



Danish Offshore Wind tenders - Status

Jeppe Johansen, Chief Advisor / Centre for Global Cooperation / DEA

BOWE2H Project Workshop, Malmö, Sweden

17. April, 2024



Danish Energy Agency

AGENDA

- Danish Energy Agency
- 6 GW offshore wind government tenders
 - Market dialogues
 - Tender conditions
 - Overplanting
 - Minimum requirements



DANISH ENERGY AGENCY, DEA

A government agency under the Ministry of Climate, Energy and Utilities

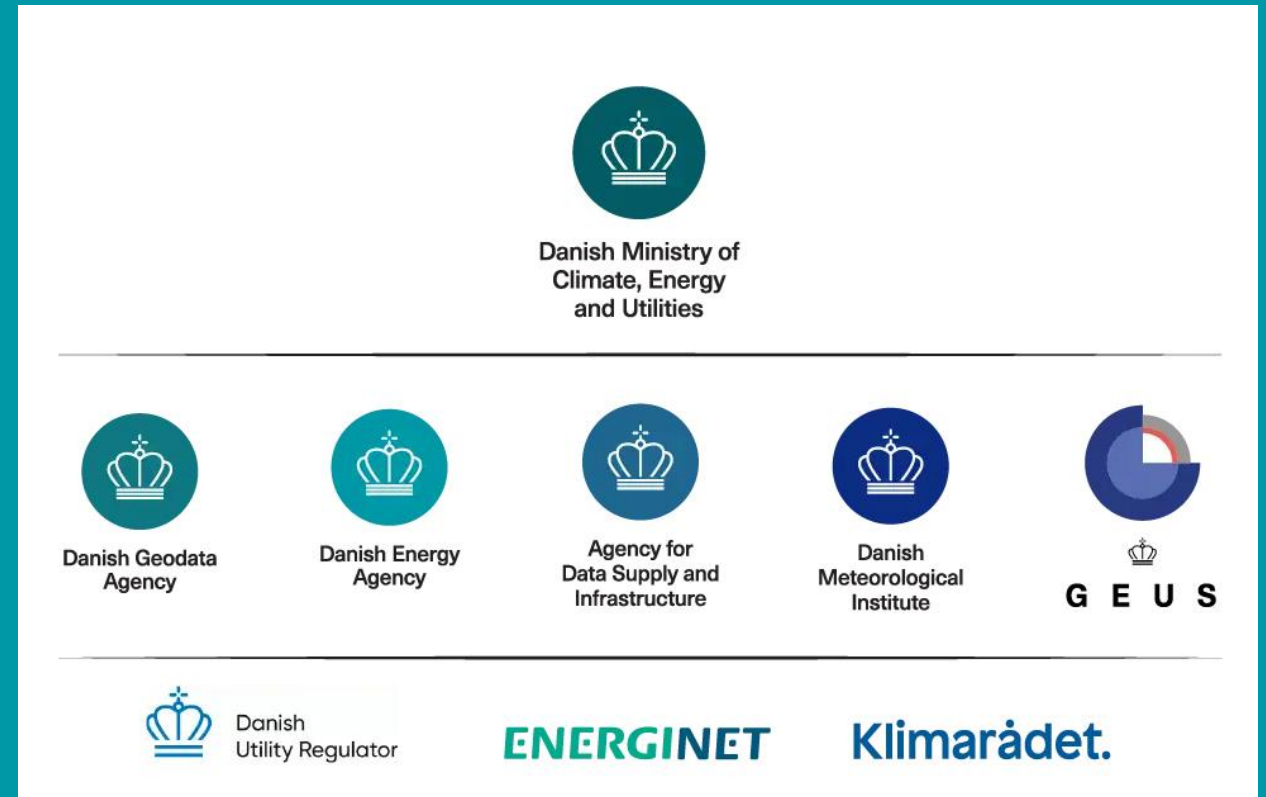
At the DEA, we **monitor** and **develop** energy and supply sectors in Denmark

Our Responsibilities

- tasks related to energy production, supply and consumption
- efforts to reduce carbon emissions
- support economical optimization of utilities

Our Services

- funding subsidies, publications, scenarios, statistics, energy maps and analyses – including management of **offshore wind tenders** and **permitting processes**.



DEA CORE COMPETENCIES



Forecasting
and scenarios

e.g. KF23, AF23



Renewable energy



Flexibility and
power plants



Energy efficiency and
district heating

Choice awareness

A least cost energy transition with high
security of supply, a high share of
renewable energy and an **efficient** energy
consumption



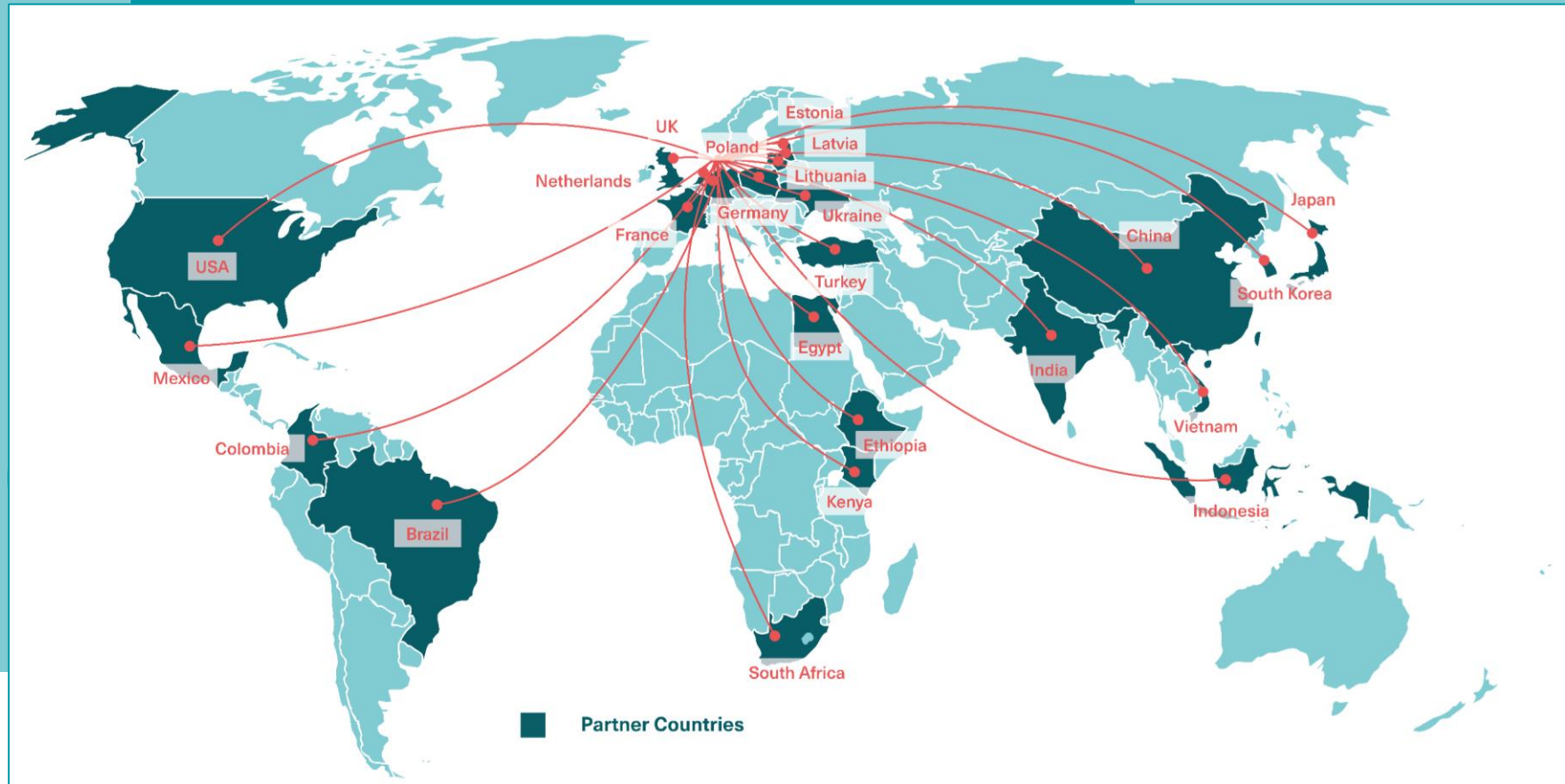
DANISH ENERGY AGENCY, ORGANIZATION

Centers in DEA



Danish Energy Agency

GLOBAL COOPERATION





6 GW OFFSHORE WIND GOVERNMENT TENDERS IN 2024

- Existing offshore wind parks
- Under construction
- New tenders



6 GW tenders

- Tender conditions being published any time now
- All projects operational before year-end 2030 (min. capacity)
- Lifetime: 30 years+

- 3 GW Energy Island Bornholm being tendered out later this year



MARKET DIALOGUES

- Challenge: How to make Danish OW tenders attractive to the global market?
- One tool is **Market Dialogues**.
 - › Open and transparent tender process
 - › Testing feasibility of tender conditions up against the market developers
 - › Securing flexibility and fair competition
 - › Alignment on de-risking measures providing less uncertainty for the market.
- Valuable input and recommendations from the market is adapted into the final tender conditions





MARKET DIALOGUES (6 GW)

- **2 Market dialogue rounds**

1000+ inputs from 15 developers -> 10 bilateral meetings -> slightly delayed process.

- › Developer qualifications

- Minimum qualifications: no pre-qualifications
- Technical requirements
- Financial requirements

- › Win-limit

- › Penalties

- › State ownership

- › Connection to future hydrogen infrastructure

- The feedback is generally positive – site conditions, wind resources and interconnections are good - market shows interest
- These inputs have been used to fine-tune the **final tender conditions**, which will be published later this month.





OFFSHORE WIND TENDER CONDITIONS

Previous tender conditions (Thor)

- No state ownership
- Prequalification phase
 - Tender with negotiation
- State subsidies were expected
 - 2-sided CFD subsidy scheme (20y)
- Capacity range (800-1000MW)
- The final bid-price shall be above 0,00 øre/kWh

Result: Drawing lots between five bidders suggesting minimum price (0,01øre/kWh)

Common tender conditions

- Concession Agreement
- Pre investigated site data, metocean data and environmental information are provided to the bidders.
- SEA of the plan published
- Award criterion is "Price".
- Minimum requirements

6 GW tender conditions

- 20% state ownership
- No subsidies
- Grid connection will be guaranteed for 6 GW. SEA enables uncapped **overplanting**
- **Minimum requirements on environmental impact**
- "Use it or lose it" in the North Sea

NEW TENDER CONDITIONS (6 GW)

MORE
RENEWABLE
POWER

Overplanting

- Only the minimum capacity of 1 GW* in each area is an obligation for the concessionaire
- Strategic Environmental Assessment enables virtually uncapped overplanting
- Freedom for developer to improve business case
- Hydrogen production expected
- Potential use of direct lines
- “Use it or lose it” in the North Sea

**Hesselø has a cap of 0.4 GW*



NEW TENDER CONDITIONS (6 GW)

SUSTAINABILITY

Minimum requirements - Environment

- Third-party verified Environmental Product Declarations of main components (towers, blades, etc.)
- Third-party verified Life Cycle Analysis of the project's construction, operation, and decommissioning
- Nature inclusive design
- Recyclable blades
- Environmental data collection throughout the life of the wind farm – data publicly accessible
- Social responsibility – documentation for living up to human rights and international conventions, fair wages and working conditions
- Marine Nature Fund





CLOSING REMARKS

Key characteristics for 6 GW tender:

- All projects must be fully operational no later than year-end 2030
- Grid connection will be guaranteed for 1 GW/site. Developers are free to overplant (uncapped)
- Price remains the sole award criteria
- Minimum requirements on e.g. environmental impact introduced
- There will be no subsidies
- The State will require 20% ownership of each project

Finally, we expect to release the final tender conditions any time now

And we are confident, we will see many new wind turbines in the Danish waters in the years to come despite market bottlenecks.





Thank you

19. april 2024

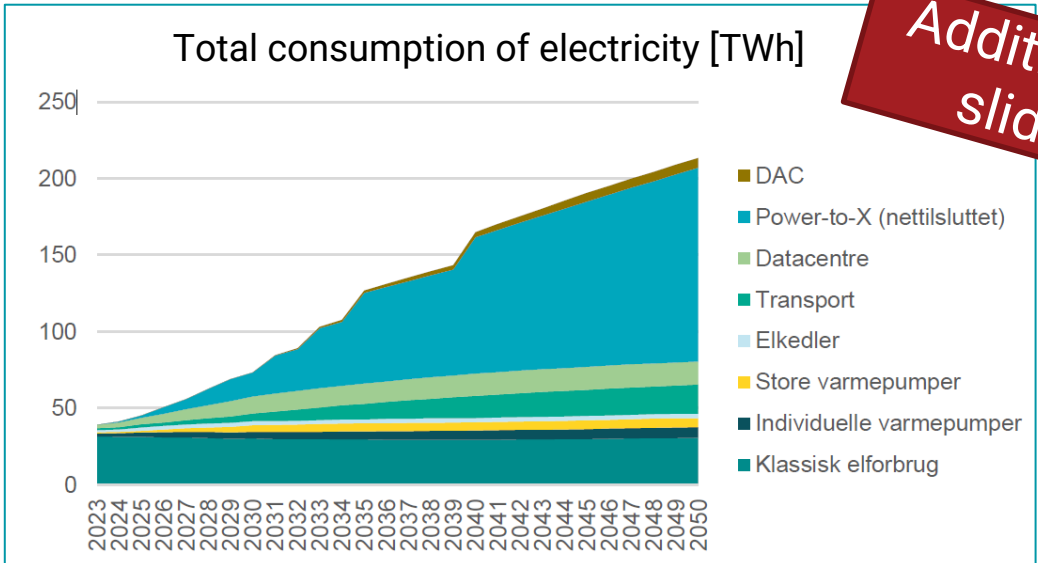
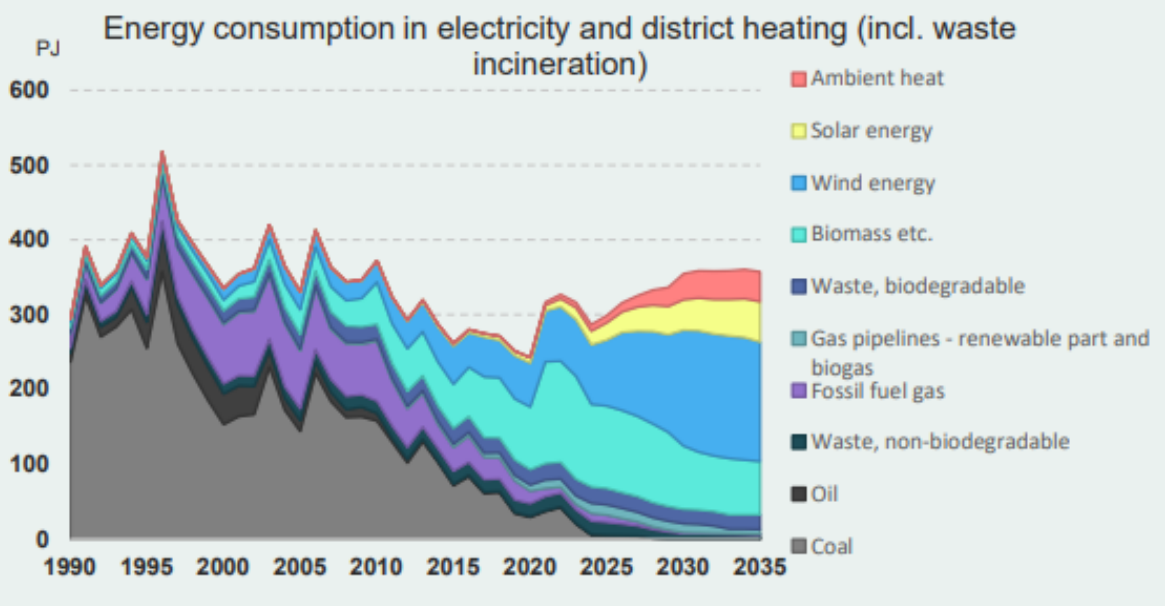


Danish Energy Agency

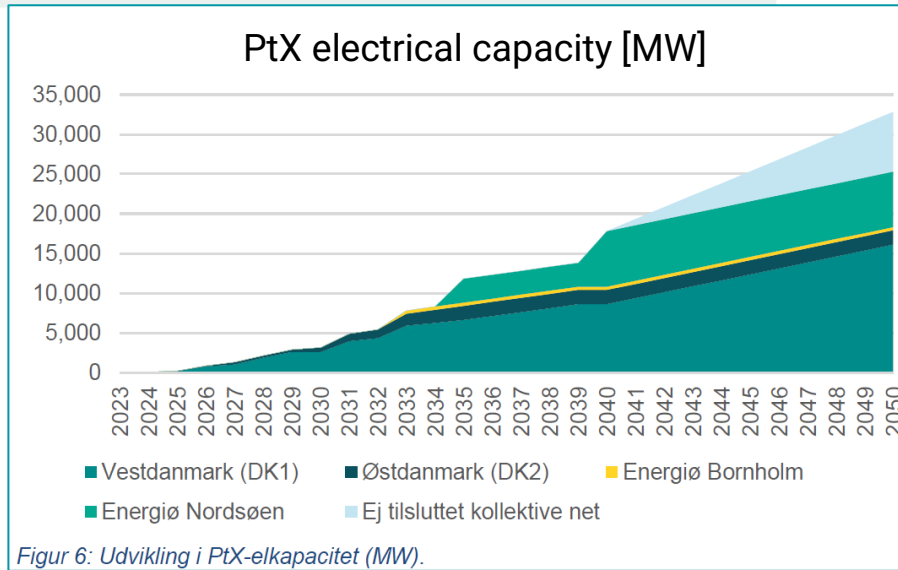


DENMARKS CONSUMPTION

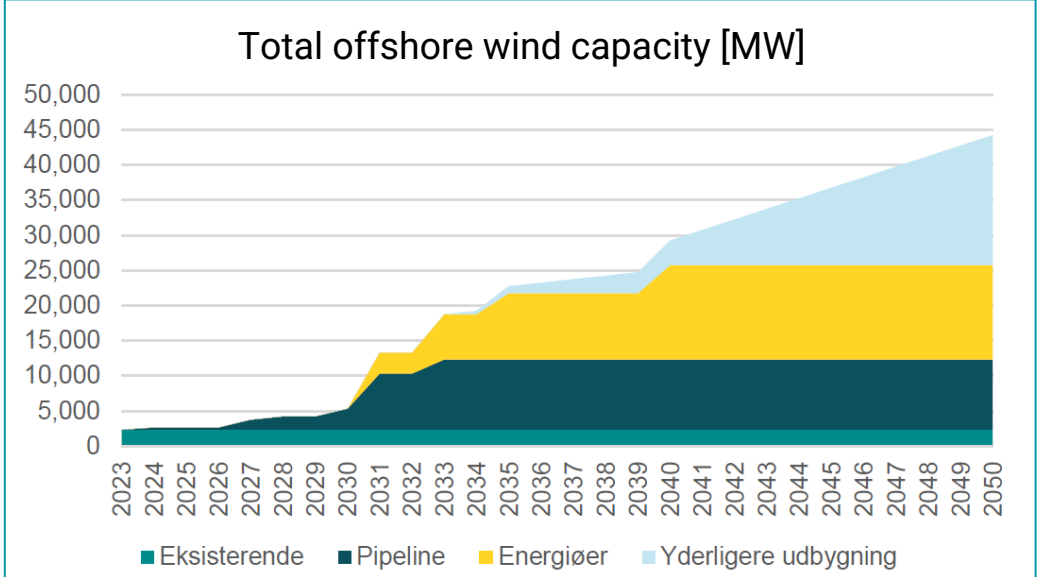
Additional slide



Figur 4: Samlet nettoforbrug af el (TWh). Dvs. ekskl. tab i nettet på ca. 7 pct.



Figur 6: Udvikling i PtX-elkapacitet (MW).



Figur 12: Havvindkapacitet (MW).

AF23 – Analyses Assumptions for Energinet ([link](#))