

QA

Biogas process for enhancing nutrient recovery in centralized sludge treatment

Liiteresurssi tänään ja huomenna - Otaniemi
Viljami Kinnunen - 28.11.2019

Gasum

CONTENT

1. Gasum in brief
2. How topinoja biogas plant is turned to "*sewage sludge refinery*"



1. GASUM IN BRIEF

BUSINESS UNITS



NATURAL GAS
AND LNG



BIOGAS



PORTFOLIO
MANAGEMENT
AND TRADING

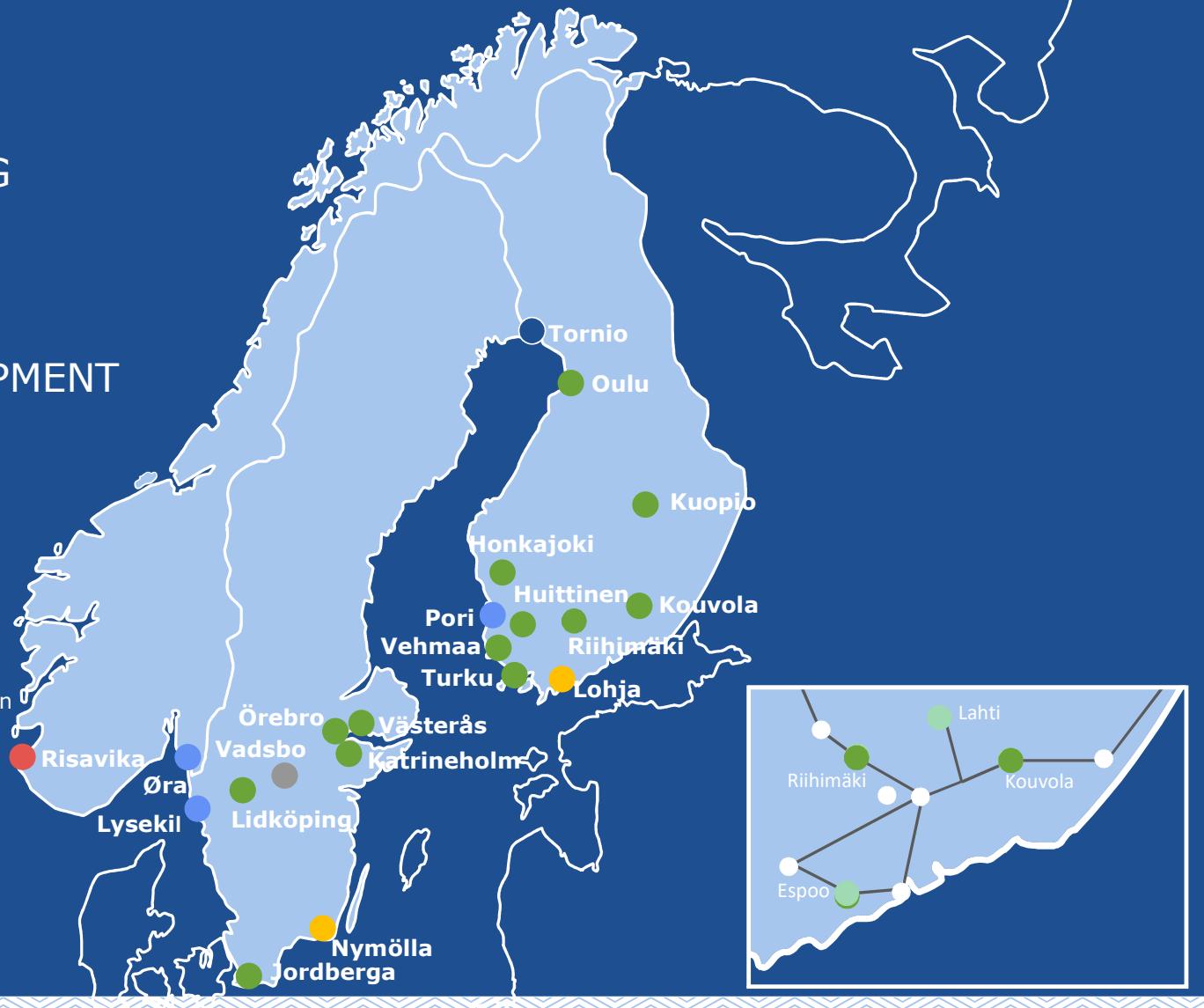


TRAFFIC

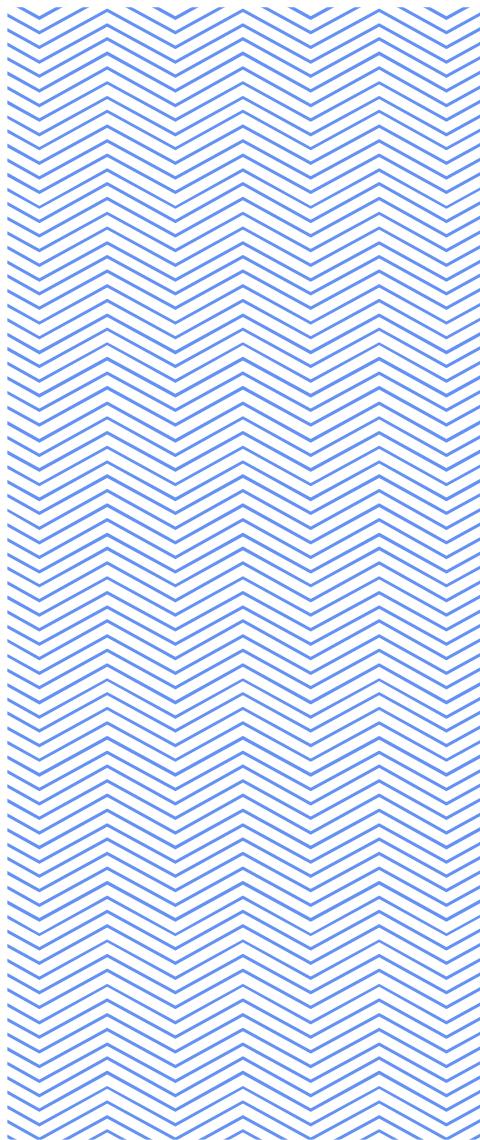
Gasum

GASUM IS DEVELOPING THE NORDIC GAS ECOSYSTEM AND PROMOTING SUSTAINABLE DEVELOPMENT

- LNG production plant
- LNG terminal
- LNG terminal (joint project)
- Gasum, biogas
- Gasum, biowaste and biogas
- Biogas production plant (joint project)
- Gasum, biogas plant under construction



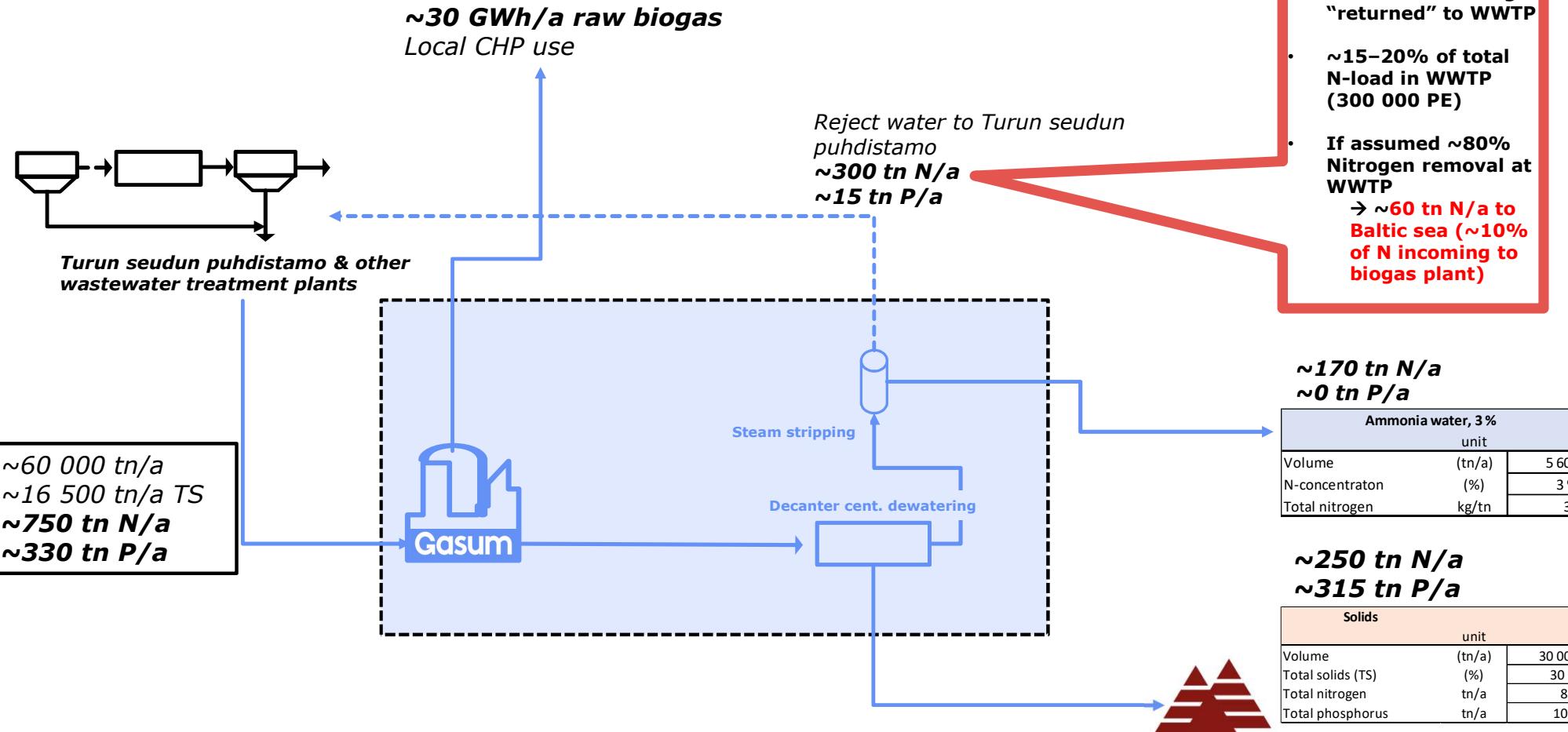
2. HOW TOPINOJA BIOGAS PLANT WAS TURNED TO "SEWAGE SLUDGE REFINERY"



GASUM TOPINOJA – THE OLD PLANT (2009-2018)



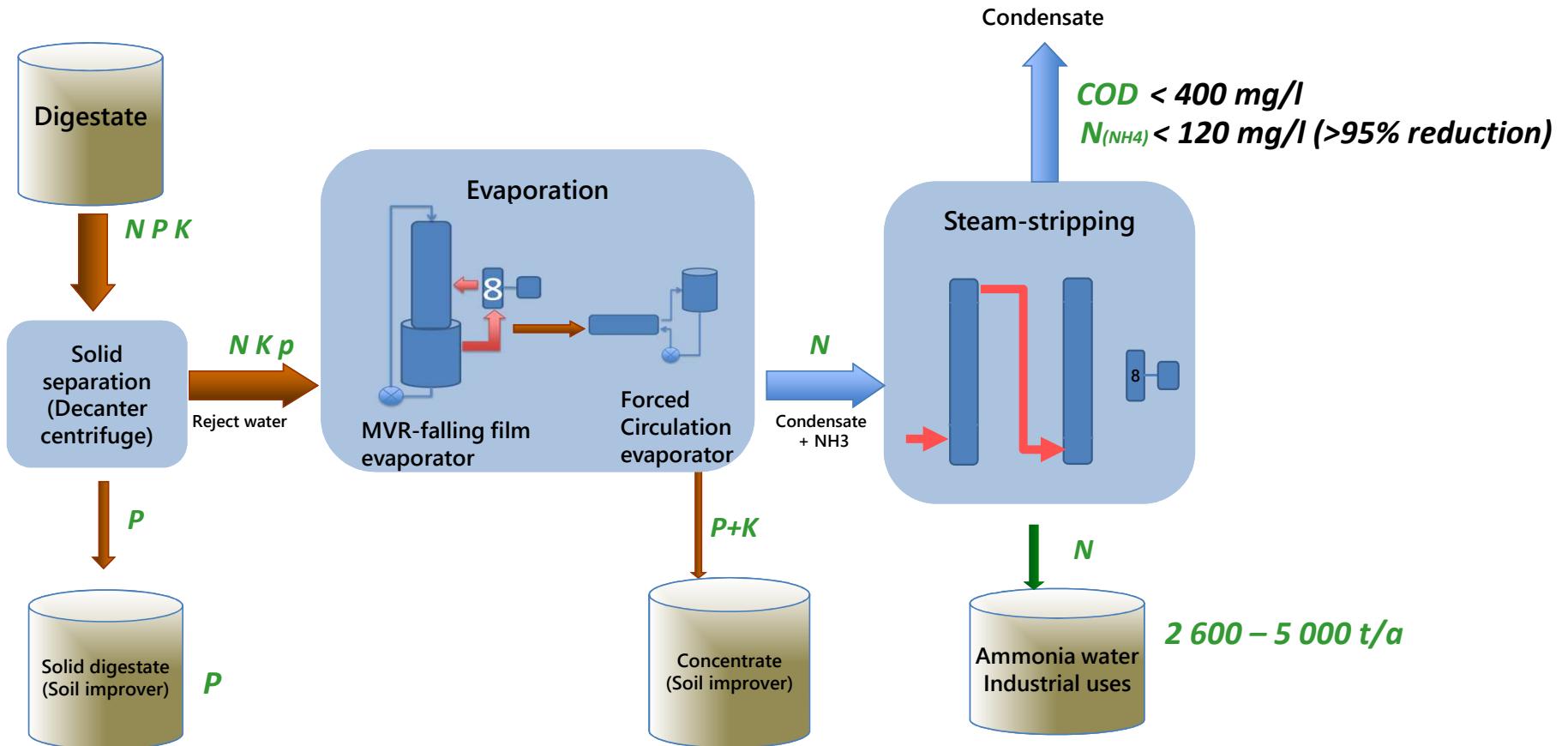
INDICATIVE VALUES



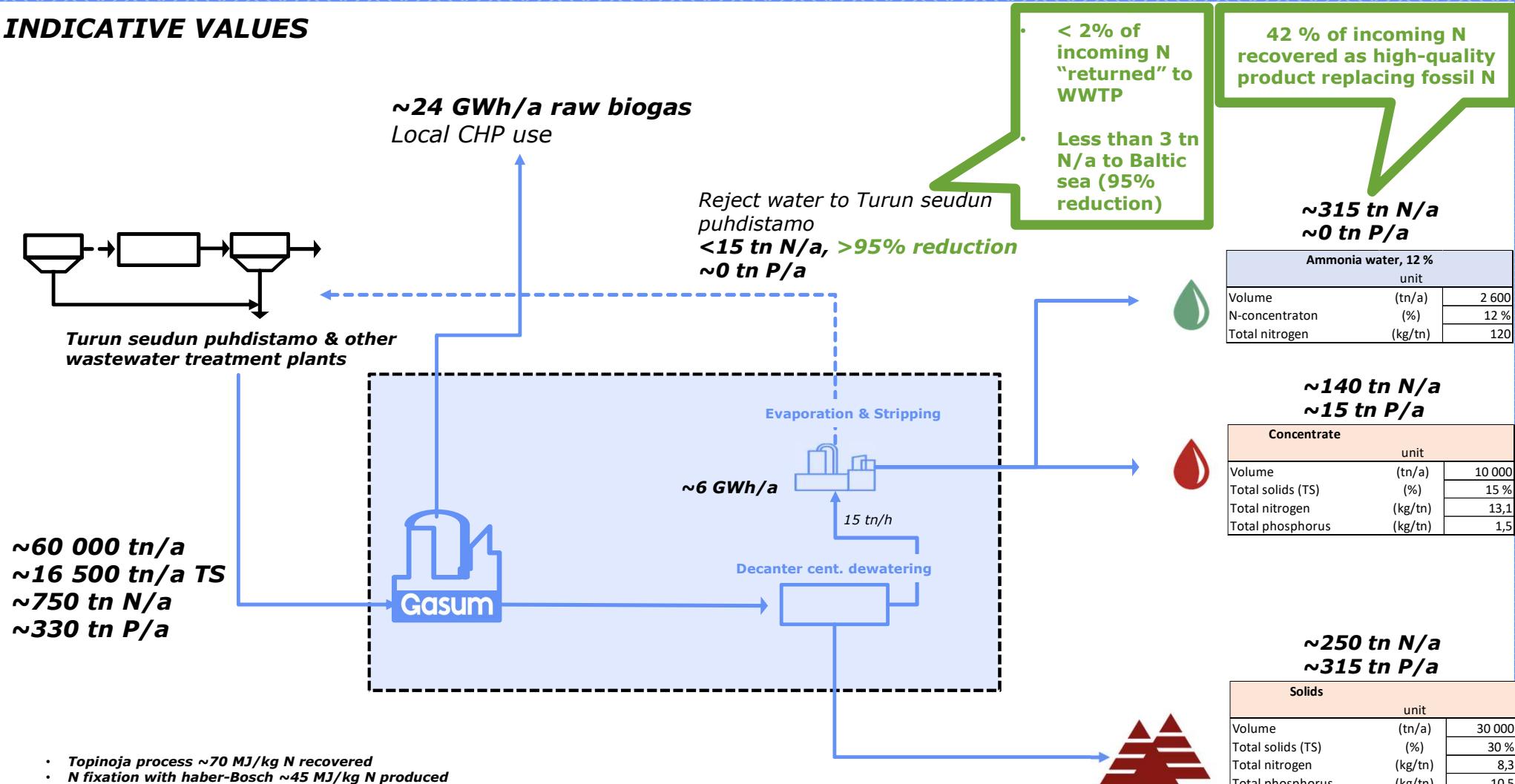
GASUM TOPINOJA – MODERNIZATION (2018-2020)



AMMONIA WATER FROM REJECT WATER



INDICATIVE VALUES



[About Gasum](#) – [For the media](#) – [News](#) – 2018 – Recycled nutrients from Gasum Turku biogas plant to be recovered for industry use

28.11.2018

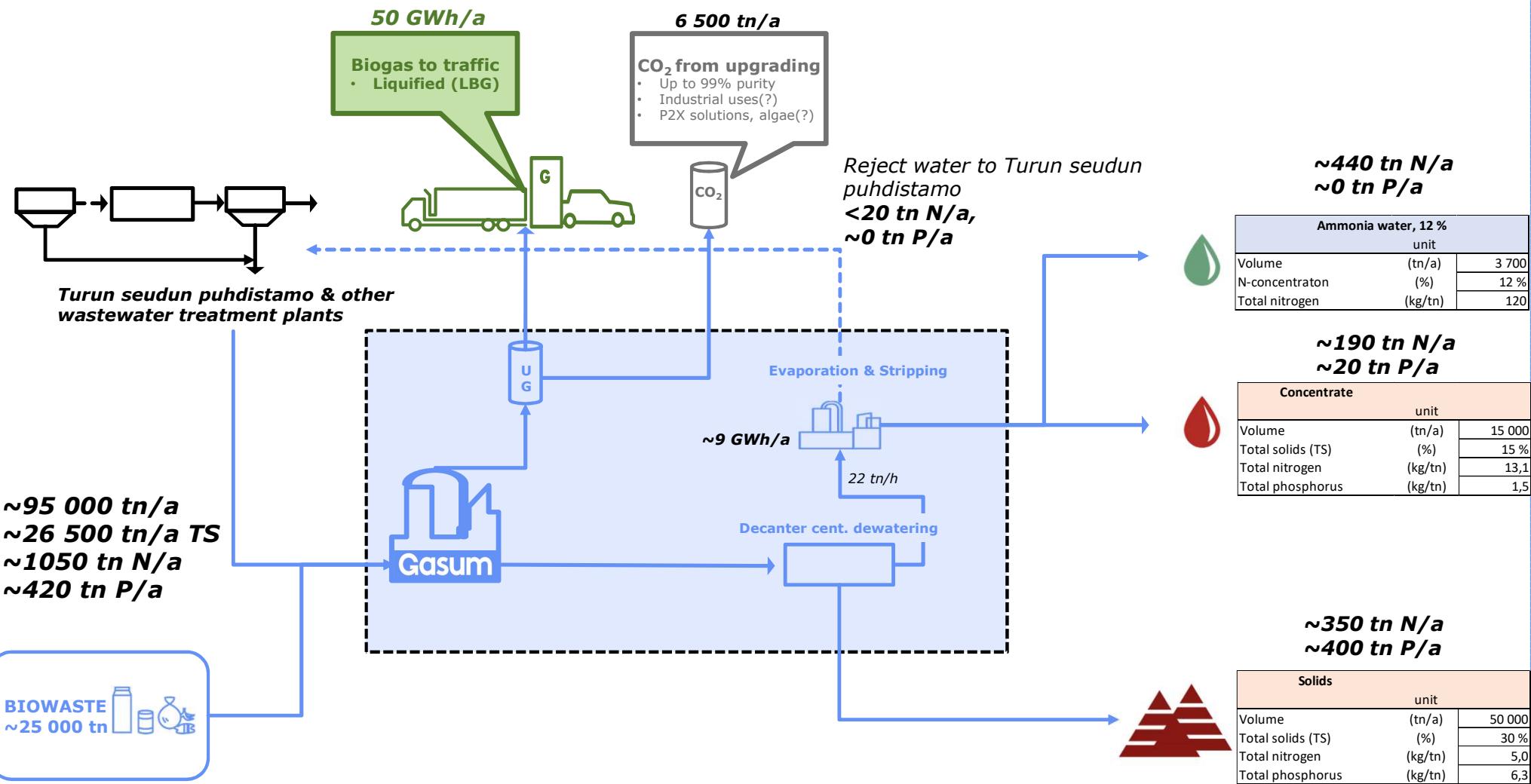
Recycled nutrients from Gasum Turku biogas plant to be recovered for industry use

Developing a circular economy solution based on the Gasum biogas plant in Turku, Finland, is one of the Finnish Government's key projects. Phase 1 of the project, related to nutrient recycling, has now been completed. Gasum processes sludge from the Turku region wastewater treatment service provider at its Topinoja biogas plant, turning the waste feedstock into biogas and recycled nutrients. Gasum has entered into groundbreaking recycled nutrients collaboration with Algol Chemicals. The project will continue with plant expansion and biogas liquefaction plant investment and is due for completion in late 2019.

GASUM TOPINOJA – EXTENSION (2020 →) “THE SEWAGE SLUDGE REFINERY”



INDICATIVE VALUES



THANK YOU!

Next - Kuopio biogas plant



Next - Oulu biogas plant



WE ❤ GAS