Benefits sheet: Municipal wastewater sludge treatment

## AquaGreen

### AquaGreen

has developed the technology together with the **Technical University of Denmark** (DTU)

### Adopt the circular economy: turn your sewage sludge into resources while eliminating organic pollutants.

The groundbreaking AquaGreen technology dries sewage sludge using energy from the sludge itself.

This is made possible thanks to our patented integrated steam drying and pyrolysis plant. The pyrolysis process eliminates microplastic, medicine residues and all other harmful organic compounds, turning the dried sludge into biochar and thermal energy.

# Benefits of AquaGreen HECLA® Setores 1.000 processing sludge from a 50.000 PE treatment plant

Meet your environmental, climate, and economic targets





You reduce pollution and recirculate nutrients:

- No PFAS/micropollutants in soil and groundwater
- No malodor or health risks
- 10x less transport volume
- 25 tons of life-critical phosphorus recirculated



## You eliminate greenhouse gas emissions:

- 1.800 tons CO<sub>2</sub>e emissions reduction<sup>1</sup>
- 500 tons CO<sub>2</sub>e stored in biochar
- 2.000 MWh energy produced (1.500 tons CO<sub>2</sub>e reduction<sup>2</sup>)





# You reduce costs and generate revenue:

- Sludge transport and handling cost are reduced up to 90%
- Carbon removal credits trading at 100€/ton CO<sub>2</sub>e
- Biosolids biochar can be upgraded to valuable active carbon-like filter material



#### References:

- 1. Based on LCA by Thomsen, T.P, DTU (2018) "Drying and pyrolysis of sludge in a climate perspective"
- 2. Oil-based power production CO<sub>2</sub> emission according to www.world-nuclear.org



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