



Rijksdienst voor Ondernemend
Nederland

Mass balance and grid systems.

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Introduction

Advisor Energy, Energy Grids and Energy certificates @ RVO

Acting Convenor of the CEN WG on the European Standard for Guarantees of Origin (EN 16325)

Formerly:

- Many years of consulting on Energy Certificates and Guarantees of Origin to public authorities
- Policy Advisor at Dutch GO issuing body for electricity CertiQ
- Almost ten years with TENNET TSO

Regulatory Framework

Renewable Energy Directive

+ DA's and Implementing Regulations (like IR 996)

Electricity Markets Directive / Gas Markets Directive (e.g. Annex 1.5 gas markets directives)

But also e.g.

CSRD

Green claims directive (draft)

Country perspective

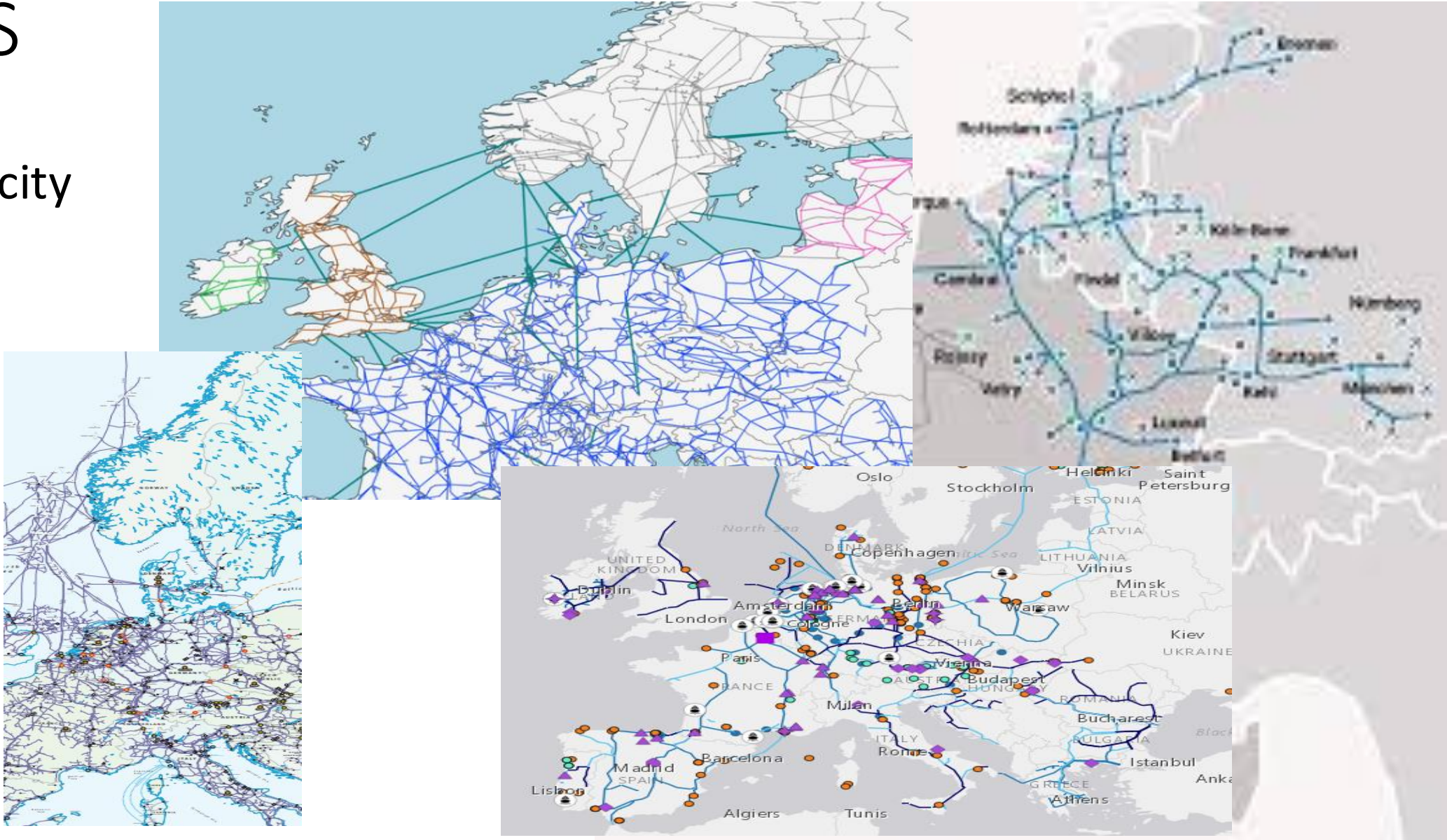
1. Fullfill RED obligations / sectoral targets, meanwhile
 - Stay within detailed EU regulations on proving sustainability
 - Allow for strong supervision / compliance checks
 - AVOID DOUBLE COUNTING OF RENEWABLE ENERGY
2. Fullfill UNFCCC / KYOTO GHG-emission reductions as a country; preventing “leakage”.
3. Other obligations, e.g. staying within the EU single market framework

Opening statement

- Energy Grids are the regular way of transporting large volumes of energy
- Energy Grids are the preferred way as they are much more energy efficient and have huge benefits from a technical and economic perspective compared to alternatives.
- Energy Grids supply to several sectors / applications
- The administrative way to deal with renewable energy should be able to accomodate grids.
- Preventing the usage of energy grids for purposes of national target achievement and sustainability information sharing is NOT a viable option.

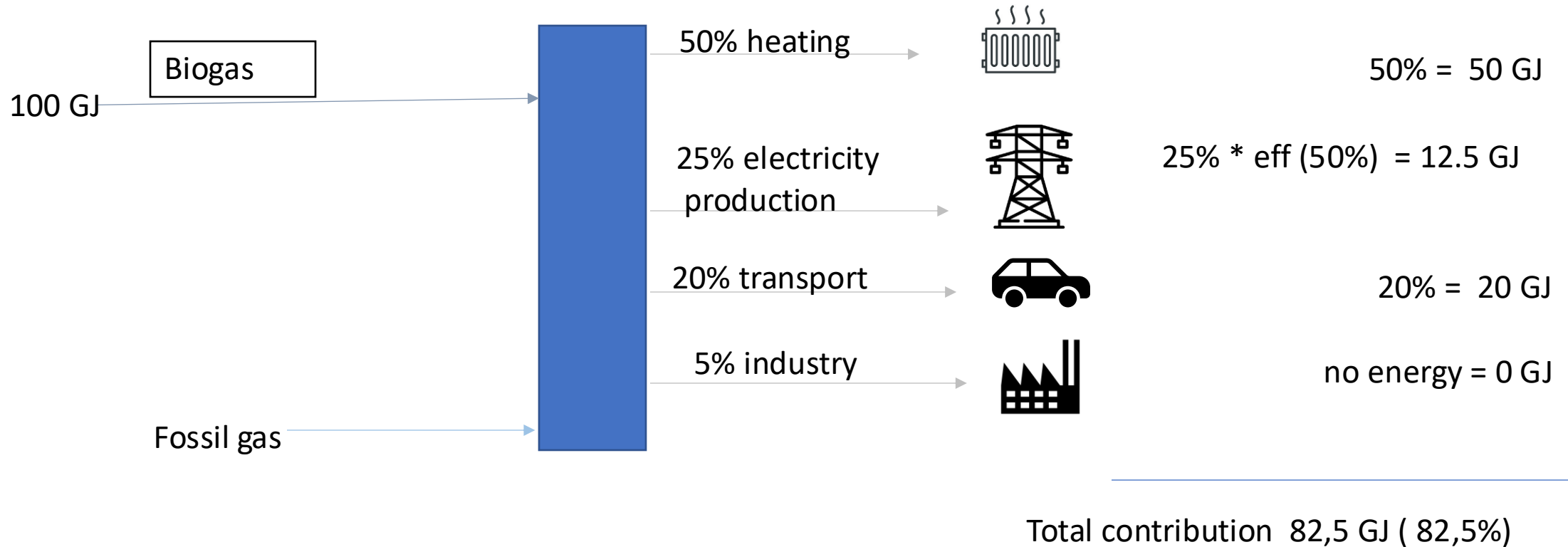
GRIDS

- Electricity
- CH₄
- H₂
- Fuels



Grid distribution

example : Dutch gas grid



Statistics follow physical flows, so allocated on physical distribution

Current situation (in EU / within national regulatory frameworks

- In practice, there are two issues:

“IR996 prevents mixtures of fossil and renewable when using POS.”

CASE BP vs FRANCE

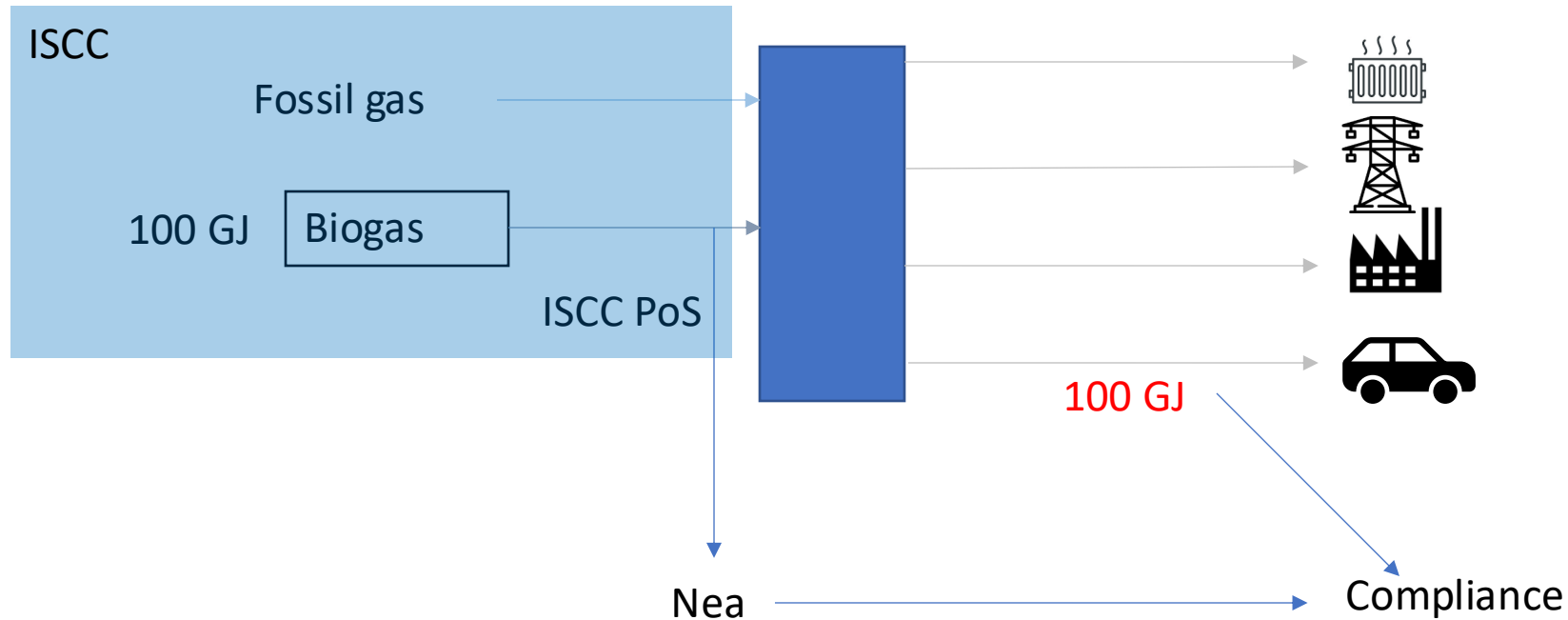
ISCC (or similar) certificates (POS) are currently NOT accepted if not related to (mixtures of) solely renewables.

Preventing double counting of Renewables hampers EU trade as Member States have an interest to count “their” national achievements as their own....

Specific allocation (Netherlands)

Contribution to RED
Transport target

example : allocation possible for transport obligation



Possible because NEa accepts the PoS at the entrance of the grid, no PoS handed out after!

Allocation of less biogas to other sectors, only possible on national level because that does not impact the overall target.

Possible situation (in EU / within national regulatory frameworks)

- Where could we go from here?
- 1. Usage of grids for renewable gasses and fuels to be permitted within EU framework for reasons of efficiency

While at the same time:

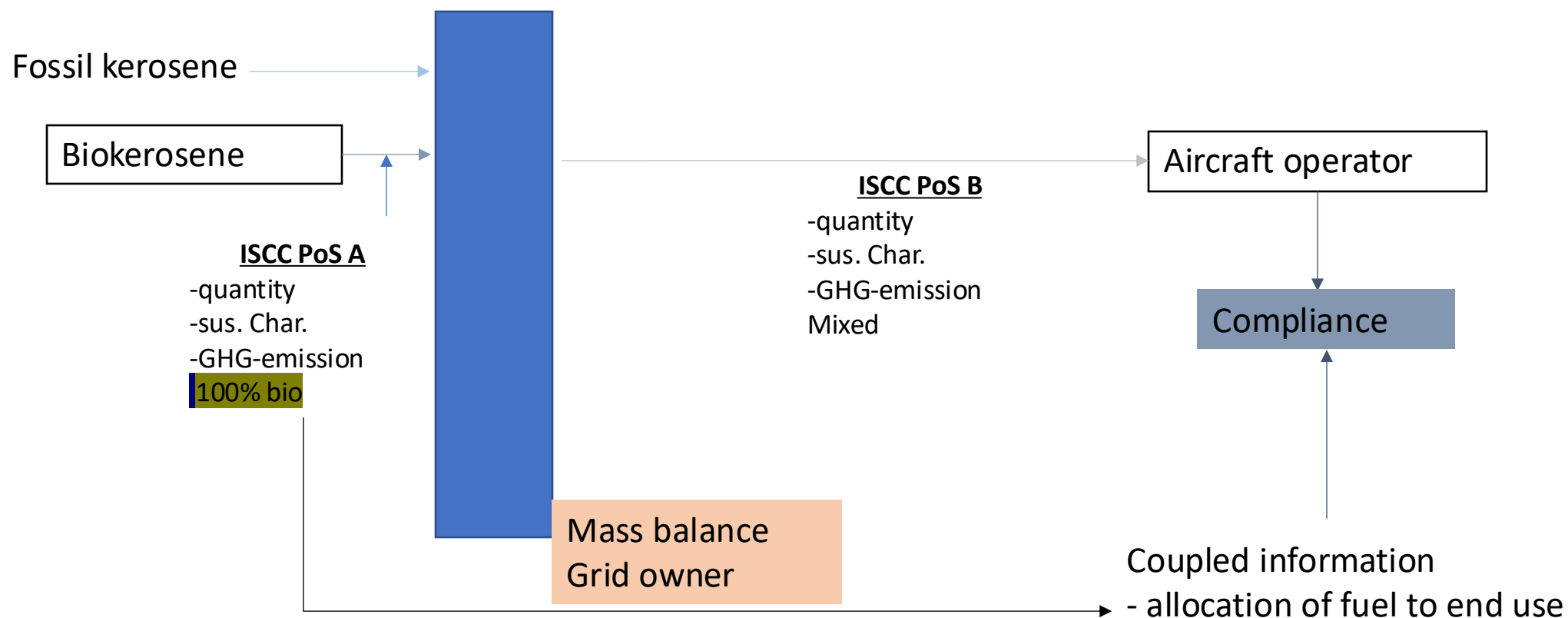
- 2. Achieving national (sectoral) targets as agreed under e.g. RED as well as Paris Agreement

WHILE AVOIDING DOUBLE COUNTING

What does it need to do so?

1. Integration of POS-system (proof of sustainability) and GO (proof of renewable aspect of energy supplied through grids)
2. Generic EU agreement (ex ante) to use the flexibility mechanism (statistical transfer) to reflect the flow of renewable energy cross border across the grid to be proven ONLY by POS AND GO and to be reflected in the UDB (as reflected by the agreement between MS).

Delivery to transport from Grid



In case of a proper coupling of POS and GO within the UDB this information can be combined with compliance information. (PoS A and PoS b)

Compliance

- Allocation based on energy input and end use proportional allocation
- Specific allocation possible if:
 - PoS is provided at **injection in** the grid
 - Use of gas out the grid is documented
 - At national level
 - International trade from a member state perspective would need a bi-lateral agreement along the lines of the RED flexibility mechanisms (or preferably a generic EU /EEA agreement) related to consequences for reaching EU targets and Paris Agreement goals while avoiding double counting

NL

Outside NL

Certification (ISCC)

ISCC PoS A

100% Bio
Bio gas

ISCC PoS B

Mixture

Fossil gas

Mass balance

Compliance based on allocation

Statistical transfer

Compliance

National authority

Why should a government allow statistical transfer ?

NL

Outside NL

Certification (ISCC)

Fossil gas

ISCC PoS A
100% Bio
Bio gas

ISCC PoS B
Mixture

ISCC PoS C
Mixture
MeOH production

Mass balance

Compliance based on allocation

Shares

Allocation to export

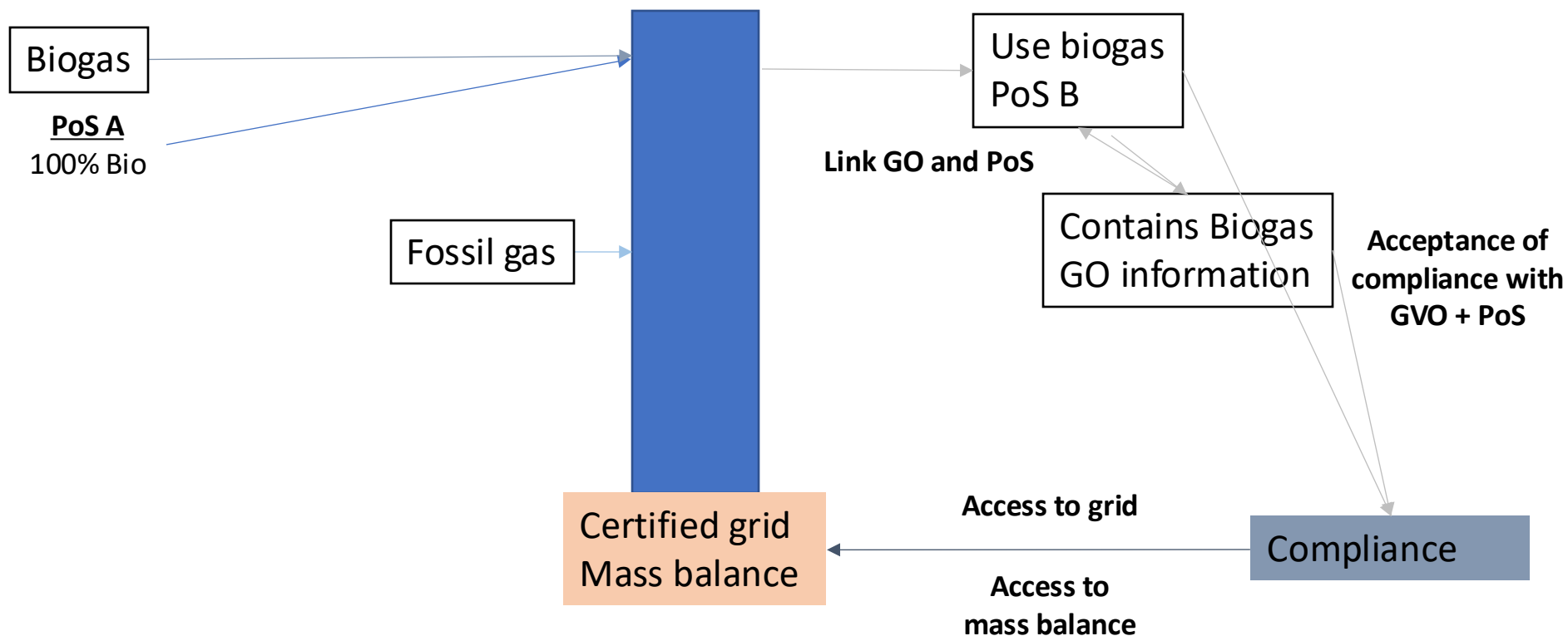
National authority

Statistical transfer

Compliance
statistical transfer

Other national authorities

Using GO and POS in the UDB for compliance



Summary

Under which circumstances can grid exported biogas be used for compliance in the imported country?

- The PoS used for compliance needs to be traceable to injection in grid
- Statistical allocation by member states (in SHARES)
- (Renewable) Gas is accounted for in the correct country

Extra slides / niet gebruikt