

Comparison of existing national standards of biomethane injection

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GGG Workshop Biomethane Trade

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Biomethane injection standards available

- Austria
- Czech Republic
- Germany
- France
- Poland
- Spain
- Switzerland
- Sweden (vehicles only)
- The Netherlands

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Biomethane injection
performed

- + UK
- + Finland
- + Norway
- + Luxembourg

No standard: agreement between grid operator and supplier

Standardization overview

- 29 different quality components
- Diverse number of characteristics among countries
- Different units for same characteristic:
E.g.: Vol-%, Mol-%, ppm

Wobbe Index, Caloric Value

- Characteristics of the energy output from combustion

		min	max	median
Wobbe Index	kWh/m ³	6,34 (PL)	16,058 (ES)	13,3
	MJ/m ³	23 (PL)	57,81 (ES)	46,3
Caloric Value	kWh/m ³	5 (PL)	13,1 (DE, CH)	10,7
	MJ/m ³	18 (PL)	47,16 (DE, CH)	32,8

Methane, Oxygen

- To ensure high energy content

		min	max	median
Methane	Vol-%	80 (SE)	96 (CH)	95
Oxygen	Vol-%	0,5 (CZ, CH)	3 (DE)	0,75
	Mol-%	0,01(ES)	0,5 (NL)	0,2

Halogens, Siloxane

- Halogens – fluorine (F), chlorine (Cl), bromine (Br), iodine (I), and astatine (At)
- Siloxane – organic compounds composed of units of the form R_2SiO

		min	max	median
Siloxane	mg/m ³	6 (CZ)	10 (ES, AT)	10
Halogenes	mg/m ³	0 (AT)	1,5 (CZ)	1
Chlorine	mg/m ³	1 (FR, ES)	50 (NL)	1
Fluorine	mg/m ³	10 (FR, ES)	25 (NL)	10

Thank you for your attention

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