

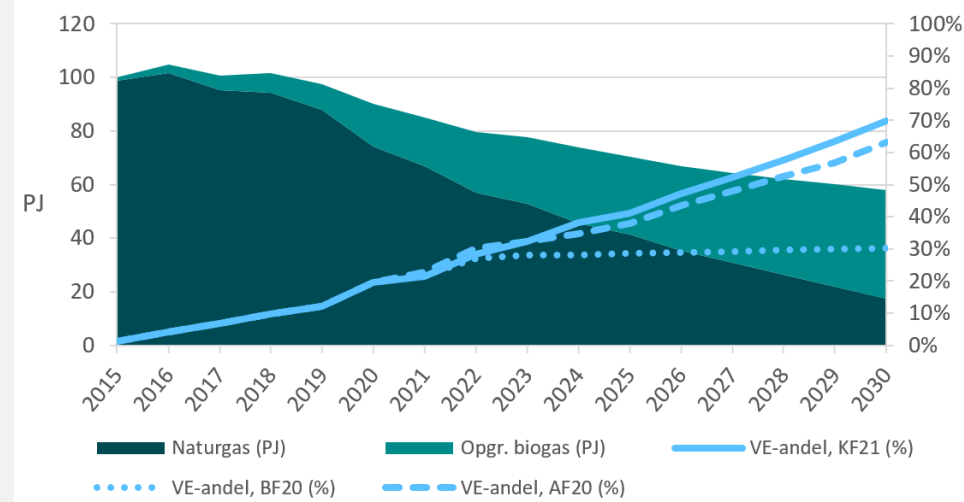
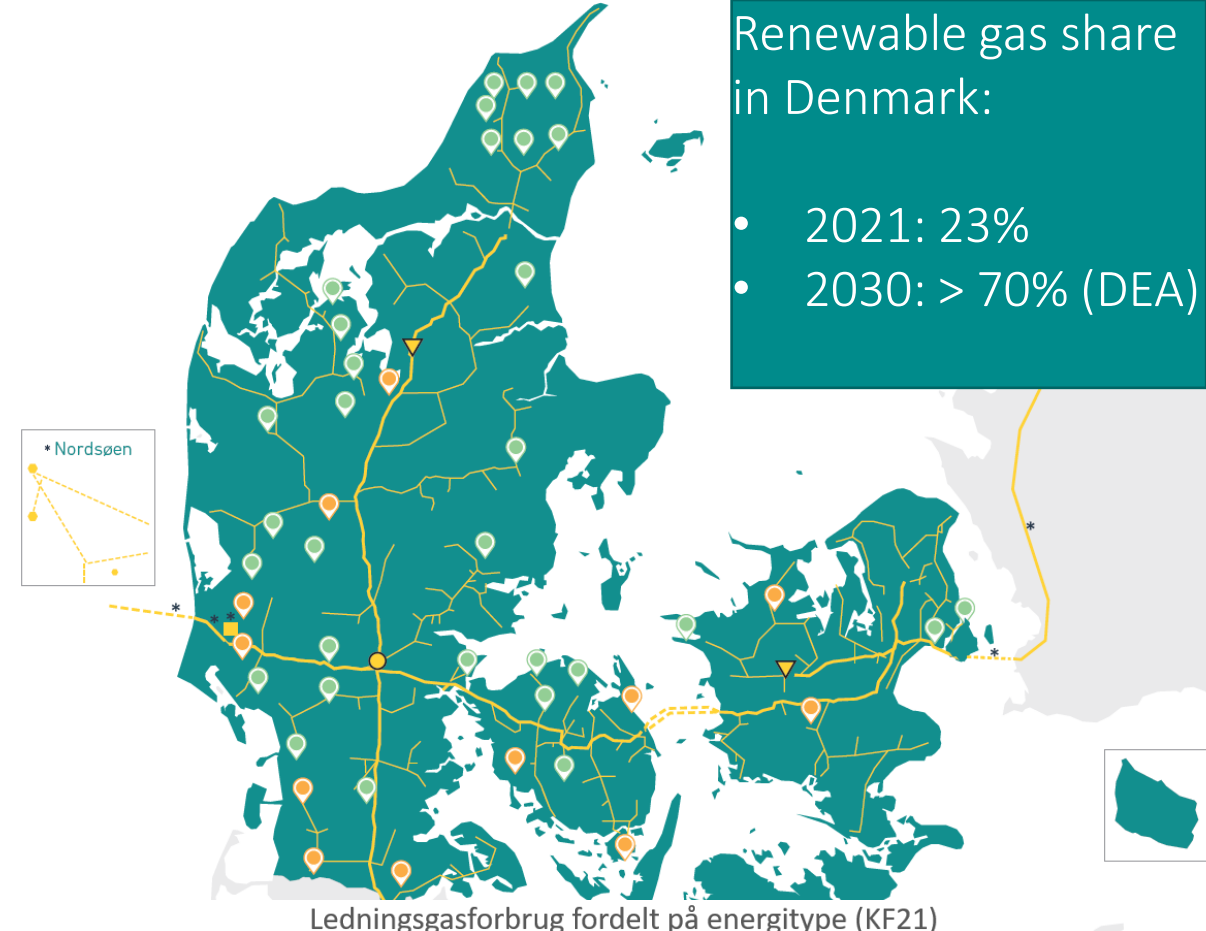
BIOMETHANE – OVERVIEW ON THE FUNCTIONING OF BIOGAS REGISTRIES AND IMPORTANT EUROPEAN DEVELOPMENTS

Jeppe Bjerg, Energinet, Denmark

*12th EU ETS Compliance Conference
Track 1: Implementation of monitoring and reporting regulation
24 November 2021*

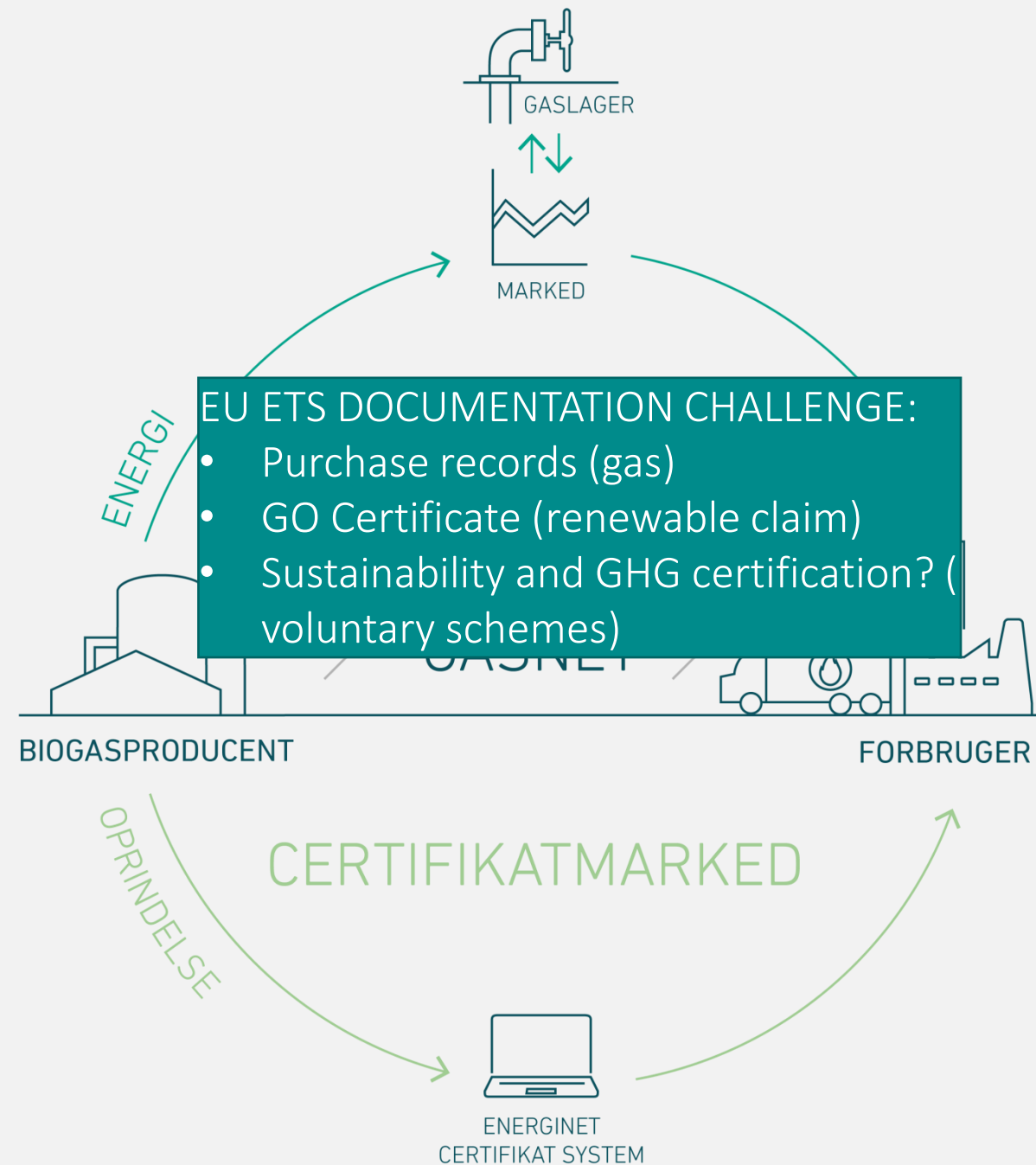
TOPICS

- Danish biomethane registry – functioning and information
- Biomethane registries in EU – European Renewable Gas Registry (ERGAR)
- Union Database developments
- Biomethane cross border and double counting – targets and funding



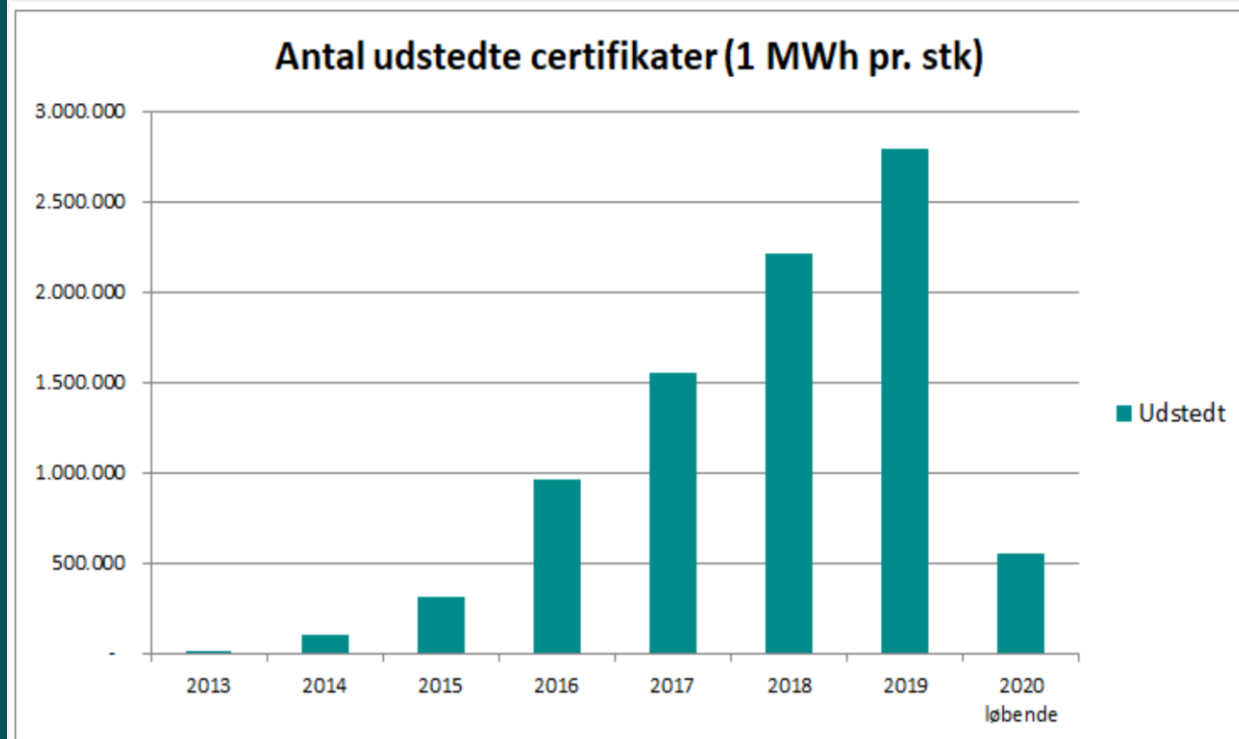
GAS MARKET AND CERTIFICATE MODEL

- ✓ Renewable gas market model approved by Regulator (2010)
- ✓ Certificate model implemented (2011)
- ✓ Certificate model as provided evidence for several purposes incl for ETS and transport fuel quota in DK
- ✓ Energinet appointed Issuing Body for Guarantees of Origin for renewable gases in grids – including biomethane and hydrogen
- ✓ Certificates for next green gases being developed
- ✓ New certificates being developed:
 - ✓ GO: REDII compliant
 - ✓ GO+: REDII plus additional information/requirements
 - ✓ GOBalance: balancing injection and withdrawal hourly basis

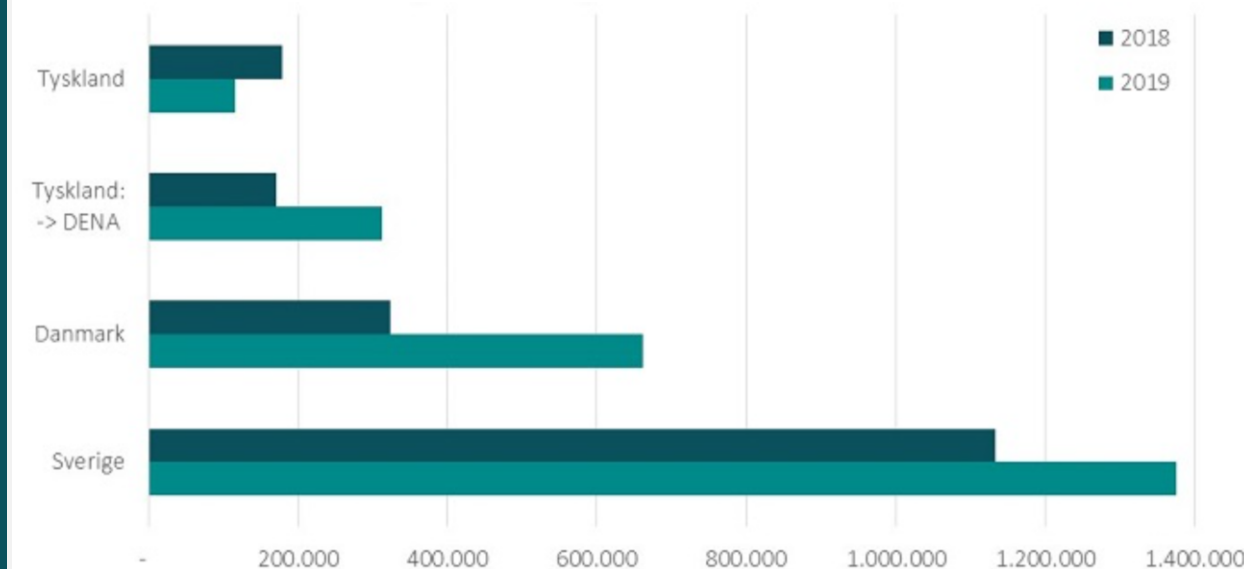


FACTS ABOUT CERTIFICATE SYSTEM

- 63 account holders
- 44 plants - plant and biomass data
- Annual audit of biomass reports
- Annual audit of account holders
- Certificates issued for all injected gas
- Issued on measured injected volumes basis
- Book & Claim system
- Most certificates are currently exported
- Grexel platform modified for gas
- <https://energinet.dk/Gas/Biogas/Certifikater-i-tal>



ANTAL SOLGTE CERTIFIKATER 2019 SAMMENLIGNET MED 2018



GUARANTEES OF ORIGIN

Electronic certificate issued documenting injected monthly volumes of renewable gas per plant

- Energinet issuing body
 - Power system
 - Gas system
- In future Gos for disclosure purpose must follow CEN 16325 incl
 - 1 MWh/GO
 - Suport: Investment & Operation support
 - GHG emission?
 - Standard perhaps ready 2023

Cancellation Statement
 With this cancellation statement the indicated certificates are no longer tradable in Denmark. The account holder is responsible for the correctness of the information stated on this cancellation statement. Energinet is responsible for the initial issuing of certificates only. Biomethane physically injected in Denmark counts towards its renewable energy share obligation as Member State under the Renewable Energy Directive.

Transaction details
 Transaction Type: Ex-domain Cancellation Export
 Transaction Date: 2017-08-24 12:38:24
 Transaction Number: 2017082400001

Message to Receiver: From: 2017082400001
 Account Holder: -
 Account: -
 Domain: -
 Street: [Certifikatkompaniet](#)
 DB: Certifikatkompaniet: 643002406722000033
 DK-Energinet-Biomethane
 Gaden 11
 8858 Byen
 Country: Denmark

To
 Name of Beneficiary: German AH - ID 1234
 Cancellation Purpose: For further transactions in Germany
 Consumption Period: 2017-08-01 to 2017-08-13
 Country of Consumption: Germany
 Location of Beneficiary: DENA
 Usage Category: Commercial & Public use
 Type of Beneficiary: Energy supplier

Certificate Number (From - To)	Volume	Domain	Fuel Technology	ST Issuing Date	Production Period	Production Plant (GSRN, Trading Schemes, Estimated Annual Production name)	Support Schemes
6430024065559 0991000000002 1940 To 6430024065559 0991000000002 3689	2000	DK-Energinet-Biomethane	F01030200, T070000	S 2017-04-19	2017-03-01 To 2017-03-31	643002406722000033 40000 kWh Biobiotest Anlæg2	Biomethane-GO Production Support
6430024065559 0991000000002 4586 To 6430024065559 0991000000002 4339	254	DK-Energinet-Biomethane	F01030200, T070000	S 2017-05-02	2017-03-01 To 2017-03-31	643002406722000033 40000 kWh Biobiotest Anlæg2	Biomethane-GO Production Support

Production Plant public information
 Production Plant Name: Biobiotest Anlæg2
 Domain of Production Plant: 643002406722000033
 Estimated Annual Production, kWh: 40000
 Date of Commissioning: 2016-11-01
 Location of Production Plant: 1113 Certifikatby, DK
 Technology: T070000 - Other
 Fuel: F01030200 - Renewable Gaseous Sewage gas
 Additional information: -
 Production support: -

Place: _____ Date: _____
 Signature _____

EUROPEAN RENEWABLE GAS REGISTRY



Vision:

Renewable gas will be tradable cross border in an increasingly integrated European market via the gas grid and used in all end use sectors

Mission:











Building on national renewable gas registries a trustworthy transparent and standardized documentation scheme for cross border transfers of renewable gas certificates will be established for renewable gas injected to the European gas grid. Ensuring that double sale and double counting of the green value is avoided.

Status:

- Registries handling 80-90% of renewable gas injected to European grid
- Two ERGAR schemes being developed
 - ERGAR MB: RED II voluntary scheme for massbalancing European gas grid (application)
 - ERGAR CoO: Book & Claim system for voluntary markets. (launched)
- Common transfer hub established
- First commercial test transfer conducted
- Energinet in proces of joining hub

More info: www.ergar.org eller kontakt jbg@energinet.dk

ERGaR Schemes: Overview

	ERGaR CoO Scheme		ERGaR RED MB Scheme	
APPLICATION PURPOSE	 Consumer disclosure	Initiatives by Market & Society 	 Target compliance transport sector	
BACKGROUND	Art 19 RED II	Market and Scheme Rules	Sustainability & Mass Balance Art 25-31 RED II	
COMPETENT AUTHORITY	Issuing Bodies by Government Mandate	Registries	Voluntary Scheme recognised by EC	Registries via ERGaR RED MB Scheme
Rules and Standards	CEN – EN 16325	ERGaR CoO Scheme 	E.g.: ISCC, REDCert, NTA 8080	ERGaR RED MB Scheme 
DOCUMENT TYPE	GoO  Guarantee of Origin	 CoO Certificate of Origin	PoS  Proof of Sustainability 	 ERGaR PoO Proof of Origin
STATUS	Launched 6/2021		under recognition by the European Commission as voluntary scheme	

ERGaR RED MB Core Principles

1. Sustainable biofuel (RFNBO)

ERGaR RED MB handles exclusively biomethane consignments where **sustainability has been duly verified by recognised Voluntary Schemes** in accordance with RED II.

No Proof of Origin (PoO) can be issued for any injected biomethane consignment without having a valid Proof of Sustainability (PoS) for that consignment. The PoS must be inseparably attached to the PoO.

2. Export destination

ERGaR RED MB is exclusively concerned with biomethane consignments destined for export and **not counted** in the country of production for meeting of national biofuel quota targets.

3. Single logistical facility

The **interconnected** European natural gas network is recognized as a single logistical facility with the effect that mass balancing according to RED shall be done at European level.

However, ERGaR RED MB mass balancing covers only biomethane consignments transferred **internationally**, i.e. crossing at least one country border.

4. Mass balancing

Biomethane volumes injected into the interconnected European natural gas network are mass balanced with matching withdrawn volumes on a **consignment to consignment basis**.

PERSPECTIVES

- Challenge on double counting when using both geographical and trade accounting mechanisms
- Challenge on double claims and double subsidy can be addressed by using existing mechanisms
- The future role of Guarantees of Origin/certificates vs Sustainability Certification must be clarified and control between schemes ensured
- Union Database could help – but scope, timing and purpose? Is it transactional or statistics to avoid double claims?

QUESTIONS



Jeppe Bjerg, m: 2333 8897, e: jbg@energinet.dk

Cancellation Statement

With this cancellation statement the indicated certificates are no longer tradable in Denmark. The account holder is responsible for the correctness of the information stated on this cancellation statement. Energinet is responsible for the initial issuing of certificates only. Biomethane physically injected in Denmark counts towards its renewable energy share obligation as Member State under the Renewable Energy Directive.

Transaction details

Transaction Type:	Ex-domain Cancellation Export
Transaction Date:	2017-08-24 12:38:24
Transaction Number:	2017082400001

Message to Receiver: -

From

Account Holder:	Certifikatkompagniet
Account:	DB- Certifikatkompagniet-643002406722100351
Domain:	DK-Energinet-Biomethane
Street:	Gaden 11
Postal Code and City:	8888 Byen
Country:	Denmark

To

Name of Beneficiary:	German AH - ID 1234
Cancellation Purpose:	For further transactions in Germany
Consumption Period:	2017-08-01 to 2017-08-13
Country of Consumption:	Germany
Location of Beneficiary:	DENA
Usage Category:	Commercial & Public use
Type of Beneficiary:	Energy supplier

Total

Total MWh:	2000
Total Biomethane-GO:	2000

Certificate Number (From - To)	Volume Domain	Fuel, Technology	S/T	Issuing Date	Production Period	Production Plant (GSRN, Estimated Annual Production, name)	Trading Schemes	Support Schemes
6430024065559 0991000000002 1940 To 6430024065559 0991000000002 3685	1746 DK-Energinet- Biomethane	F01030200, T070000	S	2017-04-19	2017-03-01 To 2017-03-31	643002406722000033 40000 kWh Biobiotest Anlæg2	Biomethane- GO	Production Support
6430024065559 0991000000002 4086 To 6430024065559 0991000000002 4339	254 DK-Energinet- Biomethane	F01030200, T070000	S	2017-05-02	2017-03-01 To 2017-03-31	643002406722000033 40000 kWh Biobiotest Anlæg2	Biomethane- GO	Production Support

Production Plant public information

Production Plant Name:	Biobiotest Anlæg2
Production Plant GSRN:	643002406722000033
Domain of Production Plant:	DK-Energinet-Biomethane
Estimated Annual Production, kWh:	40000
Date of Commissioning:	2016-11-01
Location of Production Plant:	1113 Certifikatby, DK
Technology:	T070000 - Other
Fuel:	F01030200 - Renewable/Gaseous/Sewage gas
Additional information:	-
Production support:	-