Guarantees of Origin - will prices stay high?
Guarantees of Origin - will prices stay high?

The bulls steered the market in 2022

Dry year, war in Europe and sky-high energy prices

- 2022 was significantly bullish coupled with higher volatility
- GO prices (Nordic hydro ‘22) more than quintupled from levels around €1.7/MWh at the start of 2022 to €9.8/MWh in November
  - Lower-than-normal hydrological balance created supply scarcity
  - As a result of the energy price crisis, Hydropower producers were cautioned to conserve water in their reservoirs from May onwards
  - Supply concerns as in in most countries, the disclosure of green power consumption needs to match the production from the same year
  - Emergency measures tackling high energy prices caused investment uncertainty

Perfect bullish storm in 2022
Guarantees of Origin - will prices stay high?

2023 saw some correction – prices remain elevated

**Role of GOs strengthened - demand to remain**

- Energy prices eased as well as hydrological balances with the start of 2023
- With the adoption of revised regulation role of GOs was strengthened as instrument for mandatory disclosure (RED III, State aid Guidelines, Taxonomy, Internal Electricity Market Directive)
- This results in higher willingness-to-pay
- The temporary export ban of Icelandic GOs created some confusion amongst market participants, wondering whether AIB could take a more active role, leading to increasing volatility
- Short-term outlook
  - Market activity is currently quite low, characterized by subdued trading and volume levels over summer while volatility remains elevated
  - Focus is shifting to 2024 and 2025 contracts
  - We expect 2023 contracts to trade around the €6/MWh threshold, dropped below lately due to “Hans”
  - We expect a €7.5-€8.0/MWh range for 2024 and around €7/MWh for 2025
  - Main driver is increasing demand to bolster renewable electricity claims and higher regulatory requirements causing competition for GOs

**Hydrology situation normalized**

**Our mid-term forecast suggests slightly higher supply y-o-y**

We estimate that the number of GOs issued in 2023 (Biomass, Hydro, Solar & Wind) will be 733.6±68 TWh, versus 726TWh in 2022 and 747TWh in 2021
Guarantees of Origin - will prices stay high?

Our long-term outlook – have we seen the peak?

Assuming BAU corporate demand our forecast is bearish

Norway exiting EECS could lift prices by €4/MWh

- The capacity build-out in this model reflects EU’s net-zero emission target by 2050 and National Energy and Climate Plans, renewable electricity demand is reflecting IEA’s net-zero emission scenario
- This is our conservative scenario, showing BAU corporate demand. With increasing claims and stronger regulatory requirements for using GOS we assume demand to deviate from here

- Prices are declining towards 2040 due to high renewable capacity build-out and corresponding GO issuance.
- In case Norway were to leave the GO market (as indicated by the coalition contract), we see a €4/MWh upside potential in the near-term as a result of 130 TWh not being exported
We empower decision-makers towards a net zero world.