

## **Industry power sourcing & RED-compliant PPAs**



### **Power Procurement in the Nordics**

Industry power sourcing from industry transition projects starts to take off for real.

Still hard to find agreement on price, especially in northern Sweden.

Flexible operations more optimal, but still hard to go below baseload with current electrolyzer costs.

EU PPA requirements on RFNBO-producers, hydrogen and data centers in Delegated Acts to Renewable Directives.

PPA interest from offshore wind parks – effect from potential cfds etc.?

Nuclear PPA, Battery PPAs?

## RED Delegated Act for RFNBO, broadening to hydrogen for industry

#### Northern Sweden & Norway

Above 90% renewable grid

- Electricity from grid is renewable
- PPAs still signed as part of hedging strategies
- GoOs must be annulled

#### **Effects on Power Procurement Strategies**

- > Several PPAs from various sources
- ➤ Behind-the-meter storage
- ➢ GoO purchase
- > Readiness to reduce production when lack of renewable generation often correlated to high power prices
- Also allows for other revenues on intraday and ancillary markets.
- > In low-carbon grid also look to secure offtakers to low-carbon, but not RED-compliant "end-product"

#### Finland, SE3, SE4

Low carbon-grid

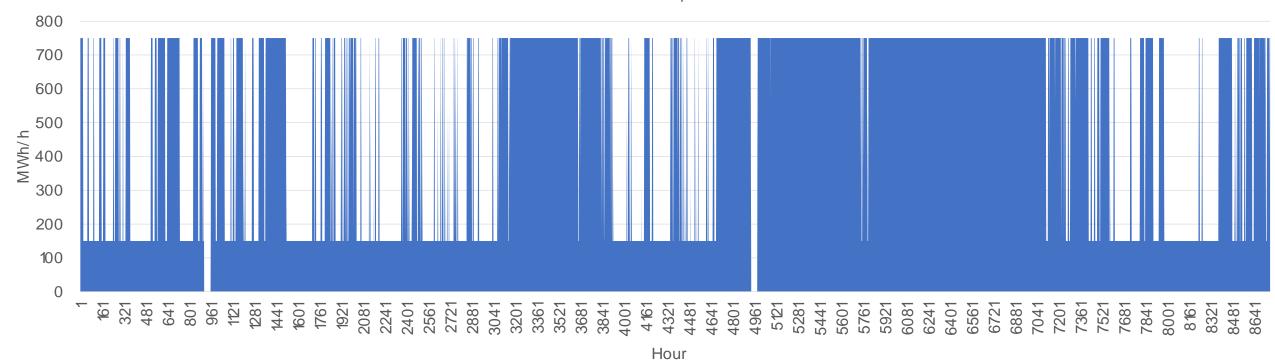
- PPAs are required, from unsupported assets
- No additionality criteria (= ex hydro ok)
- Monhtly matching, 24/7 matching from 2030
- Or power prices below 20 EUR/MWh

# Consumption schedule not for the BASELOAD lovers...

Wind PPA Capacity: 1500 M	W
Max Capcity Hours (#): 50	23
Ramping Hours (#): 5	45
Minimum capacity Hours (#): 30	99
Zero capacity Hours (#):	93

Simulated Base Case P2X Power Consumption Schedule (1500 MW Wind PPA)

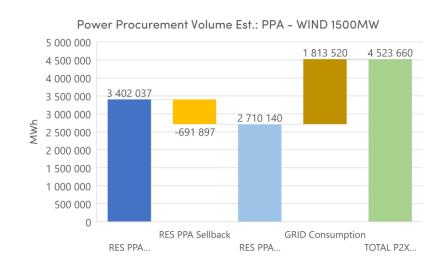
■ Simulated P2X Consumption Schedule

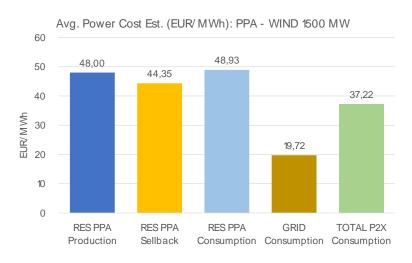


## **Examples of considerations & analysis**

Example calc

Renewable grid





Low-carbon grid

