



CEE Biomethane markets - comparison

Introduction to Biomethane Trading

UABIO Friday – Zoom - November, 3rd 2023

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CEE Biogas/Biomethane

CEE region – comparison table	Czechia	Poland	Slovakia	Ukraine	EU
Number of biogas stations	573	346	111	83	19 000
Production of biogas GWh	6 832	3 407	810	1 366	196 000
No. of biomethane production units	7	0	2	2	1 350
in construction	3	1	2	2	?
CNG filling station	230	25	19	300	4 200
National 2030 biomethane target (mld. m ³)	0,65	2,5*	0,3	1,0	35

* PL 2030 target is 10 % pipeline transported renewable and low emission gases

Investment subsidy

- CZ: MPO Calls - OP TAK (EU); interconnection pipeline buyout/refund by DSO under certain conditions
- SK: MHSR Calls (EU) – on building of new and modernization of existing plants; interconnection cost in ratio 25/75 with DSO, max EUR250k
- PL: National Recovery and Resilience plan (EU)
- UA: Projects of national importance in manufacturing sector can get governmental subsidy (min. EUR 12M); investment & tax incentives
- CAPEX/investment subsidy is (sometimes) not biomethane transaction killer

Production subsidy

- Czechia – biogas (-> electricity), notification process EC
- Slovakia – biogas/methane (-> electricity), no operational subsidy for „gas“ production
- Poland – operational subsidy for biogas (-> electricity); for biomethane proposal of operation subsidy of max PLN 425/MWh
- Ukraine – operational subsidy for biogas (-> electricity); debts of system
- Production subsidy is (usually) export killer

Potentials/Experiences/Issues

- **UA** high potential due to developed gas infrastructure, lack of advanced of advanced biofuels/feedstock and distance of plants from the grid are issues
- Maritime law – ban of fossil gas exports, exception for biomethane
- Termination of **SK** biogas support schemes in years 2025-2028
- EU harmonisation issue – biogas registry setup (AIB/ERGaR)
- Ramp up biomethane production **CZ**, technology, feedstock mix, estimates
- Technical conditions of biomethane injections in **PL**

Price categories of biomethane:

- 1/ „Super“ advanced biomethane with highly negative CI score (manure)
- 2/ Waste only biomethane with low CI score (waste & residues)
- 3/ Energy crops (conventional)

- Structure of the transaction: green value/premium + commodity
- Green premium LT: fixed price; inflation index; price progression; MSA
- Commodity: Spot index basis (THE - Germany)
- Contracts: Biomethane Agreement + Standard Gas Agreement (EFET)
- Contract length: Spot versus Long term (5-15 years)

Proof of Sustainability: PoS

- Most valuable document
- Best source of information – including GHG emissions and their calculations


Guarantee of origin: GO

- Evidence of injected volume of sustainable gas, double counting
- Solely GOs do not contain sufficient information to certify sustainability or demonstrate meeting of GHG savings criteria

Proof of Sustainability (PoS) for Biogas and Biomethane V2.6
 Applies under the Renewable Energy Directive (EU) 2018/2001 (RED II)

Unique Number of the PoS:

Date of Issuance of the PoS:


 International Sustainability & Carbon Certification
www.iscc-system.com

Supplier	Recipient
Name: <input type="text"/>	Name: <input type="text"/>
Address: <input type="text"/>	Address: <input type="text"/>
Certification System: ISCC EU	
Certificate Number: <input type="text"/>	Contract Number: <input type="text"/>
Address of dispatch/shipping point of the sustainable material: <input type="text"/>	<input type="checkbox"/> Same as address of supplier
Address of receipt/receiving point of the sustainable material: <input type="text"/>	<input type="checkbox"/> Same as address of recipient
Dispatch date of the sustainable material: <input type="text"/>	
Producer of biomass fuel: <input type="text"/>	<input type="checkbox"/> Date of installation ¹ <input type="text"/>
User of biomass fuel: <input type="text"/>	<input type="checkbox"/> Date of installation ¹ <input type="text"/>

1. General information

Type of Product	Quantity	Feedstock	Country of Origin	Esc GHG Method	Fulfills Art. 29 RED II ²	waste / residues ³	low EUI ⁴	Intermed. cred ⁵
<input type="text"/>	# [MWh]	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	1							

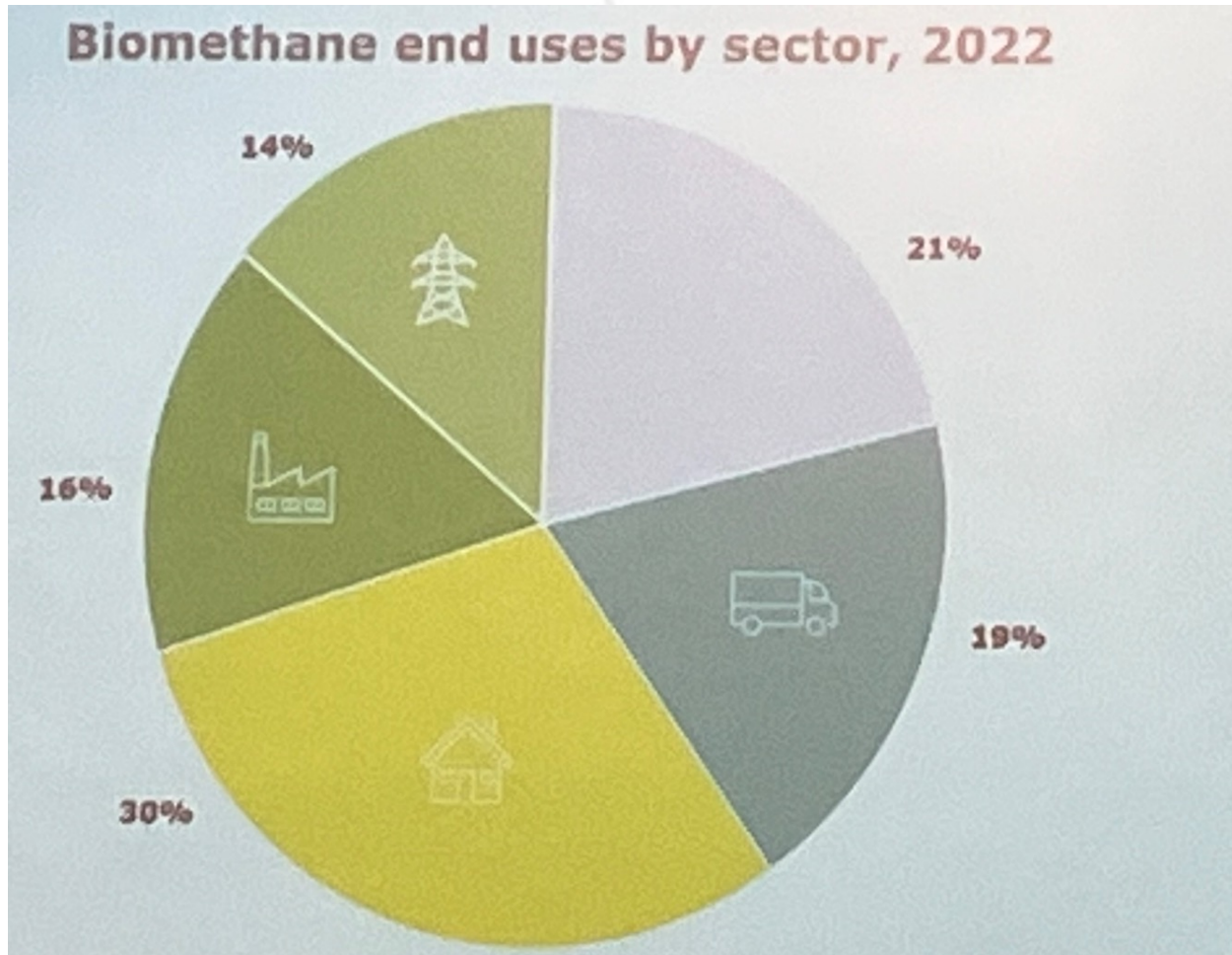
- Biomethane producer has interconnection agreement with DSO
- HPP/MPP injection types
- Combustion heat – Gross calorific value variance/propanisation
- The producer (usually) does not participate in the balancing gas market -> trader (deviation)
- Physical commodity shipping to prove mass balance
- Certification by the EC voluntary certification scheme (e.g. ISCC EU)

Contact for experienced consultant that can optimize monetization of your biomethane production and can prepare your plant for successful ISCC EU certification:

Mr. Dalibor Delong, REX Solutions
dalibor.delong@rexsolutions.cz
+420 736 506 379

- UDB and other administration on producer

Transport is not „mantra“



End customer for biomethane:

- Buildings/heating – 30 %
- Transport – 19 %
- Industry – 16 %
- Electricity production – 14 %
- Other – 21 %

Source: EBA Statistical report 2023

Indicative termsheet



For Discussion Purposes Only
Subject to Contract and respective Management Approvals

Non-binding Biomethane market Termsheet

1	Buyer	Renewable Energy Europe Biogas Trade Ltd																																						
2	Producer/Seller	AA																																						
3	Production device information	Address: EAN:																																						
4	Production Capacity	cca 2 800 000 Nm ³ /year																																						
5	Production device type	Anaerobic Fermentation																																						
6	Renewable energy source	<table border="1"> <thead> <tr> <th>Substrate code</th> <th>Name</th> <th>%</th> <th>Carbon intensity gCO₂ eq/MJ</th> </tr> </thead> <tbody> <tr> <td>27111900-020103-05</td> <td>Biomethane from dry manure</td> <td>13%</td> <td>XX</td> </tr> <tr> <td>27111900-020499-04</td> <td>Sugar beet cuttings, small parts and tops</td> <td>11%</td> <td>XX</td> </tr> <tr> <td>27111900-020106-02</td> <td>Cow slurry</td> <td>1%</td> <td>XX</td> </tr> <tr> <td>27111900-5</td> <td>Grass silage</td> <td>13%</td> <td>XX</td> </tr> <tr> <td>27111900-5</td> <td>Corn silage</td> <td>53%</td> <td>XX</td> </tr> <tr> <td>27111900-020103-05</td> <td>Spoilt corn silage</td> <td>4%</td> <td>XX</td> </tr> <tr> <td>27111900-020103-05</td> <td>Waste from animal feeding</td> <td>12%</td> <td>XX</td> </tr> <tr> <td>Total</td> <td></td> <td>100</td> <td></td> </tr> </tbody> </table>			Substrate code	Name	%	Carbon intensity gCO ₂ eq/MJ	27111900-020103-05	Biomethane from dry manure	13%	XX	27111900-020499-04	Sugar beet cuttings, small parts and tops	11%	XX	27111900-020106-02	Cow slurry	1%	XX	27111900-5	Grass silage	13%	XX	27111900-5	Corn silage	53%	XX	27111900-020103-05	Spoilt corn silage	4%	XX	27111900-020103-05	Waste from animal feeding	12%	XX	Total		100	
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7	Delivery period	Start date: Q1.2024 End date: Q4. 2026																																						

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