

INCREASED RENEWABLE ENERGY AND ENERGY EFFICIENCY BY INTEGRATING, COMBINING URBAN WASTEWATER AND WASTE MANAGEMENT SYSTEM

TAKING
COOPERATION
FORWARD



REEF 2W Final Conference



Case study Prague, Czech Republic

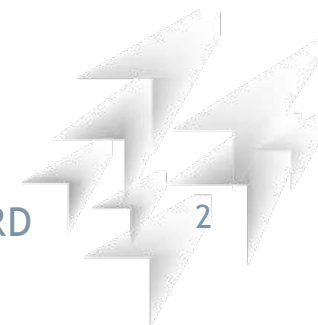


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12 digesters , 4800 m³ each



PRAGUE BIOMETHANE PROJECT



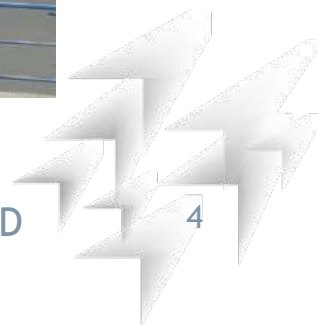
Objective

- *expert assessment for energy valorization of excess biogas through its upgrading into biomethane*

Parameter	Unit	2019	Average (5 years)
Biogas produced	Nm ³	17 846 000	17 808 000
Biogas utilized	Nm ³	16 104 000	16 599 000
Biogas to burner of excess biogas	Nm ³	1 732 000	1 209 000



PRAGUE PILOT



PILOT ACHIEVEMENTS

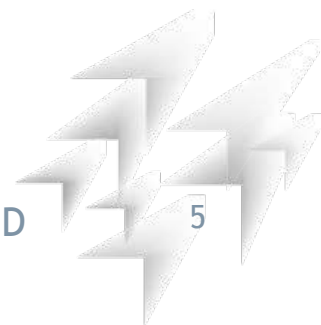
Only small part (10-15%) of produced biogas (now not used) is upgraded.

Biogas upgrading unit operates with 250 Nm³/hour of raw biogas.

Biomethane production is 160 Nm³/hour.

It means: 2,500 kg of CNG per day can be replaced by biomethane.

It means: 1,370 kWh of green energy is produced from - currently unused biogas.



INTEGRATED SUSTAINABILITY ASSESSMENT

Criterion	Composite Index (Status Quo)	Composite Index REEF 2W Technology
Environmental	3.2	2.4
Social	3.2	2.0
Economic	4.0	2.4
Technical	2.2	2.2



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