The wind power trap and the Nordic market

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The wind power trap

- Producers are strictly forced to bid their marginal costs in the Nord Pool day-ahead market.
- For wind power this will imply a near 0 bid.
- Normally, wind power will not be the marginal generation source, and therefore wind power will be able to cover their fixed costs.
The wind power trap

- But in periods of suppressed demand (Covid 19) wind power can become the marginal source and drive prices to 0 or negative.

- This effect is strengthened by the tendency of wind power to be more highly correlated in the upper quantiles of wind power production.

- … and the pattern of congestion in the upper quantiles of wind power production
Wind power trap

- Can lead to unforeseen losses for wind power investors

- + Heavy losses for power plant and other owners with high fixed cost and inflexible generation.

- Missing-money problems for necessary investments in wind power and flexibility.

- But may also present opportunities for storage assets under the correct regulations.