ERGaR – European initiative for cross-border biomethane administration

Jeppe Bjerg, ERGaR President

EBA Conference
25 January 2018, Antwerp

ergar
European Renewable Gas Registry

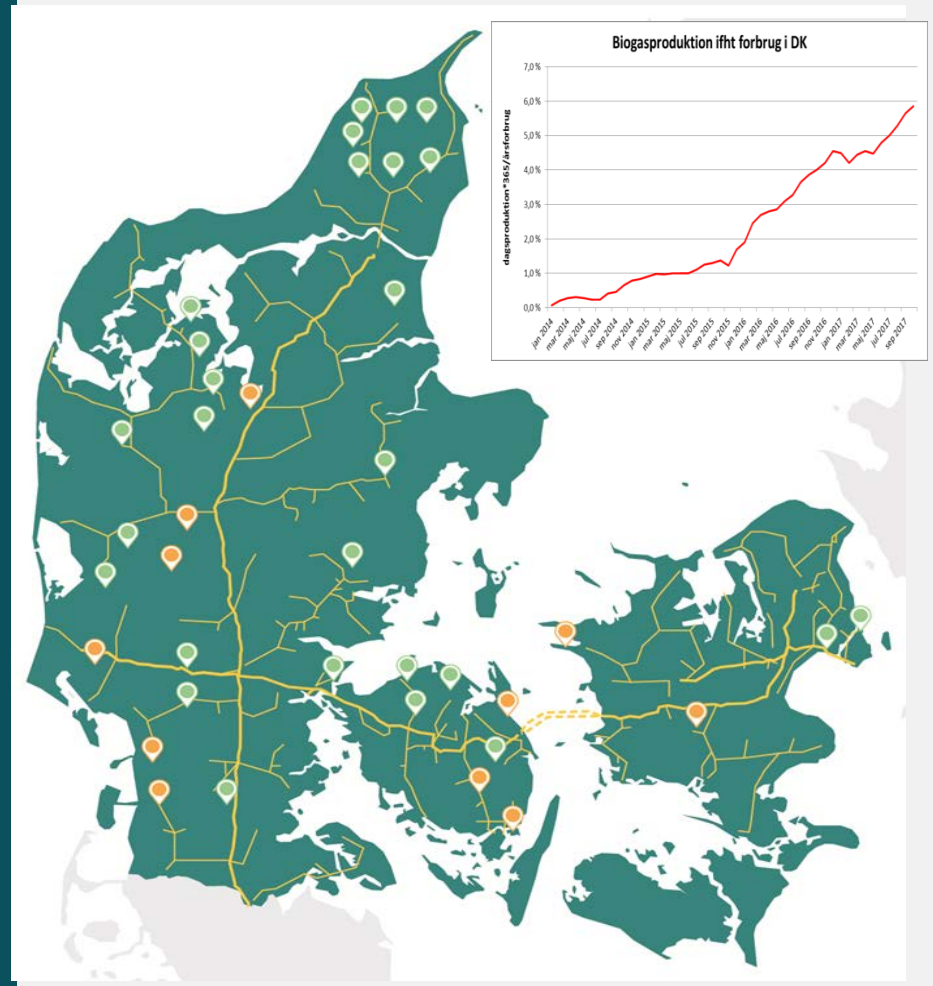
BIOMETHANE IN DENMARK

Energinet:

- Gas TSO, DSO, Storage
- Renewable Gas Registry

Denmark:

- 27 plants grid connected in 4 years
- Share of annual gas consumption:
  - Current: 6% (Dec 2017)
  - Next year: 8-10% (Dec 2018)
- Biomethane in transmission grid
- Next green gases in pipeline
- Marked model being developed



Why do we need cross-border trade with biomethane?

- Gaseous biofuel (biomethane) can be made available to vehicles everywhere in Europe in blends with CNG and LNG.
- New biomethane producing projects can be developed with a higher chance of success if not limited to the domestic market.
- Organic waste utilisation becomes possible even in countries where otherwise the conditions are not suitable (governments not supportive, local market undeveloped, project finance difficult).
- International companies with environmental awareness will have renewable gaseous fuel supplies in every European country they operate.

The proposed solution

ERGaR (European Renewable Gas Registry)

- ✓ **ERGaR aisbl** (non-profit international organisation) established 28th September, 2016 in Belgium
- ✓ **ERGaR RED** - biomethane specific voluntary scheme established and operated by ERGaR aisbl
- ✓ **Function: mass balancing of biomethane** distributed along the European natural gas network with transfer of related sustainability certification
- ✓ **Core documents: Biomethane Proofs of Origin** issued by the national biomethane registries
- ✓ **ERGaR RED seeks recognition by the European Commission** under the RED as a voluntary scheme

ERGaR members

Austria	AGCS Gas Clearing & Settlement AG	(R)	
Belgium	European Biogas Association (EBA)		
Germany	German Energy Agency (dena)	(R)	
	Fachverband Biogas (FvB)		
	Landwärme GmbH		
Denmark	Energinet	(R)	
	NGF Nature Energy		
France	Gas Réseau Distribution France (GrDF)	(R)	
Ireland	Renewable Gas Forum Ireland (RGFI)		
Italy	Consorzio Italiano Biogas (CIB)		
	Vertogas	(R)	
Netherlands	AFS Energy		
	STX Services B.V.		
UK	Renewable Energy Assurance Ltd. (REAL)	(R)	
Switzerland	Swiss Association of Gas Industry (VSG)	(R)	
	Energie 360°		

Three pillars of the cross-border biomethane administration

1. **European natural gas network** (consisting of the transmission and distribution systems) **treated as single logistical facility** with regard to injected biomethane.

2. **Mass balancing of injected and withdrawn biomethane consignments** within the European natural gas network.

3. **Sustainability verification** (prior to grid injection) and **cross-border transfer of sustainability claims.**

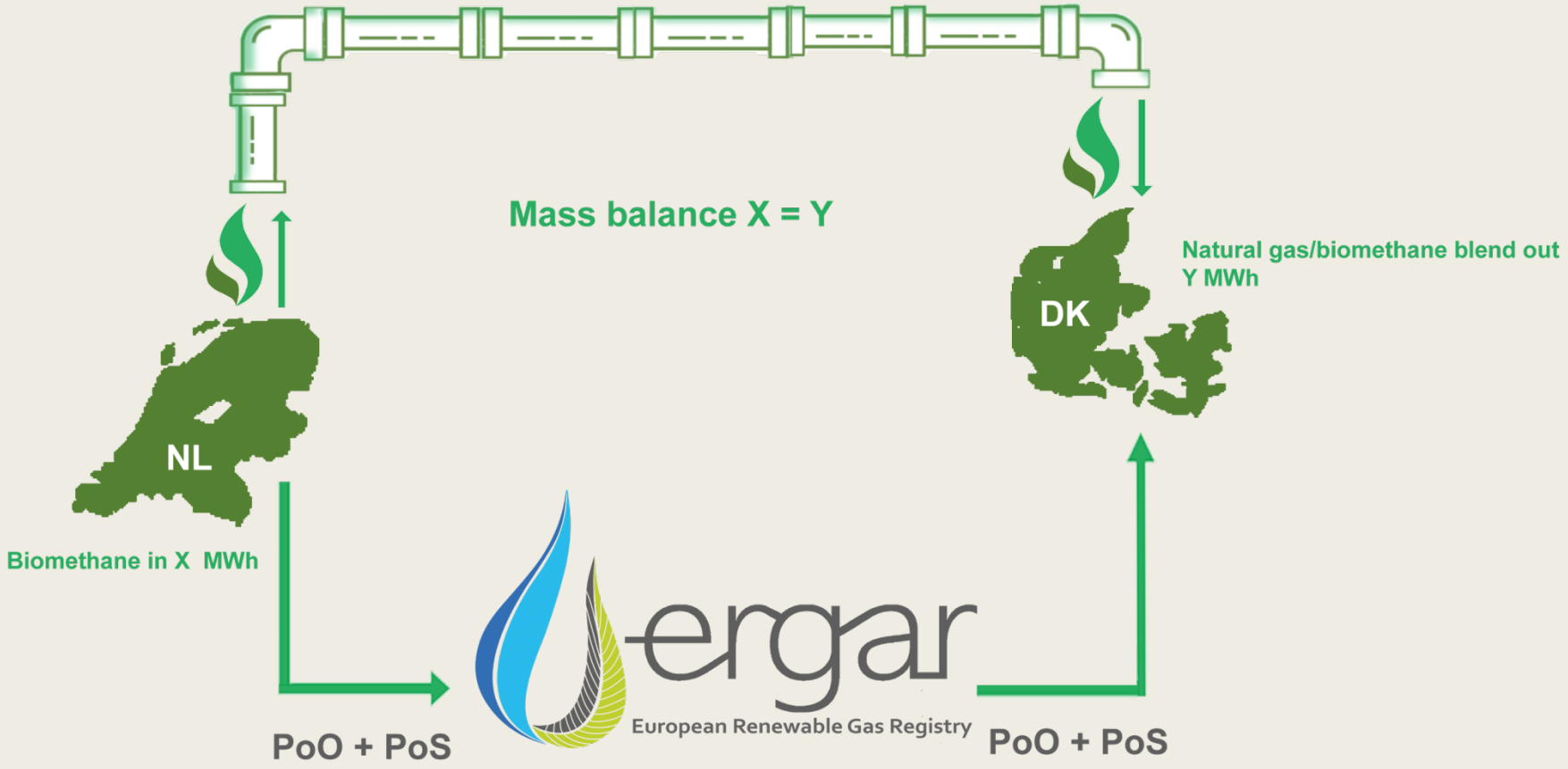
Function of mass balancing by ERGaR

RED Recital (76):

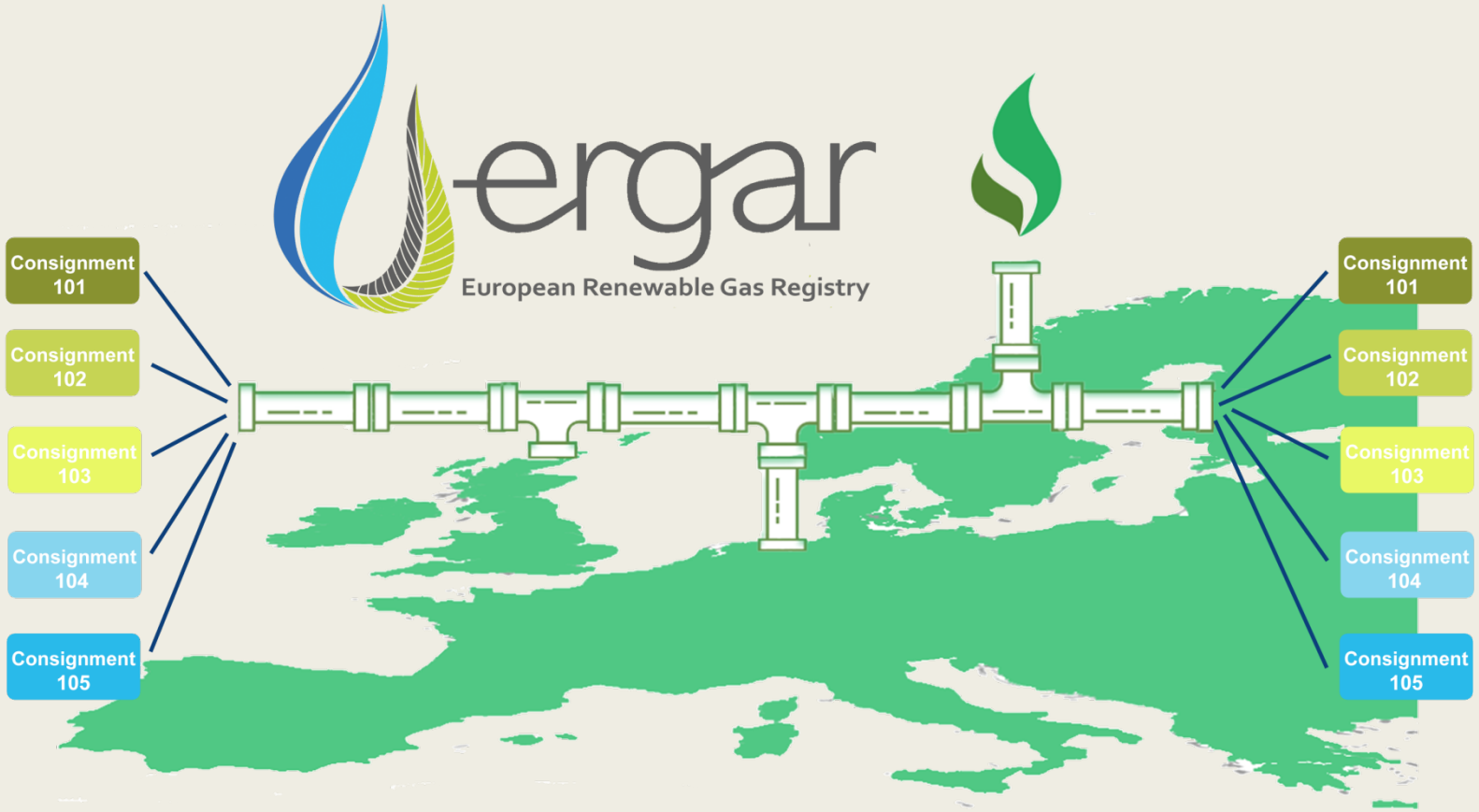
"According to the mass balance method of verifying compliance, there is a ***physical link between the production*** *of biofuels (and bioliquids) meeting the sustainability criteria* ***and the consumption*** *of biofuels (and bioliquids) in the Community."*

The physical link between the production and consumption of biomethane is the natural gas network, the administration must ensure the balancing of every injected consignment with the corresponding withdrawn consignment.

Mass balancing by ERGaR



Mass balancing consignment by consignment



Why do we need the transfer of sustainability characteristics?

The principal answer is in the RED which makes is mandatory:

"Biofuel production should be sustainable. Biofuels used for compliance with the targets laid down in this Directive, and those that benefit from national support schemes, should therefore be required to fulfil sustainability criteria."

The business reasoning is also formulated in the RED:

"Sustainability criteria will be effective only if they lead to changes in the behaviour of market actors. Those changes will occur only if biofuels meeting those criteria command a ***price premium*** *to those that do not."*

Cross Border Transfer of Sustainability Claims

The **sustainability verification** for biomethane injected into the European natural gas network for export purposes should consist of **two steps**:

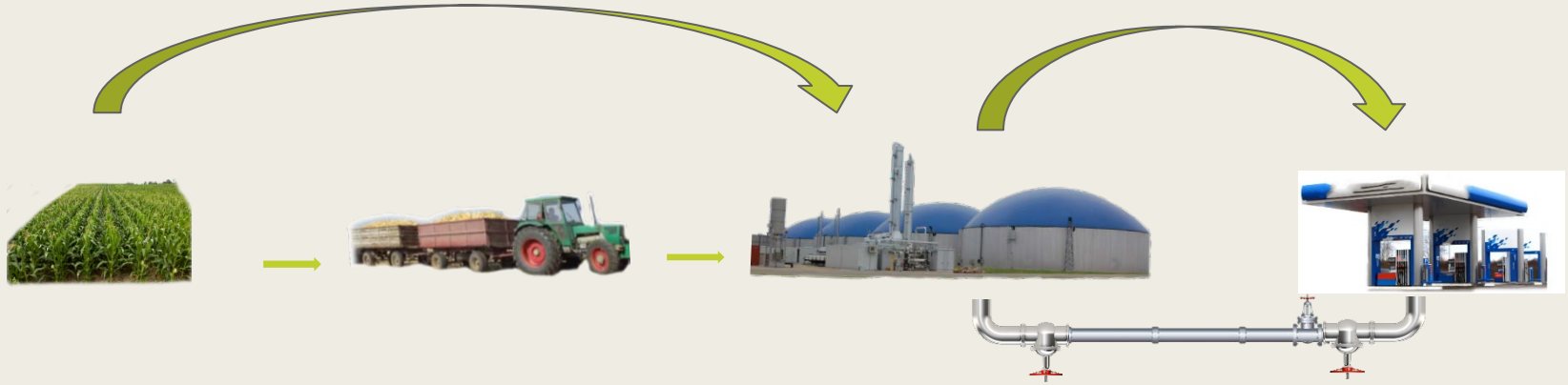
1. The **first part of the chain of custody** – *from raw material supplies through production/upgrading to grid injection* – will be covered by one of the established sustainability verification procedures, exactly like in case of liquid biofuels.

2. The **second part of chain of custody** – *from the moment of grid injection to the withdrawal by the end-user* – will be covered by the new voluntary scheme applying the mass balancing methodology.

Chain of Custody for Biofuels

Liquid biofuels:

Biomethane:



THANK YOU

Jeppe Bjerg
President

European Renewable Gas Registry
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