

Green Power Denmark

Annual meeting 2024

Skovgaard Energy PtX

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From wind turbines to PtX

- Power to unfold – green transition.
- Unfold the great potential within PtX starting in Northwest Jutland.
- 25+ employees with project development, administration, and preparation for the operation of PtX facilities.



Jørgen Skovgaard

Demonstration and test of Power-to-ammonia in Lemvig

REDDAP (Renewable-Dynamic-Distributed-Ammonia-Plant)



- Site of 91 hectares
- Electrical infrastructure to enable island mode operations behind-the-meter
- 10 MW Green Ammonia Plant
- Energy storage



- Fully dynamic ammonia production (24 MTPD)
- Estimated yearly production 6.000 MT of green ammonia
- Expected commissioning in 2024
- The project will be the first of its kind in the world and will pave the way for power to ammonia at industrial scale



What can be achieved within the demo project?

Technical:

- Operational window: 5-100%
- Dynamic operation: 10%/min up or down in load
- Maximum utilization of wind turbines and solar panels
- Allows for further installation of RE both onshore and offshore to support more green electricity and grid balancing
- Energy storage: PtX- XtP

Societal:

- Jobs creation on process plants. Operation, maintenance and innovation.
 - Knowledge for further development and research.
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Ammonia market

- 180 Mio. ton/year conventionally.
 - 10-15% is transported.
 - Fertilizer
 - Chemistry
 - Fuel
 - Large demand.
 - Increasing with population growth.
 - Price difference between green and conventional is fluctuating.
 - Willingness to pay??
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Thank you

