



REGATTRACE

Renewable Gas Trade Centre in Europe

Mapping the state of play of renewable gases in Europe



EBA

European Biogas Association

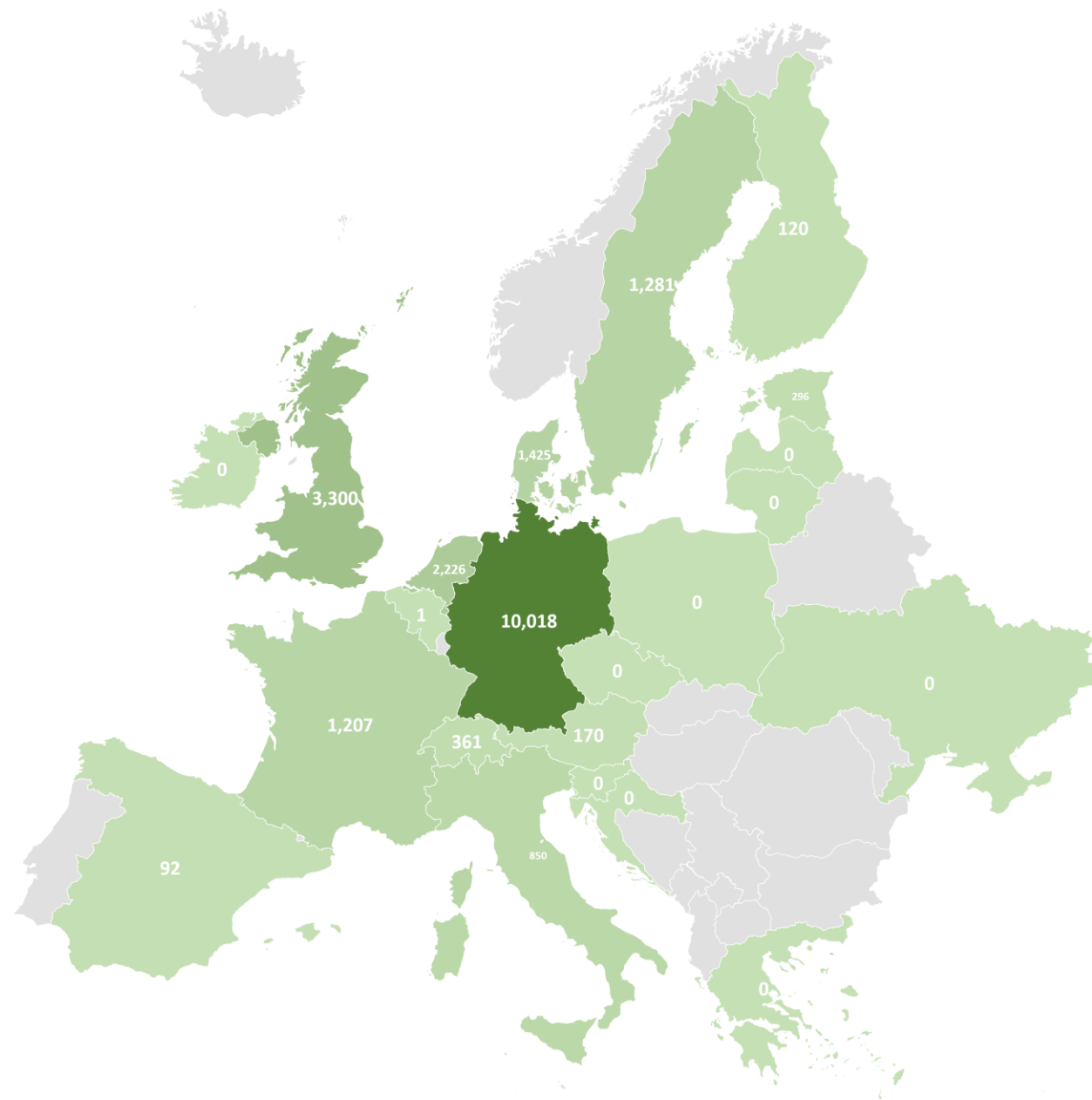
Susanna Pflüger,
EBA
Estonia,
30th November 2020

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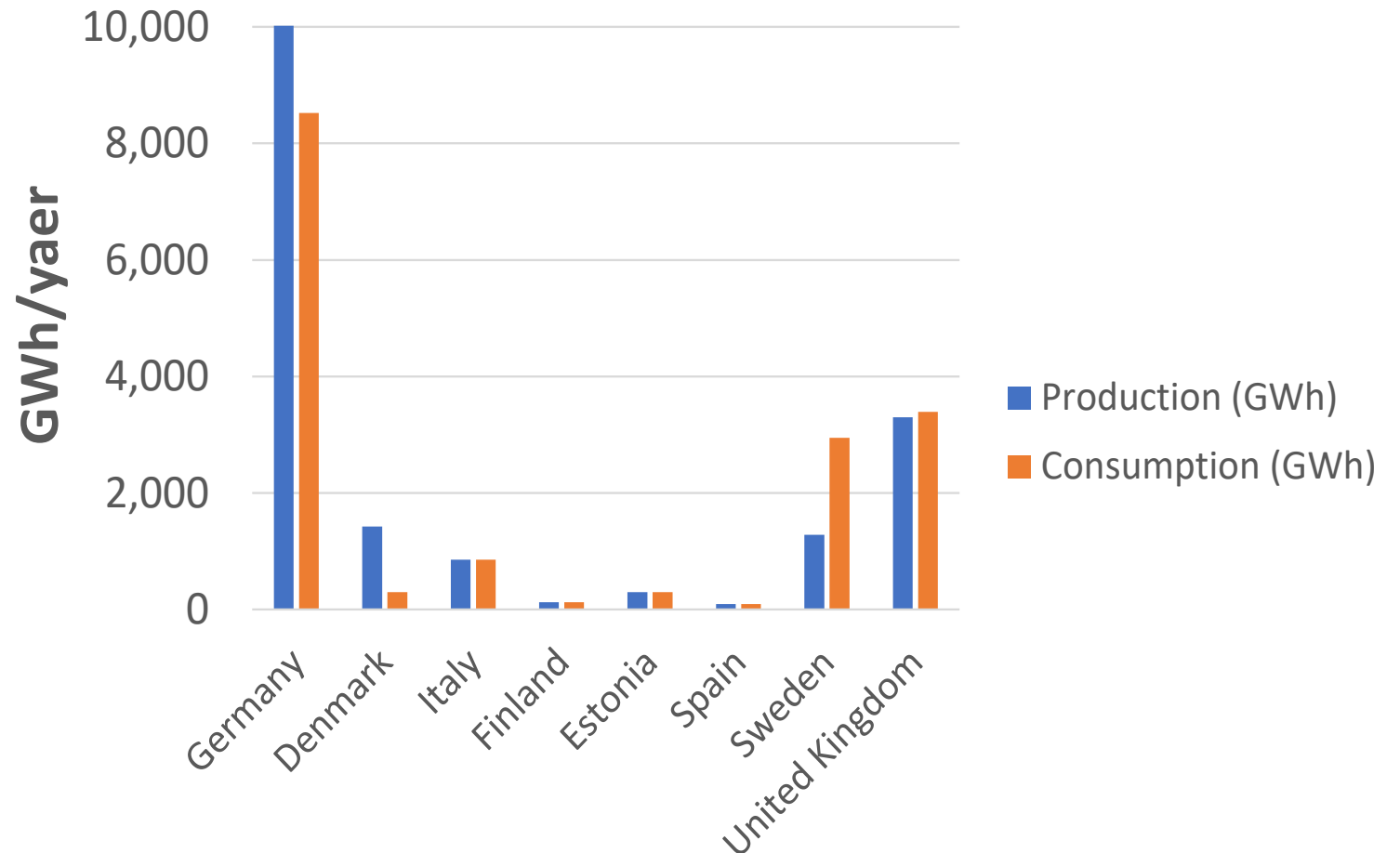
Europe – Renewable gas production per country (GWh/year)

- Data for countries involved in the REGATRACE project
- Most recent data (mostly 2018)
- Countries with biggest production are Germany, UK, the Netherlands, Denmark Sweden and France
- Only Sweden and Germany reported renewable gas production via gasification or power-to-methane
- EBA stats (end of 2019): 707 biomethane installations with 3 bcm produced, 2,5% liquified



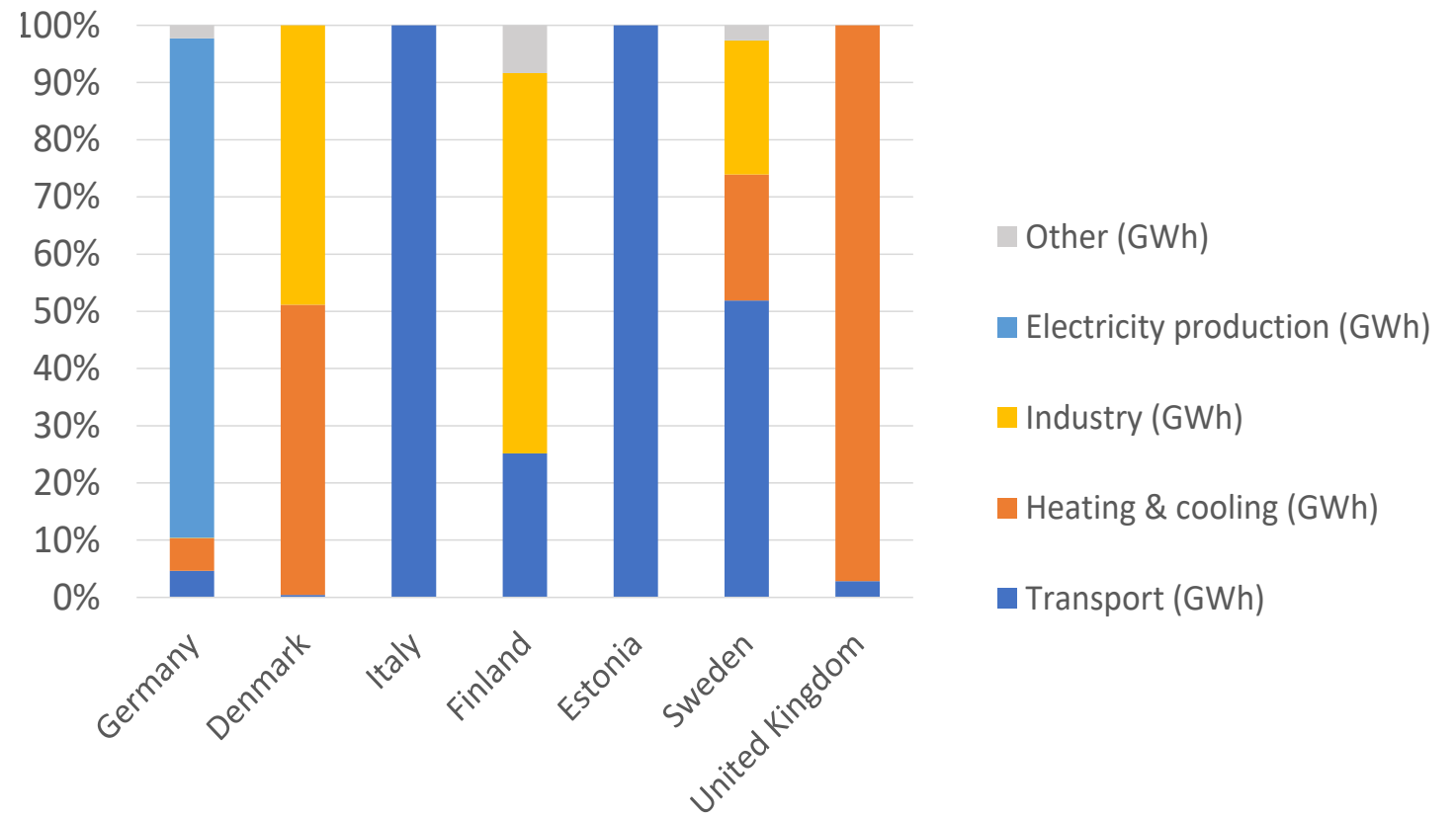
Europe – Total biomethane production compared to total biomethane consumption per country

- Graph shows only countries where data is available on both production and consumption
- Consumption in a country = end-use application was in this specific country
- For most countries well balanced
- Sweden: incentives are focused on on consumption side, whereas most other countries incentives are focused on production side → Sweden is an importer of biomethane



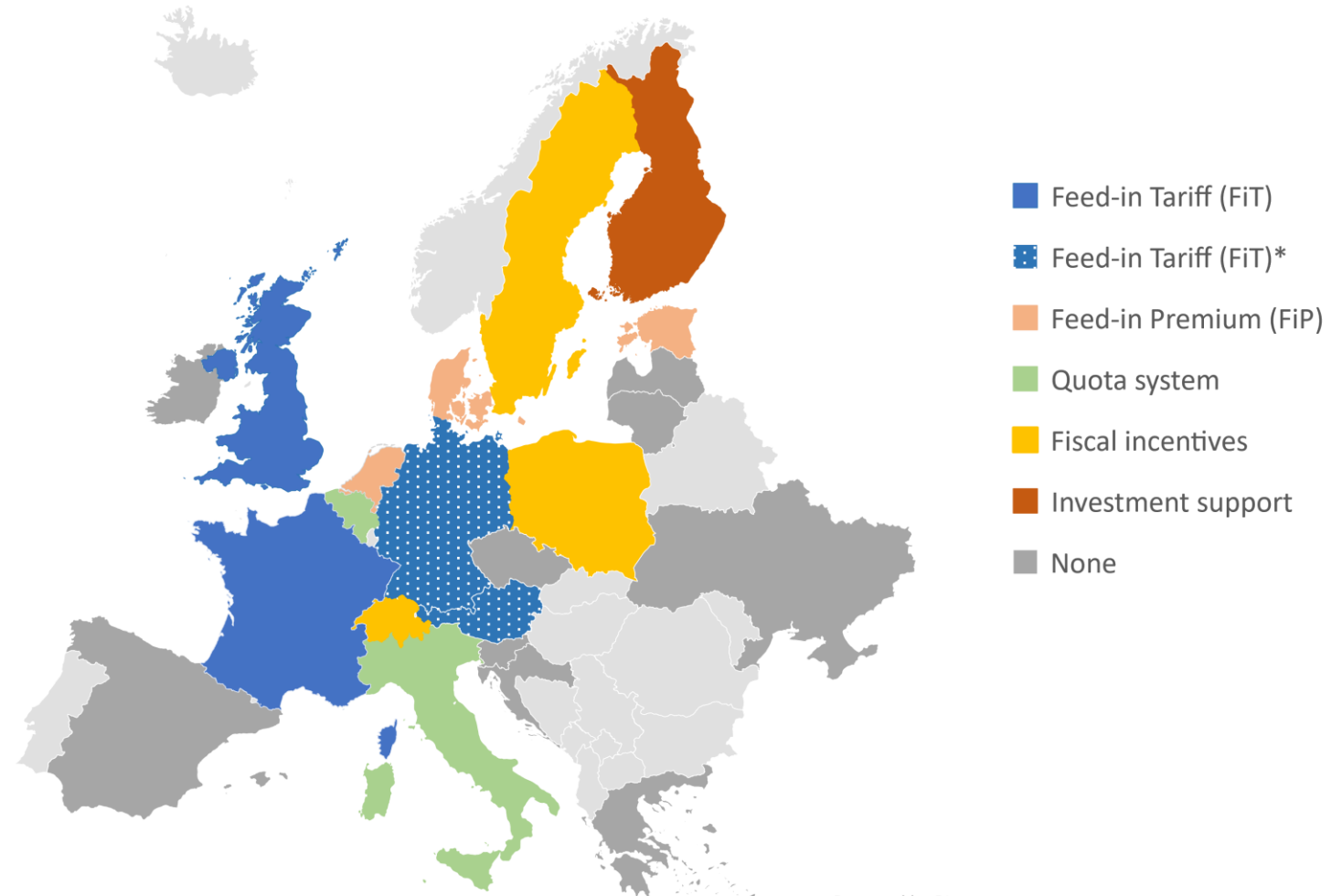
Europe – Consumption of biomethane per sector and per country

- Distribution of different end-use applications for biomethane
- Counting methods can be different between countries
- End-use pathways are depended mostly on regulations
- Sweden: transport due to favourable support scheme
- Italy: transport, facilitated by the already existing infrastructure and methane vehicle fleet
- Germany: CHP units due to Feed-in Tarriff



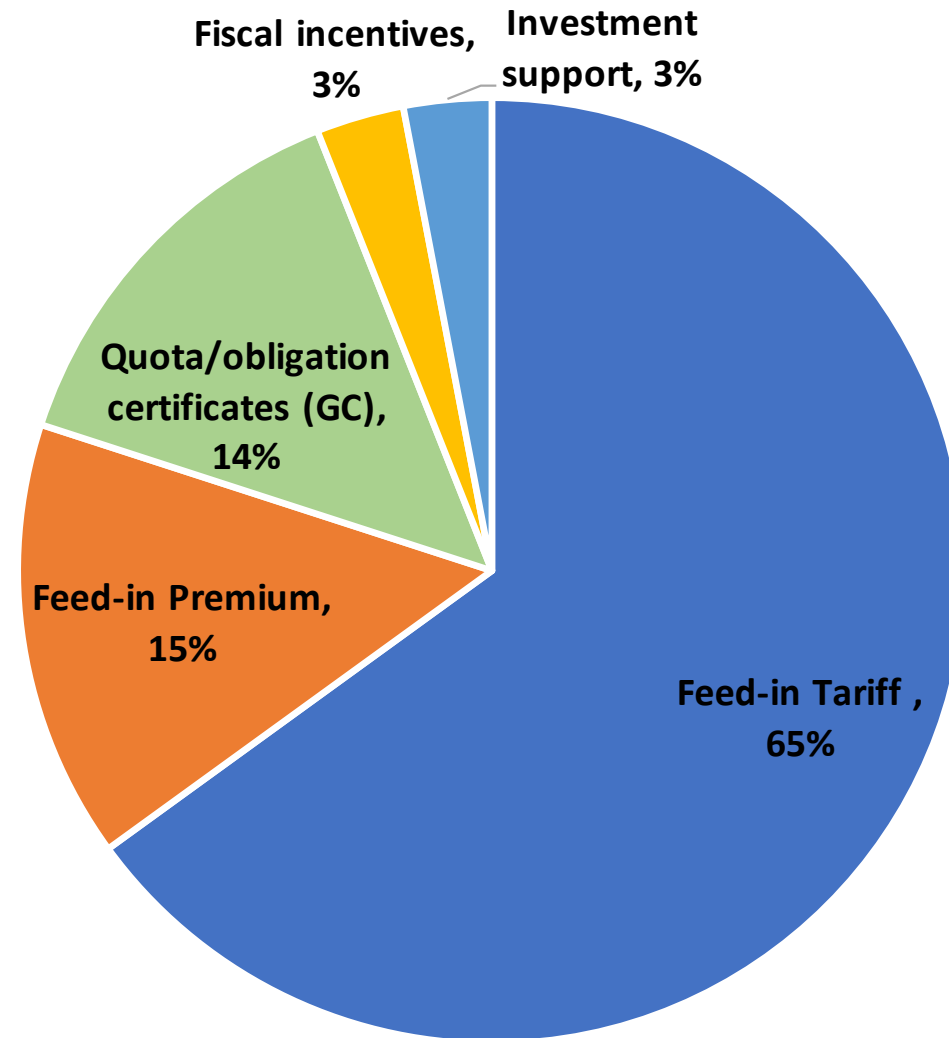
Europe – Support schemes with biggest impact on the biomethane market per country

- Most often applied support scheme for biomethane in Europe is Feed-in Tariff
- Austria and Germany: support schemes only apply when end-use of biomethane is electricity production
- Belgium: only applicable in Wallonia
- Belgium - Flanders: currently no operational support for biomethane, but minor investment support



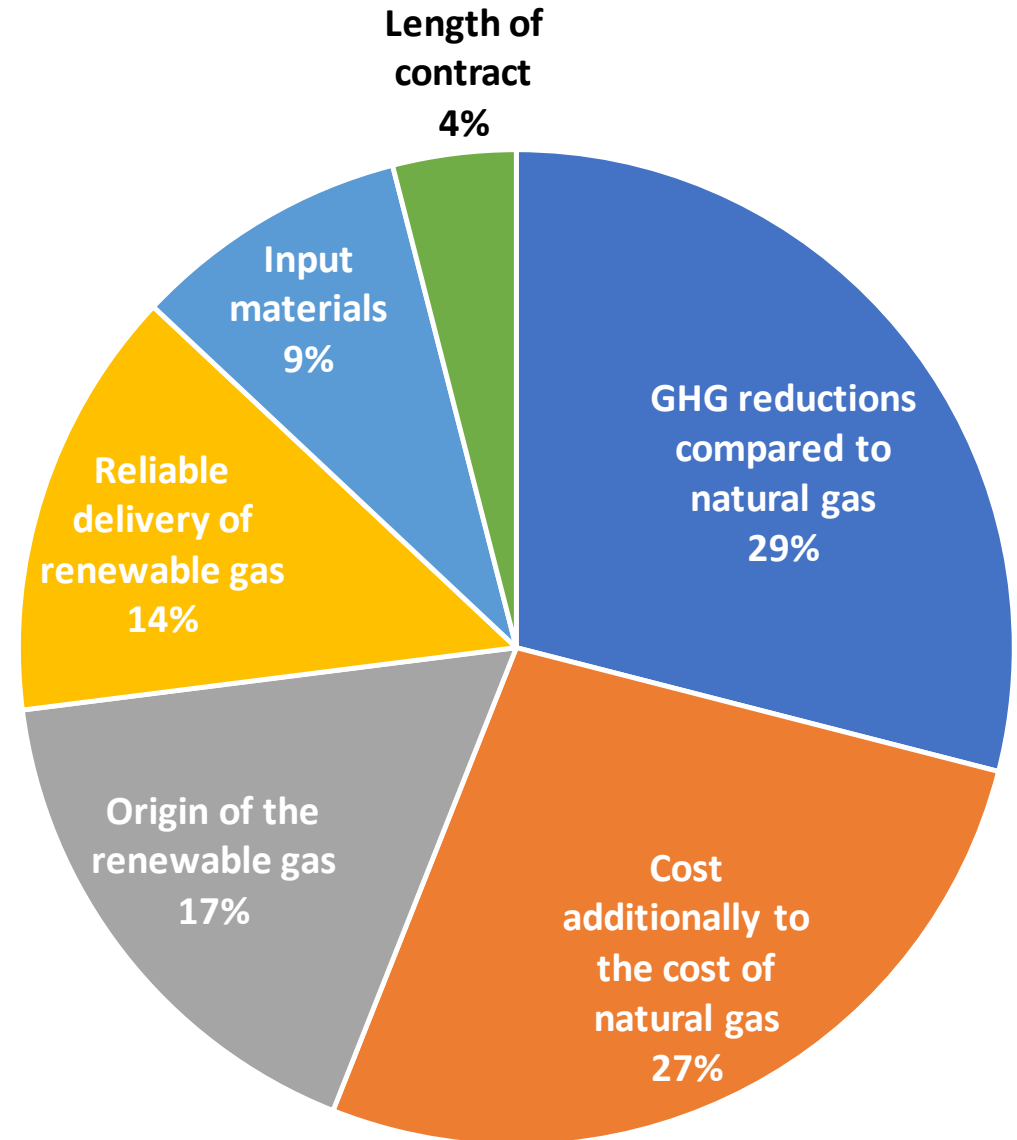
Europe – Preferred support schemes

- Preferred support scheme according to the REGATRACE survey is Feed-in Tariff (65%)
- Followed by Feed-in Premium (15%) and Quota/obligation certificates (14%)



Europe – Importance of different aspects of renewable gas for consum

- The REGATRACE online survey identified consumers preferences for types of renewable gas
- A choice experiment was conducted
- This figure shows the relative importance of different attributes of renewable gas
- GHG emission reduction have the highest impact on consumers choice (29%), followed by cost of the gas (27%)



Europe – Conclusions

- The status of biomethane markets in member states and their current legislative frameworks are scattered in Europe. Each Member State has a different view on the subsidy and use of renewable gases.
- Many countries mention biomethane as an interesting alternative for existing biogas plants, as they can decarbonize the natural gas grid.
- The most common support scheme for biomethane in Europe is a Feed-in Tariff, followed by Feed-in Premium and fiscal incentives. Several countries have more than one type of subsidy schemes in place, which either complement each other or differentiate in the end-use application of the biomethane.
- The cross-border trade of biomethane is still limited. For most countries, production and consumption are well balanced.
- GHG reduction compared to natural gas is the aspect of the renewable gas with the highest impact on consumers choice, followed by cost additionally to natural gas.

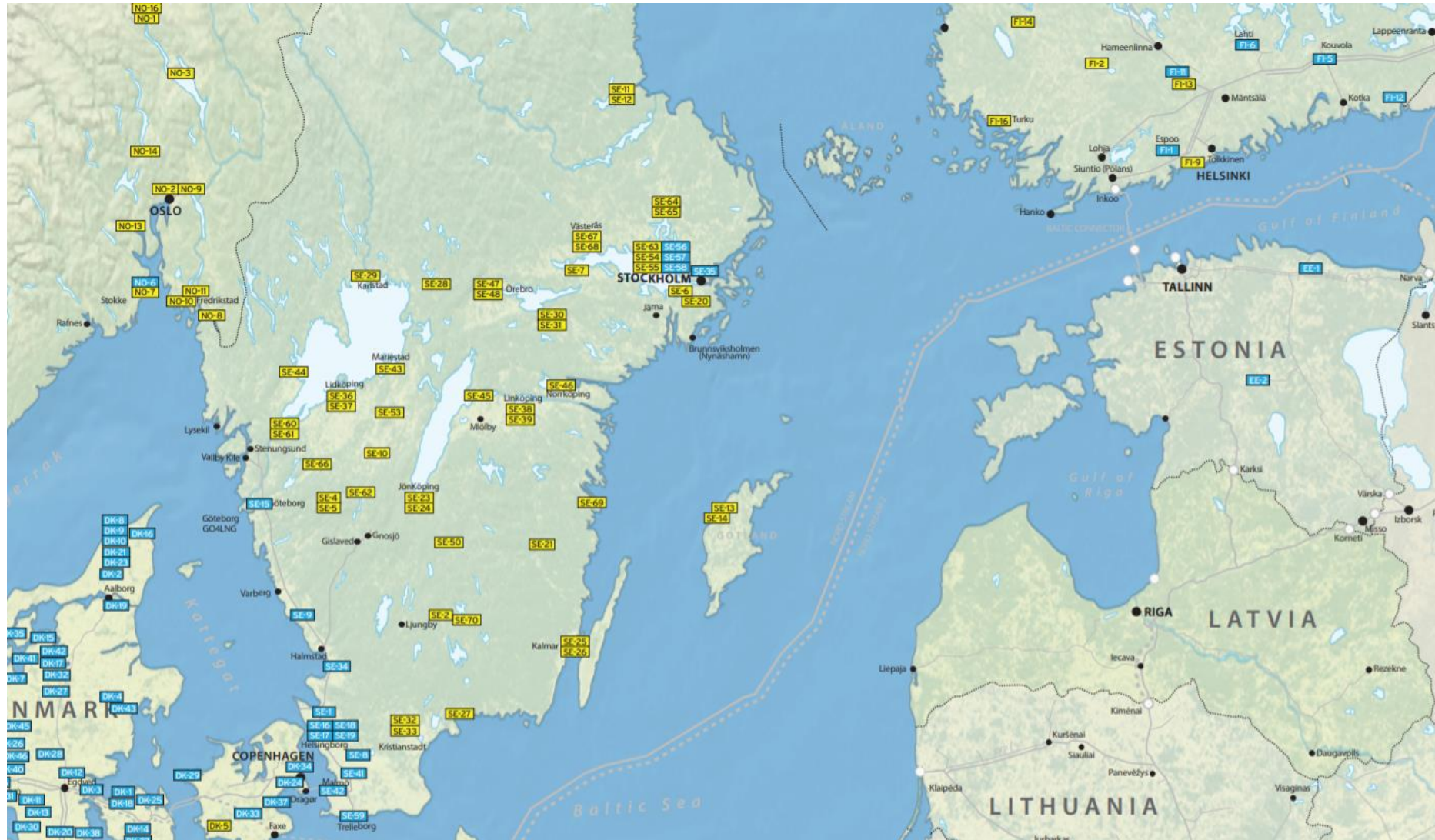
Estonia - Regulatory framework and subsidy scheme



- Good development since 10 years
- Support for production, buses and filling stations, understanding of positive externalities
- NECP: a ten-fold increase of biomethane by 2030
- Future trends: a part of a common European biomethane market – important to get the EU regulatory framework right; shipping fueled by bio-LNG?



Estonian (and regional) market

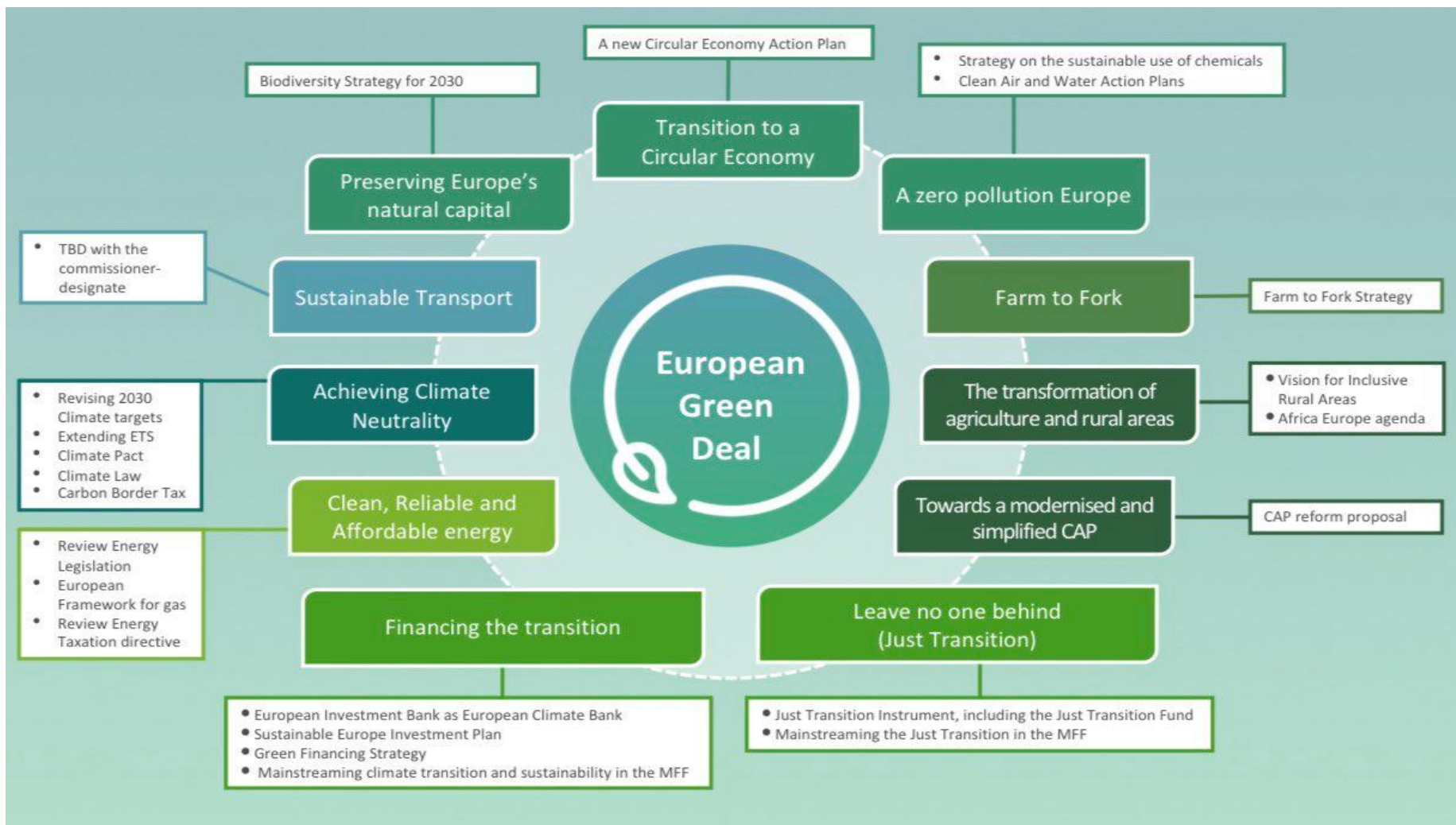


4 biomethane
plants, 14
biogas plants

Cross-border
trading allowing
to meet the
future demand?

Policy update from Brussels

European Green deal – on the way to the first climate-neutral continent



“No net-zero without biogas..” important policy initiatives

- **Sector integration strategy** (July 2020) – biogas to complement the energy supply in sectors that are difficult to electrify: industry and transport (particularly maritime) – underlines the need to use the untapped feedstock potential for biogas
- **Methane Strategy** (October 2020) - covering the areas of energy, agriculture and waste, to tackle emissions of methane and exploiting synergies between sectors, such as biogas production
- **Taxonomy** – sustainable finance (autumn 2020) - classification system for sustainable activities: gas and bioenergy strongly questioned
- **RED II revision** (June 2021) – Upward review of the targets + further promotion of renewable fuels including gas in hard-to-decarbonize sectors (industry & transport), further clarification on GOs, a possible challenge: stricter sustainability criteria
- **Transport policies** (ongoing in 2020-2021) – from tailpipe to LCA?
- **“Gas package”** (4Q 2021) - positioning renewable and low-carbon gases in the overall energy system – new start for the biogas sector

Future of gas in Europe



- The biomethane potential in Europe by 2050: 1170 TWh
- Expectation by 2030 with right policies in place: 370 TWh
- Main uses: heavy transport & maritime transport



Thanks for your attention!

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