Role of biogas in the circular bioeconomy

Gyalai-Korpos Miklós

Circular economy

LINEAR ECONOMY

RESOURCE EXTRACTION

PRODUCTION

DISTRIBUTION

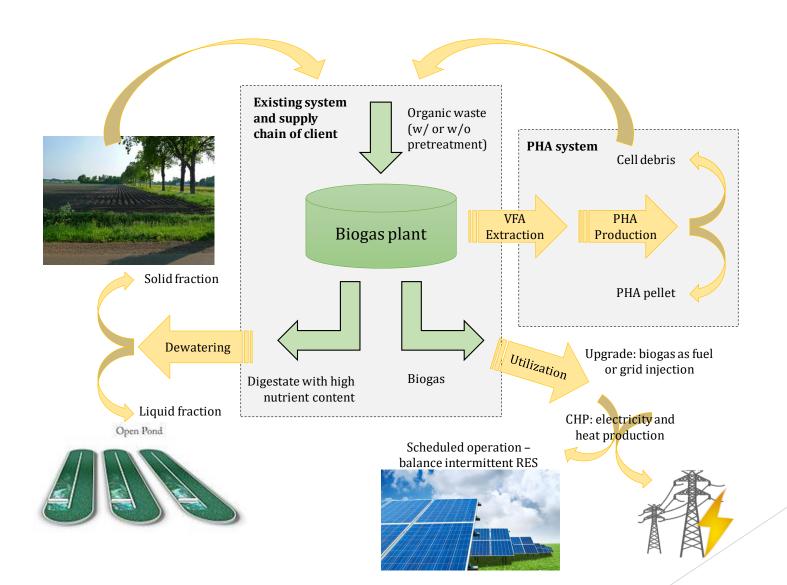
CONSUMPTION

WASTE

CIRCULAR ECONOMY



Role of biogas



Case study



Industrial symbiosis based production





Product #1

Oyster mushroom:

- ➤ Rich in vitamins
- Cheap protein source
- Low footprint production

Air or direction

Waste management – biogas production

Leftover — predigested straw valorisation extraction extraction

Product #3

Biogas for:

- > On-site heat supply
- > Electricity
- > Upgrade

Product #2

Pre-digested straw:

- ➤ Biorefinery feedstock
- ➤ All-year round available
- Optimized logistics

Cascaded biomass use



Biogas plant



Energy production



Pilze Nagy Biogáz Kft. üzeme

EnviTec BA - 330 kWel

06-118

330 kW

400 kW

Leftover

