



Industrie Service

**Choose certainty.  
Add value.**

# International transfer of GoOs for biomethane

Point of view

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2 Traders talking:

„Man, I made a quite good deal. I bought the whole 2016 production of the Foolgas biogas facility for 4 ct/kWh only!“

„Pah, I also bought the whole 2016 production of the same facility, but I only paid half of your price!“

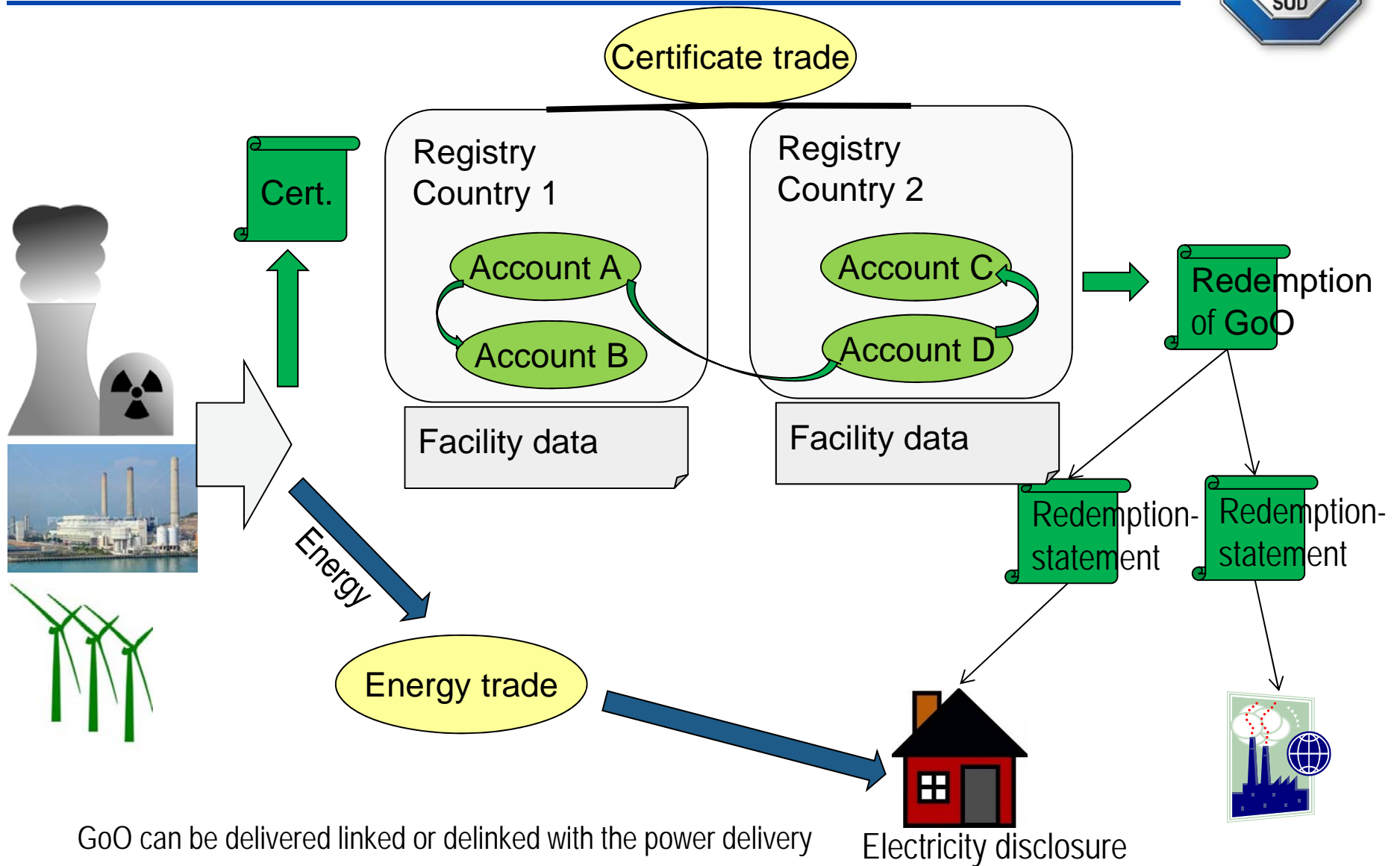


- Current situation:
  - Injection of biogas/biomethane according to varying national rules
  - Registration of biomethane production facilities/injected biomethane in national registries voluntary
  - Hardly any couplings between national registries
- Complications:
  - Transfer of GoOs for biomethane certificates from one registry to another is hardly possible (with few exceptions)
  - Transfer of criteria
  - Difficulties for suppliers of biomethane based products to offer their services internationally
- How to trade biomethane internationally?



1. GoOs for electricity and the differences to biomethane
2. Possibly ways for an international market
3. Risks
4. Customized solutions
5. Outlook

# Certificate system with register data base (electricity)





## General information

- Name of facility
- International identification number (GSRN)
- Location
- Country
- Source of energy
- Start-up date
- Installed capacity (in kW)
- Kind and amount of subsidy

## Specific information

- Unique identification number
- Month of production (production period)
- Generated Energy (kWh/MWh)

# Difference between GoOs for electricity and biomethane

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- Electricity:
  - GoOs regulated and standardised by European Community
- Biomethane:
  - No European regulation
  - No European standardisation
  - Voluntary registries



- ‚Biomass‘ is defined

2009/28/EC:

**Biomass:** means the biodegradable fraction of products, waste and residues from biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste;

**Energy from renewable sources:** means energy from renewable non-fossil sources, namely wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, **biomass, landfill gas, sewage treatment plant gas and biogases;**

- ‚Biogas‘ not defined (no standardised international (european) definition of biogas)
- **Not even homogeneous national definition of biogas/biomethane**



# Inconsistent definition of ‚biogas‘ in Germany

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- Landfill gas, gas from sewage treatment, H<sub>2</sub> can be biogas according to EnWG (Energy Industry Act) but not according to EEG (Renewable Energy Act)

# Is trading of biomethane certificates suitable?

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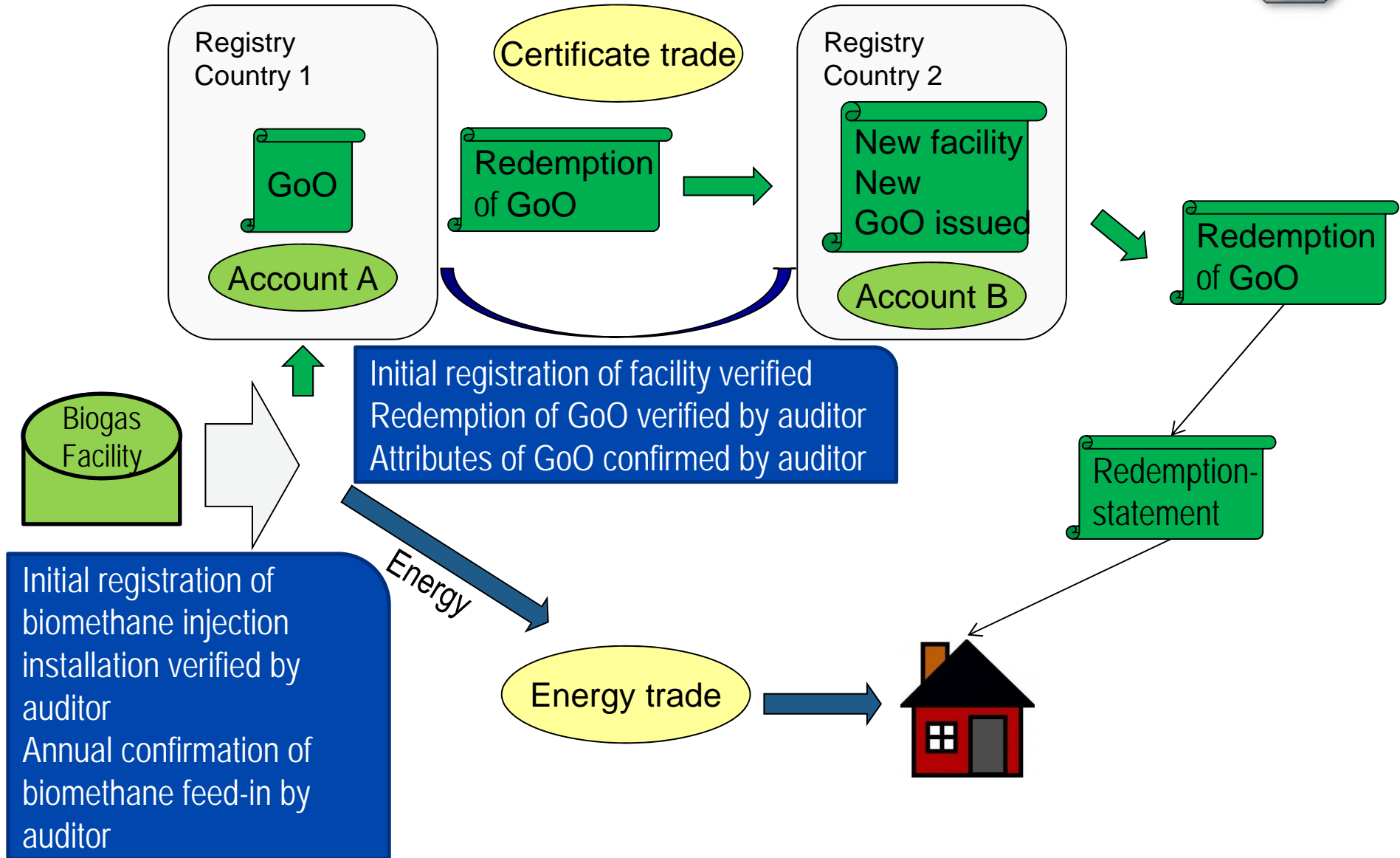


- How does the transfer of GoOs for biomethane work?

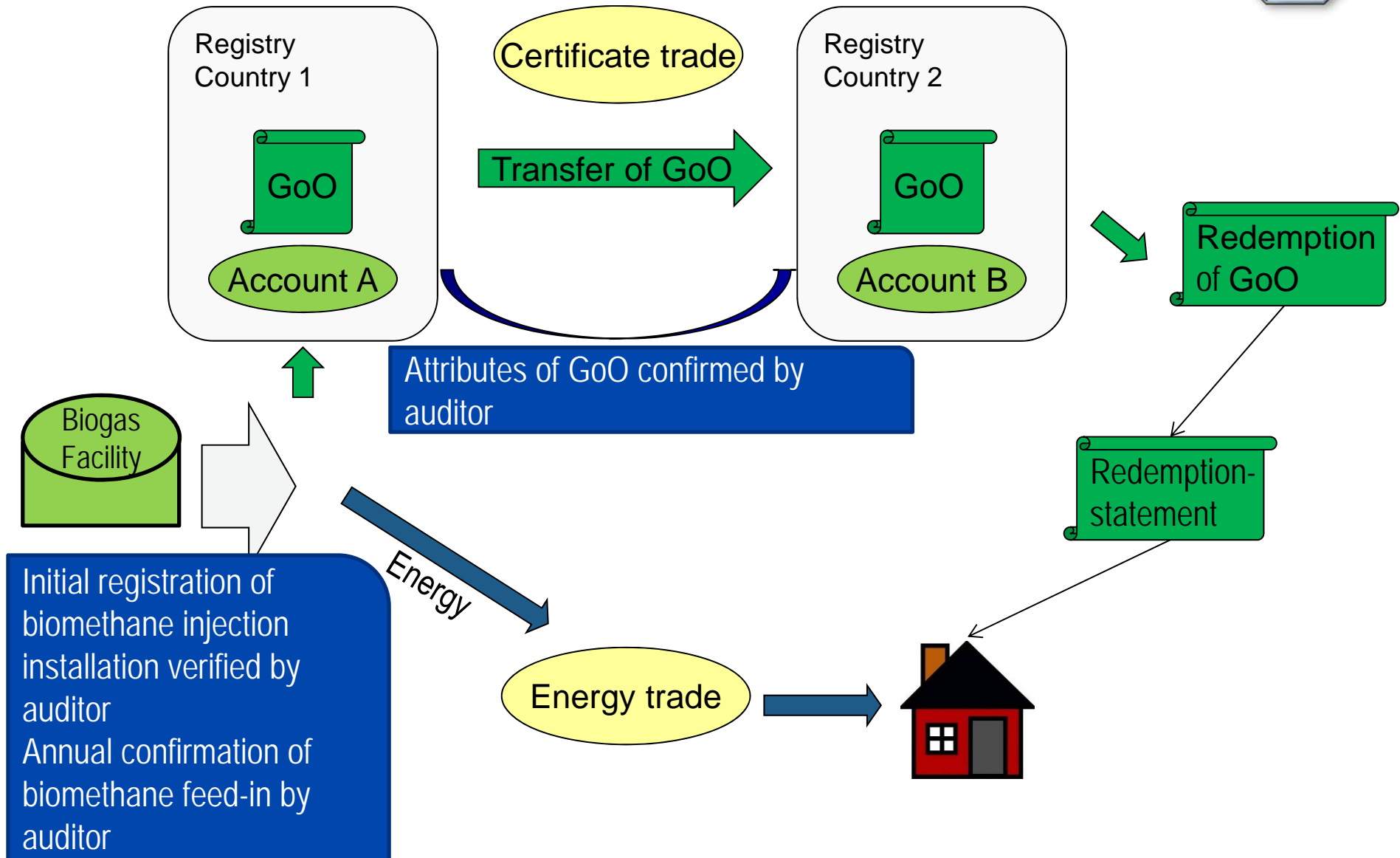


- Three ways possible
  1. No registry coupling (current way)
  2. Registries coupled (new way)
  3. (future way)
    - Registries coupled and standardized  
or
    - One single European registry with different administrators for each member state or region

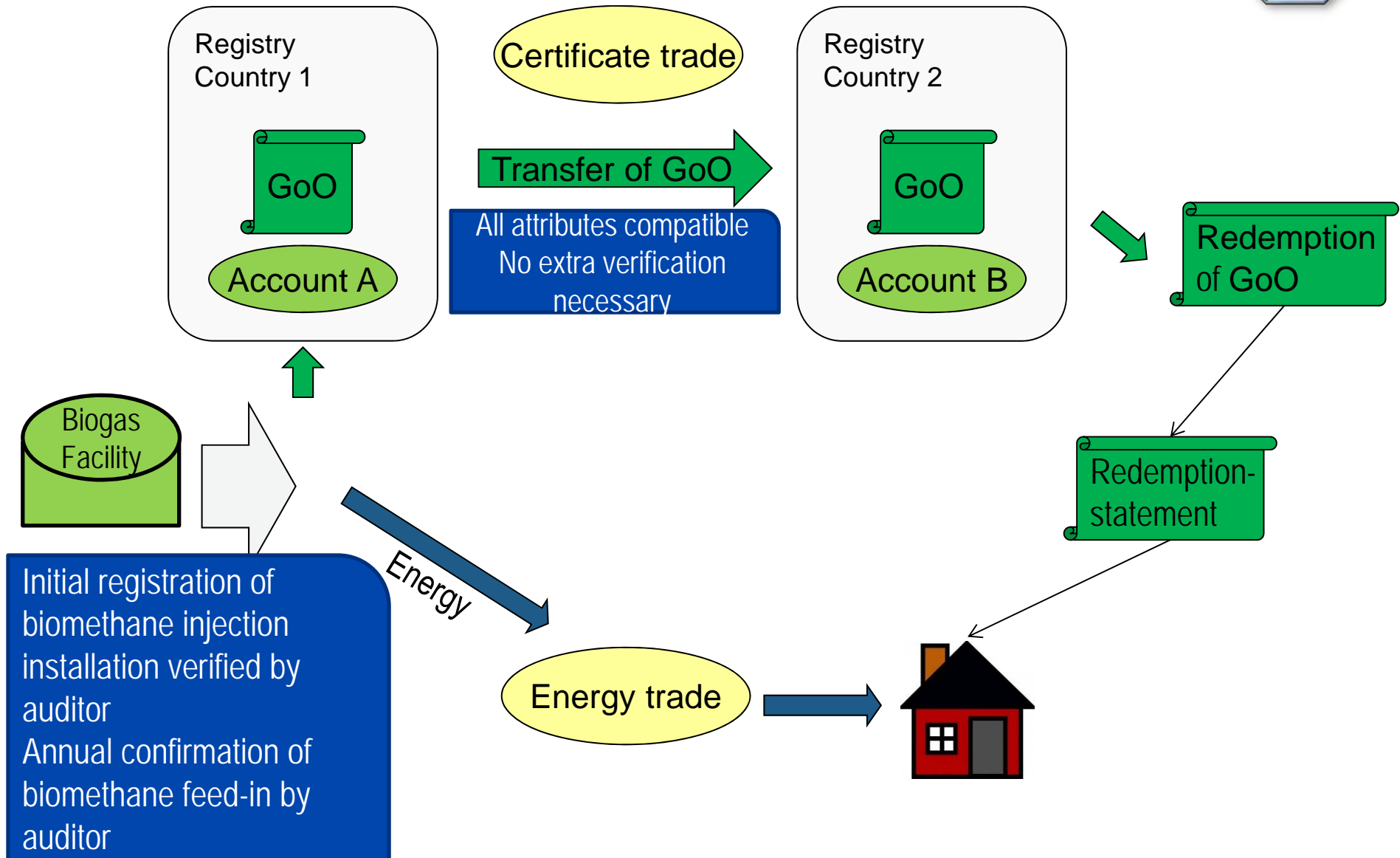
# International transfer of GoOs (current way)



# International transfer of GoOs (new way)



# International transfer of GoOs (future way)



# Problem attributes: Criteria for biomethane in registries

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- Different criteria in different registries
- Vast number of criteria

# Problem: Double Counting / Double Selling

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- Problems with subsidies:

Added value ,bio' or ,reduction of emissions' might already be taken into account in national balances of origin of biomethane

- No obligatory single registry for certificates per country yet

Parallel input into different registries is possible (e.g. biogas registry, REDCert (Nabisy), other private business registries e.g. naturemade (VUE Suisse))





- Current way:
  - Annual confirmation of biomethane feed-in (and marketing if certificates issued in multiple registries)
  - Verification of initial registration of biomethane injection facility in second country
  - Verification of redemption of GoO to issue new GoO in the registry of another country
  - Confirmation of attributes of GoO
    - Basic attributes demanded by registry
    - Customized attributes
- New way:
  - Annual confirmation of biomethane feed-in
  - ~~– Verification of redemption of GoO to issue new GoO in the registry of another country~~
  - ~~– Initial registration of biomethane injection facility verified~~
  - Attributes of GoO confirmed by auditor
    - Basic attributes
    - Customized attributes



- Focus on the demands of the customer/consumer
- What are the demands of the customer/consumer?
  - Does the „biomethane“ fulfill the requirements of the customer/consumer? (energy source: crops, no crops, landfill gas ok?)
  - When was the biomethane produced?
  - Is the price appropriate? (Subsidies)
  - Does the customer/consumer acquire the complete added value? (no double counting/double selling)
- Use of “Nachweisrelevante Bemerkung” in dena registry



- International trade of biomethane is still in the beginning but already possible on a certificate based system
- Next steps:
  - Global (European) definition of biogas/biomethane is necessary
  - General basic criteria for different qualities of biomethane have to be defined
  - And to be accepted/applied by all participating registries
  - Standardised requirements for independent third party auditors (accreditation)
  - Double counting has to be eliminated by the registry coupling agreements
- Until then:
  - Third party audits by independent and qualified organisations necessary
  - Individual 'transfer reports' attesting relevant information for customer of certificates
  - Individual proof that no double selling/counting has occurred has to be provided



The best way to convince your customer in an obscure market situation is with transparent information verified by independent qualified third parties.



Thank you very much for your attention!

Questions welcome



## General information (facility data)

- Address, postcode, city, country of the biomethane facility
- Capacity of the biomethane facility in kWh/year
- Start-up date of the biomethane facility
- Type of facility: landfill, sewage, agricultural, organic waste digestion or process gas, co-fermentation
- GSRN for metering point of gas injection (or any other unique identification code for grid gas access)



## Specific information (production data)

- Production time of biomethane (production year)
- Energy source: landfill, sewage, agricultural, organic waste digestion or process gas
- Co-fermentation: composition of inputs and gas yields (percentage)
- Kind of subsidy (amount of subsidy for production support)



# Certification of renewable energy und resources

Green  
Electricity

Biogas/  
-methane

Biofuels

Green  
Hydrogen

Renewable  
Resources

Enterprise  
of Energy  
Transition

Register data base