



FlexSNG

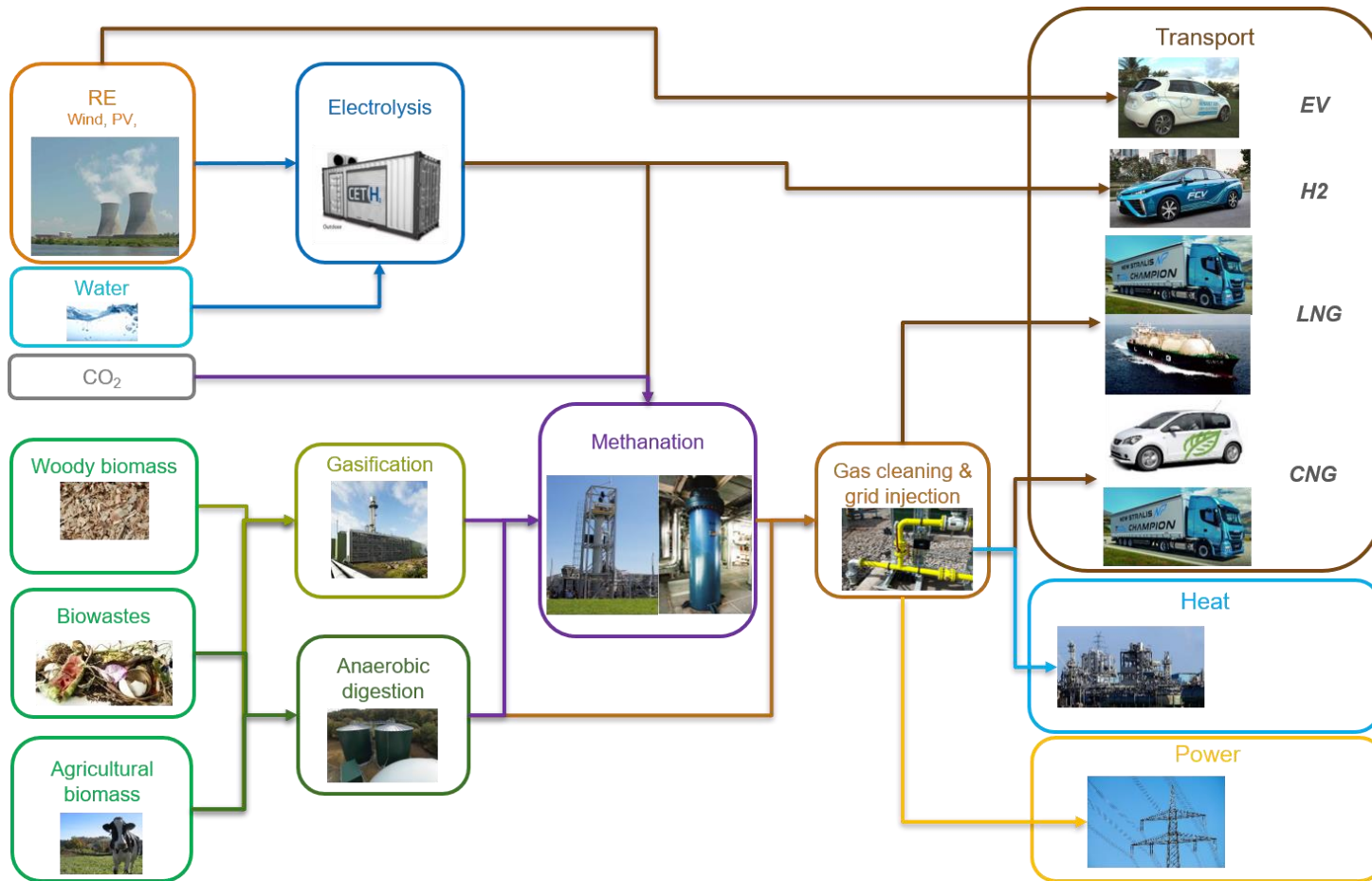
BioSNG – product specifications and market value introduction



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BioSNG & alternative green NG Gas substitutes



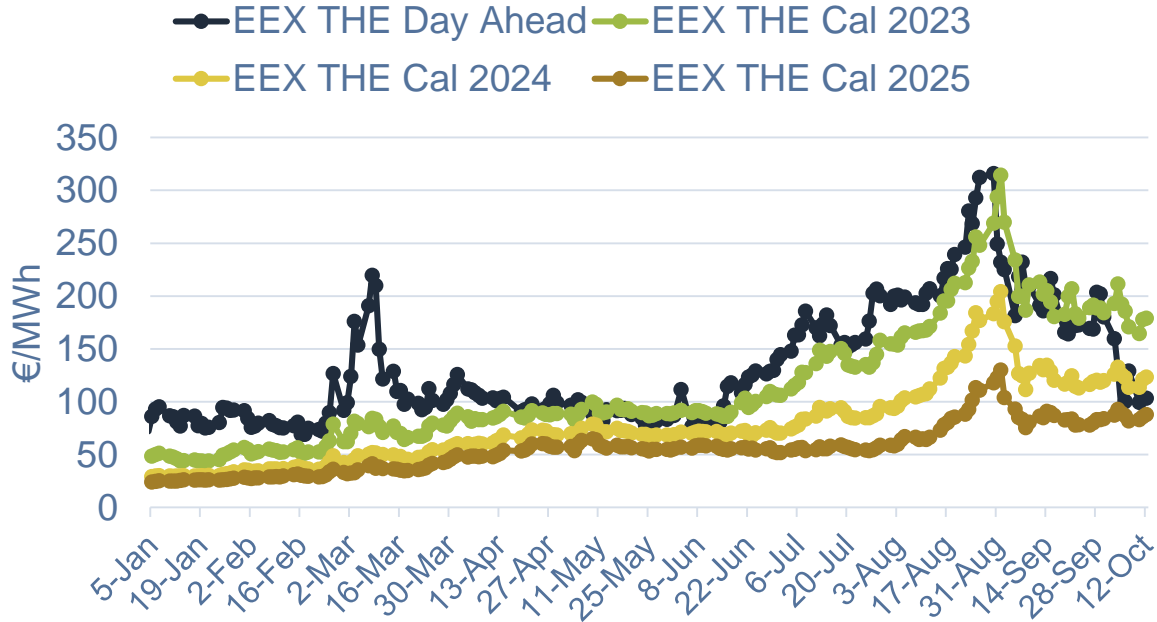
- BioSNG
- Biomethane
- H₂
- E-SNG

View on specifications for SNG grid injection

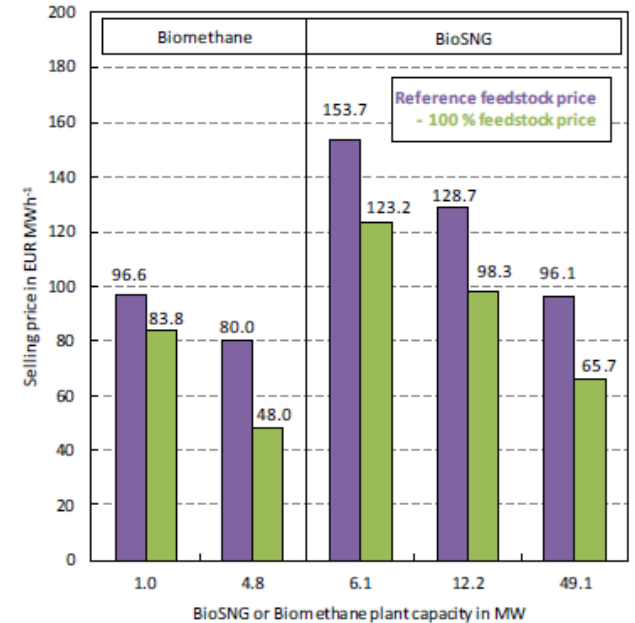
Component	Unit ⁽¹⁾	Germany ⁽²⁾		Italy ⁽³⁾	Switzerland ⁽⁴⁾
		L-Gas	H-Gas		
Wobbe Index	MJ/(S/N)m ³	37.8–46.8	46.1-56.5	47.31-52.33	47.88-56.52
Gross Calorific Value	MJ/(S/N)m ³	30.2–47.2	30.2–47.2	34.95-45.28	38.16-47.16
Relative Density		0.55-0.75	0.55-0.75	0.5548-0.8	0.5-0.7
Methane	% mol	≤90	≤95	⁽⁵⁾	≥96
Oxygen	% mol	≤3	≤3	≤ 0.6	≤ 3
Carbon Dioxide	% mol	≤10	≤5	≤ 3	<5
Carbon Monoxide	% mol			≤ 0.1	≤ 3
Hydrogen content	% mol	≤10 ⁽⁶⁾	≤10 ⁽⁶⁾	≤ 0,5	≤ 2
Hydrogen Sulphide	mg/(S/N)m ³	≤5	≤5	≤ 6.6	≤ 5
Sulphur from mercaptans	mg/(S/N)m ³	≤6	≤6	≤ 15.5	≤ 5
Total Sulphur	mg/(S/N)m ³	≤30 Avg/y	≤30 Avg/y	≤ 150	
Hydrocarbon Dew Point	°C (up to 70 bar)	-2	-2	≤ 0	

Source: Kreeft, G.J. (2018), 'Legislative and Regulatory Framework for Power-to- Gas in Germany, Italy and Switzerland', STORE&GO Project, Deliverable 7.3

View on the Economics



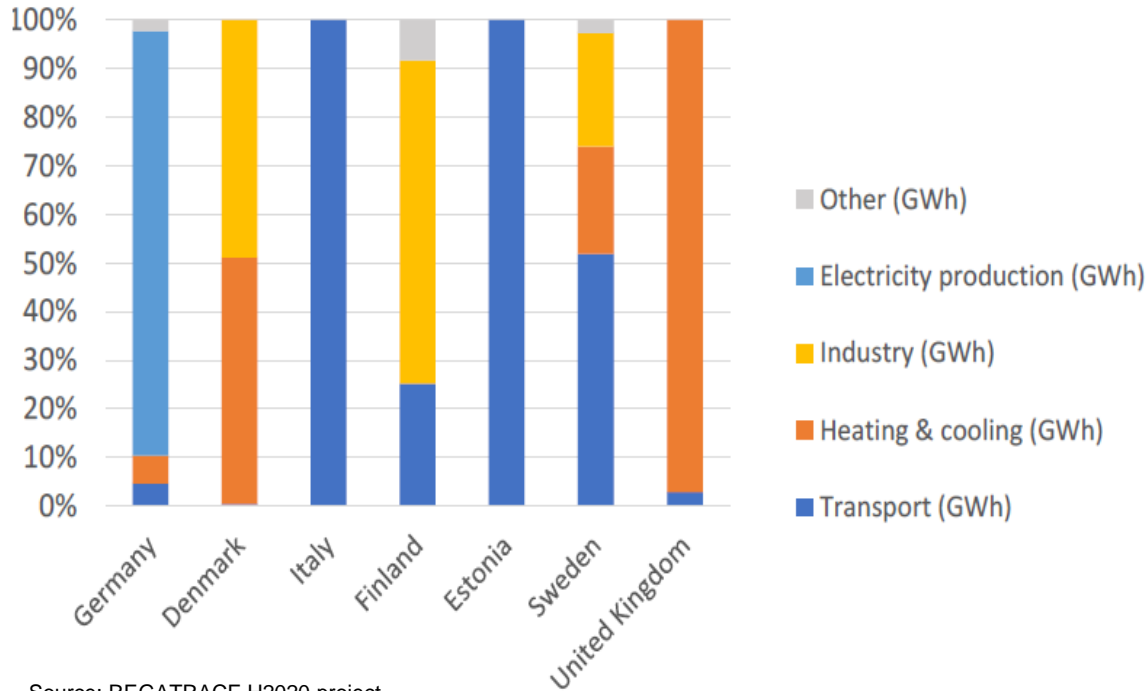
Data: EEX; Chart: EIFER



Krausler et al; Biomass Conversion and Biorefinery (2018) 8:935–944

View on the SNG/Green Gas market

Biomethane consumption per sector and country



Source: REGATRACE H2020 project

Key messages

SNG is one future puzzle piece of Green Gases

Regulation for grid injection is diverse, but dynamic

=> under retrofit for higher shares of green gases

Increase of Natural Gas prices enables new opportunities

Future markets for SNG

- Transport (LNG & CNG)
- Grid injection for industry & buildings

Thank you!



www.flexsng.eu

info@flexsng.eu

<https://www.linkedin.com/company/flexsng-project-h2020/>

<https://twitter.com/flexSNG>

