municipalities (Riga City 97,92% and Ropaži County 2,08%)
- ▲ Distribution of decision making between shareholders – 50/50
- ▲ Located 15 km from Riga City centre in Ropaži County
- ▲ 4 business directions – MSW landfill, CW recycling, energy production and greenhouses
- ▲ Profit from energy production and greenhouses decrease MSW tariff

On the edge of Getliņi peatbog





getliņi eko



Historical pollution

- Leachate formation and the resulting pollution of surface and groundwater
- Atmospheric pollution from landfill gas, which causes the 'greenhouse effect' and contributes to global warming

STEP 1: Environmentally safe landfilling

Waterproof base

Collection and treatment of infiltrate

Collection and treatment of landfill gas

Development milestones (1)

Year	Development steps
1970 - 1997	Operation of dumpsite in the former peat quarry
1997	The municipalities of Riga and Stopiņi agree that the landfill inherited from the Soviet times must be turned into a modern landfill
1998	World Bank loan for the conversion of a landfill (The loan is being repaid in 2015)
2002	Getliņi starts energy production
2003	Getliņi becomes financially self-sufficient and in the future fully ensures their daily activities and necessary investments
2009	Getliņi installs the leachate treatment facility



Energy Unit

▲ Capacity – 6MW

▲ Biogas consumption – 14 mil. m³

▲ Methane - 54,2 %

▲ Produced electricity – 31 GWh

▲ Produced heat – 21 GWh

STEP 2: Preparation and reduction of waste to landfill

Development milestones (2)

Year	Development steps
2011	The first phase of Getliņi greenhouse is opened
2014	The second phase of Getliņi greenhouse is opened
2015	MSW recycling facilities start operating
2015	CW recycling facilities start operating
2017	The third phase of Getliņi greenhouse (full-led) is opened, including processing line
2022	Biowaste recycling facility start operating



MSW sorting facility

- ▲ Capacity – 300 000 t/y
- ▲ Separation of metal, plastic, paper
- ▲ Separation of BDW
- ▲ Production of RDF material

STEP 3: Circular economy



CW processing facility

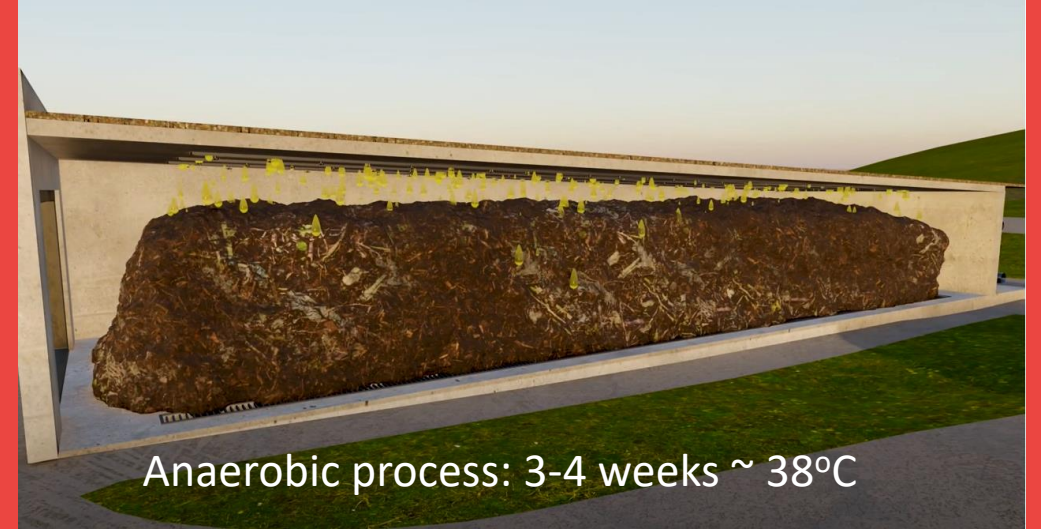
▲ Capacity 90 000 t/y

▲ Separation of metal

▲ Production of rubble and screenings

▲ For own consumption and sale

Biowaste processing facility





Greenhouses

- **Size – 1 ha**
- **Production time: October - June**
- **Tomatoes ~ 500 t/y**
- **Cucumbers ~ 500 t/y**



Site plan



Biowaste processing facility

MSW sorting facility

Greenhouses

Recultivated dumpsite

CW processing facility

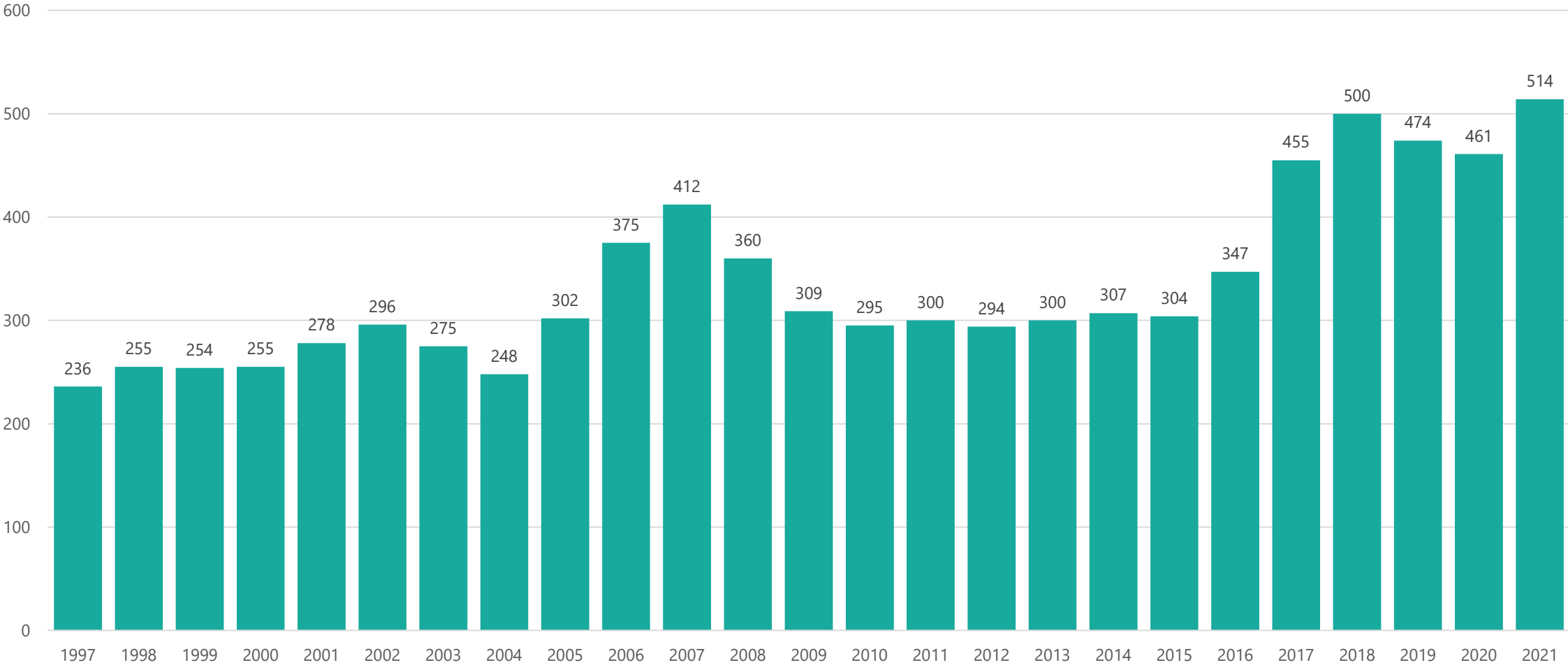
Final disposal cells

Energy unit

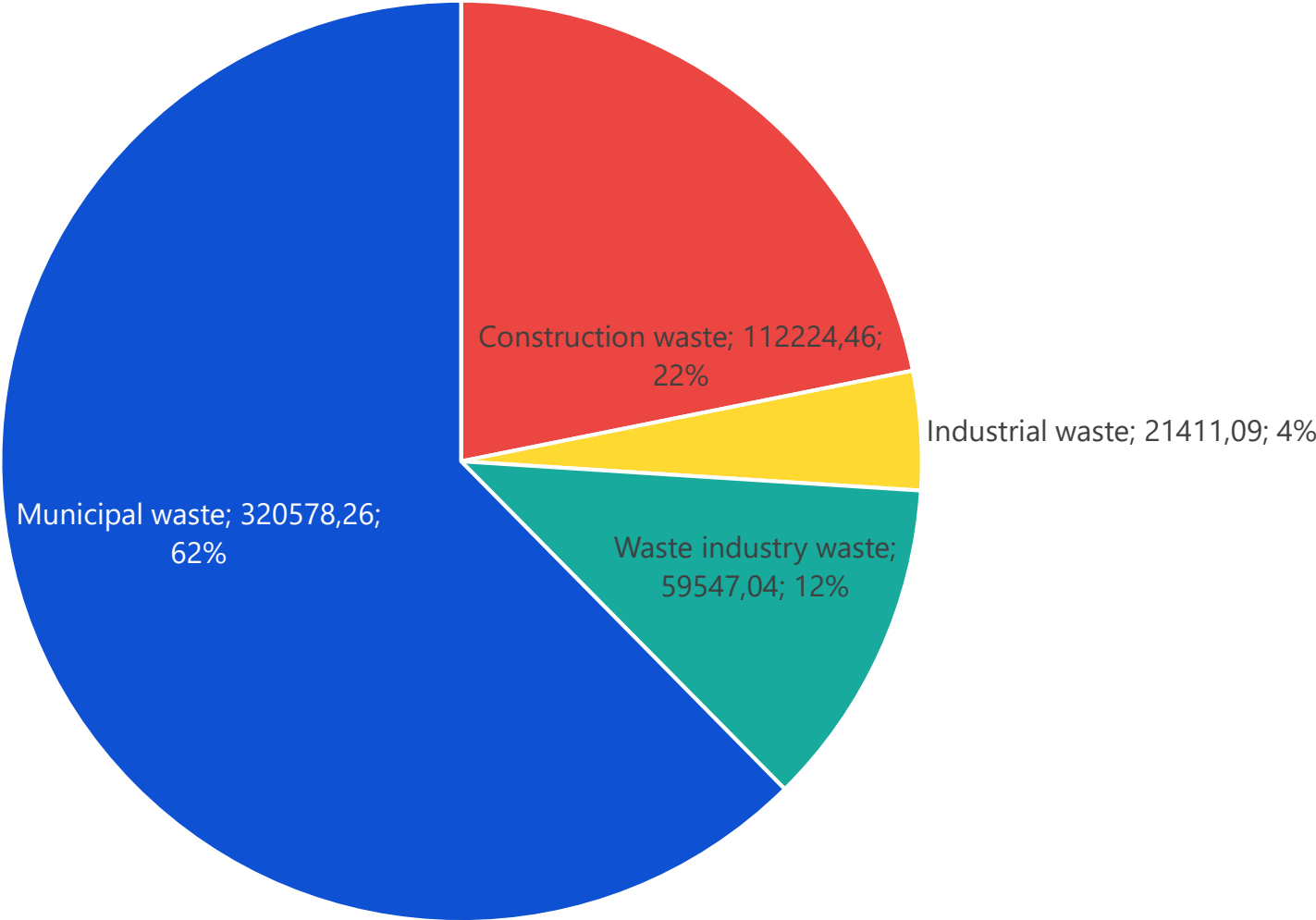
Biowaste processing plant time frame

Year	Development steps
2015	Environmental impact assessment
2017	Preparation of project application
2018	Conclusion of contracts with donor, bank and contractors
2019	Construction project development
2019-2021	Construction works
2021	Starting up in test mode
2022	Completion of the project, start of the main activity

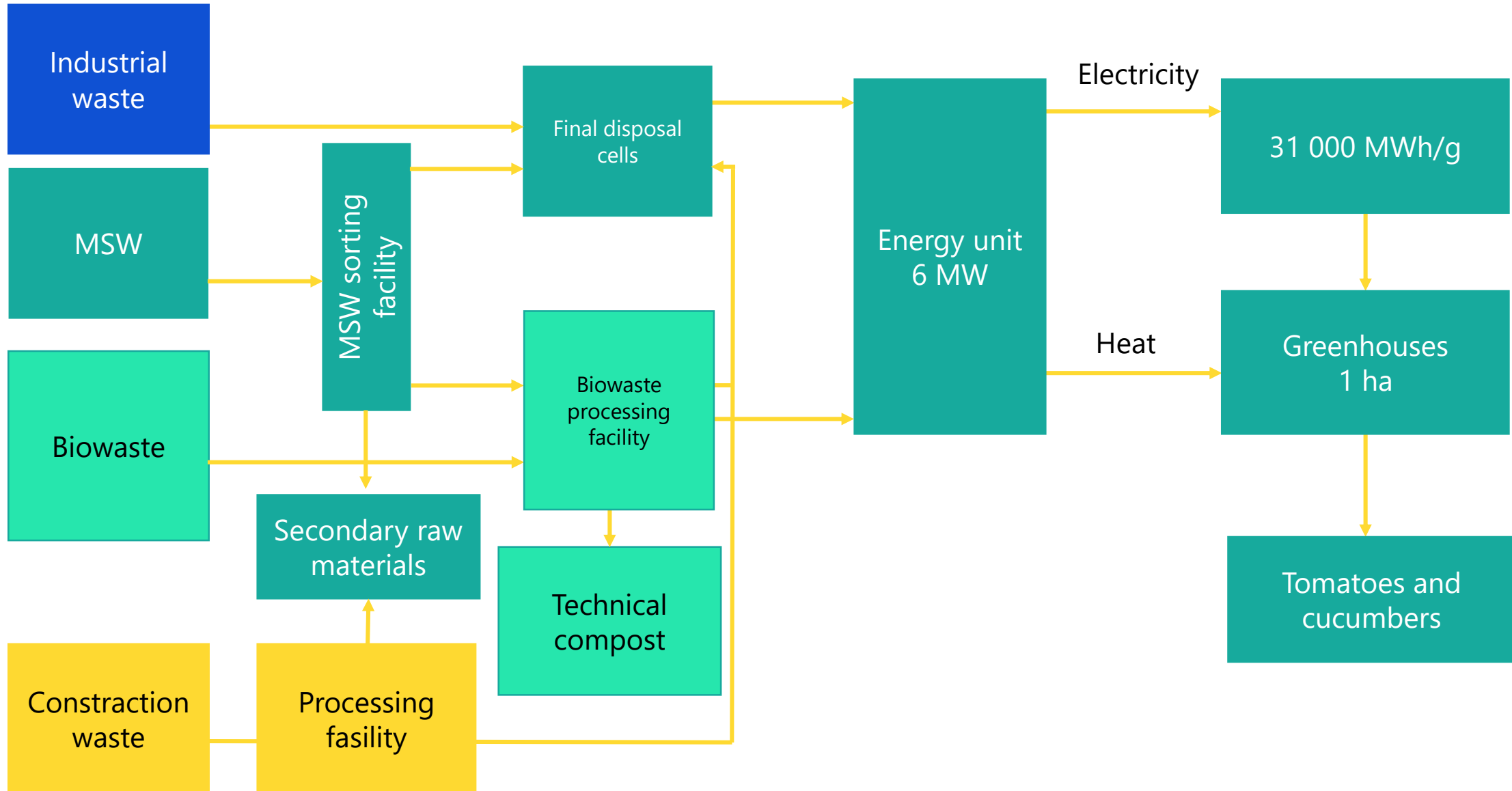
Incoming waste (thousand t/a)



Incoming waste by type, 2021



Process diagramm



Increase in MSW tariff (EUR/t)

