

Trends in the GO Market

Bodecker Partners, Malmö

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SKM**

Svensk kraftmäklings SKM

- SKM one of the biggest brokerage firms in the Nordic Power Market
- We have been in the GO market since early 2007
- We hold a permission for brokerage of financial contracts, from the Swedish FSA, Finansinspektionen.

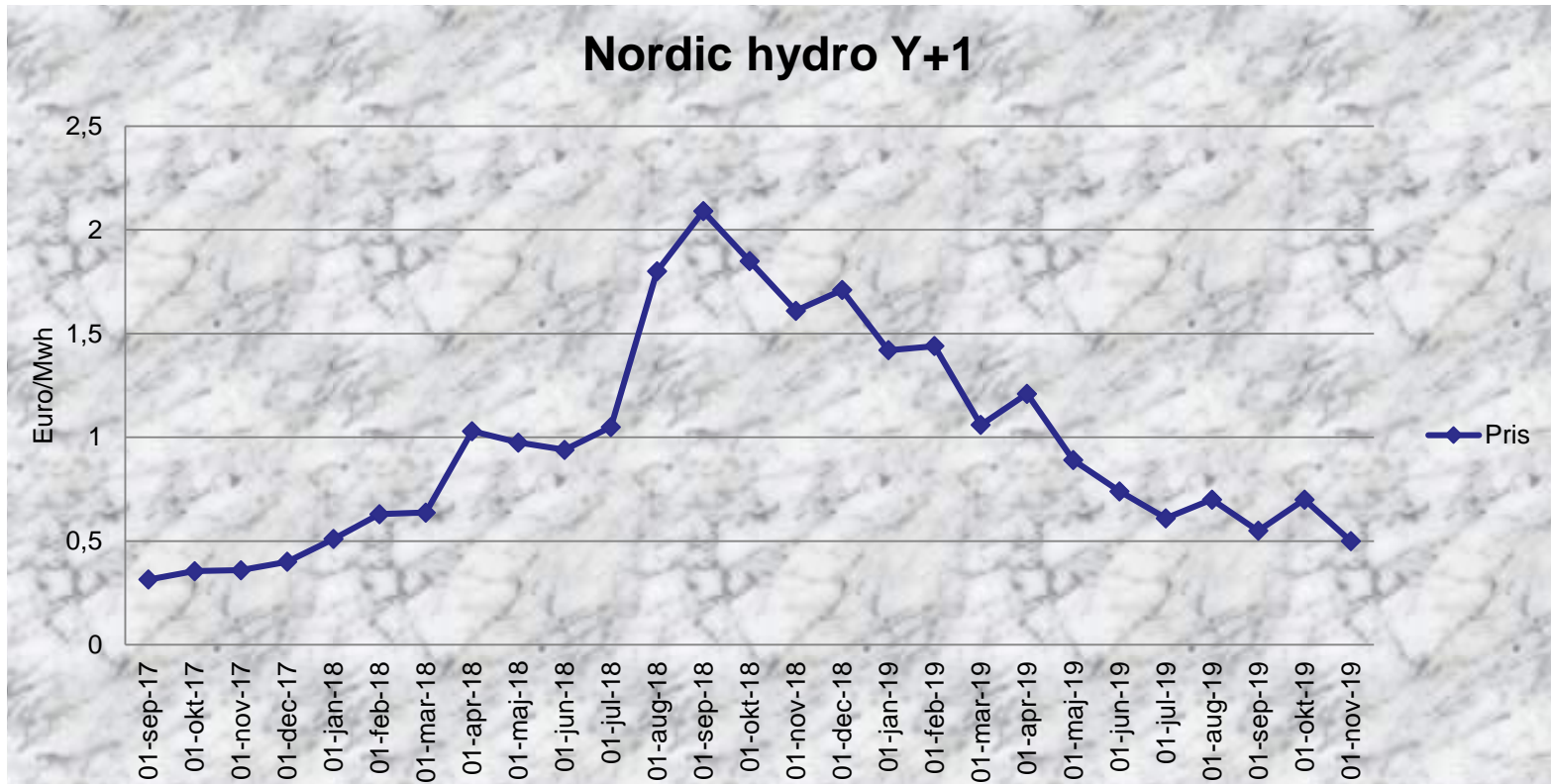


Nordic hydro is the volume product setting the price

Nordic hydro is still price setting for the European GoO market, despite the big increase in wind power production.



Nordic hydro



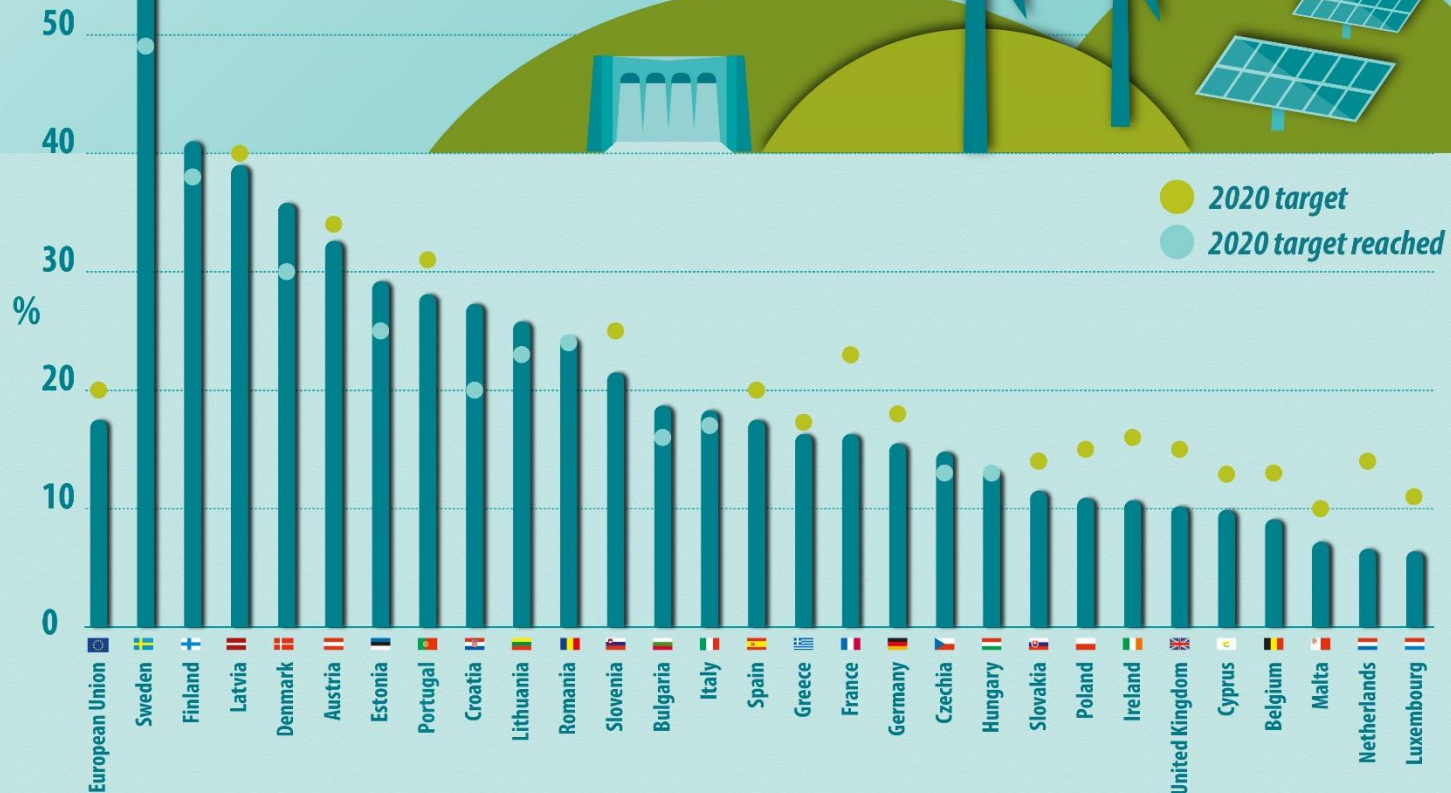
French GoO auctions started in september have pushed prices higher

Region	May 2019			June 2019		
	Volume Offered - MWh	Volume allocated - MWh	Weighted Average Price - €/MWh	Volume Offered - MWh	Volume allocated - MWh	Weighted Average Price - €/MWh
Auvergne-Rhône-Alpes	210 059	210 059	0,51	169 426	169 426	0,48
Bourgogne-Franche-Comté	84 734	84 734	0,49	66 724	66 724	0,52
Bretagne	65 427	65 427	0,47	58 467	58 467	0,48
Centre-Val de Loire	84 690	84 690	0,53	74 446	74 446	0,48
Grand Est	285 712	285 712	0,47	253 029	253 029	0,47
Haut-de-France	264 491	264 491	0,44	273 648	273 648	0,49
Île-de-France	24 699	24 699	0,35	22 674	22 674	0,36
Normandie	63 870	63 870	0,43	59 552	59 552	0,38
Nouvelle-Aquitaine	193 892	193 892	0,48	166 253	166 253	0,51
Occitanie	322 196	322 196	0,53	232 206	232 206	0,50
Pays de la Loire	84 404	84 404	0,53	73 004	73 004	0,52
Provence-Alpes-Côte d'Azur	101 557	101 557	0,53	94 793	94 793	0,51

Technology	May 2019			June 2019		
	Volume Offered - MWh	Volume allocated - MWh	Weighted Average Price - €/MWh	Volume Offered - MWh	Volume allocated - MWh	Weighted Average Price - €/MWh
Wind	1 017 849	1 017 849	0,53	855 678	855 678	0,53
Hydraulic	290 793	290 793	0,32	238 789	238 789	0,33
Solar	240 349	240 349	0,68	255 375	255 375	0,62
Thermal	236 740	236 740	0,31	194 380	194 380	0,32

Share of energy from renewable sources in the EU Member States

(2017, in % of gross final energy consumption)



REDII

- Europe has adopted one of the most ambitious renewable energy policies in the world. This policy:
 - The new directive establishes a new binding renewable energy target for the EU for 2030 of at least 32%, with a clause for a possible upwards revision by 2023.
 - Each EU country must be able to guarantee the origin of electricity, heating and cooling produced from renewable energy sources.
 - Businesses of different sizes and across all industries purchase GOs to demonstrate their renewable claims, as a basis for their sustainability reporting and CO₂ emission calculation. GOs are used for documenting electricity purchased from the grid and for power purchased directly from new renewable projects through Power Purchase Agreements (PPAs).

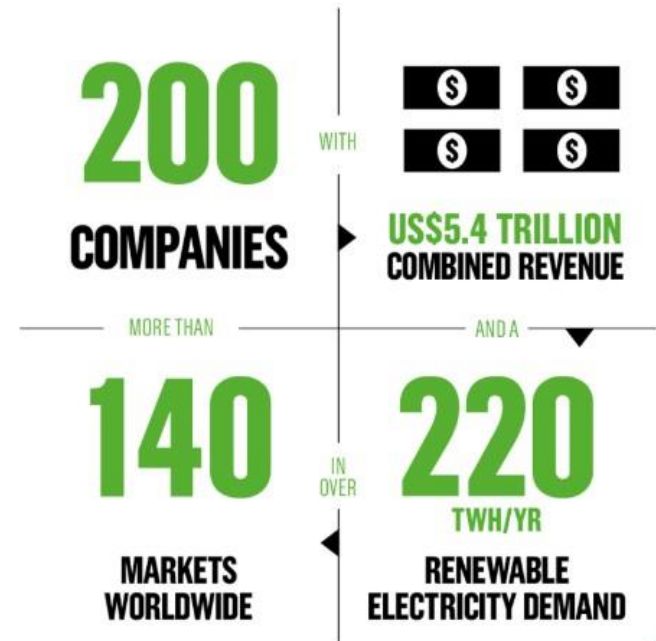
Market Expectations

- There are still big unsold volumes from 2018 and 2019 that holds back the market in the front contracts.
- Increase demand from the Netherlands and the rest of the continent on volumes produced 2020 and onwards. Also q3-q4 2019 production is bullish.
- The spread between hydro and wind is narrowing.
- Prices for GoO Biomass is closing in to Hydro price levels.
- The Demand from European buyers is still on the rise and we expect demand side to exceed the supply in 2021-2022 for certain technologies.

Price drivers: RE100

The world's most influential companies, committed to 100% renewable power. RE100 is a global corporate leadership initiative bringing together influential businesses committed to 100% renewable electricity.

COMMITTED TO 100% RENEWABLE POWER



RE100



The Market sets the price



Prices at skm.se

SKM Guarantees of Origin prices (EUR)

Product	Bid	Ask	Date	Last	Last Date
GOO BIO 2019	0.2100	0.2600	19 Nov 07:37	0.3100	11 Oct 15:10
GOO BIO 2020	0.5000	0.5800	19 Nov 07:37		1 Jan 01:00
GOO HYDRO 2018	0.0800	0.1200	19 Nov 07:37	0.1250 ↑+0.0125	6 Nov 14:57
GOO HYDRO 2019	0.2500	0.3000	19 Nov 07:38	0.2700 ↑+0.0075	14 Nov 13:56
GOO HYDRO 2020	0.5700	0.6000	19 Nov 07:38	0.5725 ↓-0.1750	14 Nov 15:21
GOO HYDRO 2021	0.7400	0.7800	19 Nov 07:38	0.6925 ↓-0.1575	25 Oct 09:06
GOO HYDRO 2022	0.7700 ↑+0.0100	0.8300	19 Nov 07:38	0.7225	1 Nov 11:16
GOO HYDRO 2023	0.7000	0.8450	19 Nov 07:39		1 Jan 01:00
GOO WIND 2019	0.3400	0.3750	19 Nov 07:39	0.3625 ↓-0.0525	12 Nov 09:52
GOO WIND 2020	0.6500	0.8600	19 Nov 07:39		1 Jan 01:00

Contacts

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