

An abstract geometric pattern of thin grey lines forming a complex, interconnected network of triangles and polygons, located in the top-left corner of the slide.

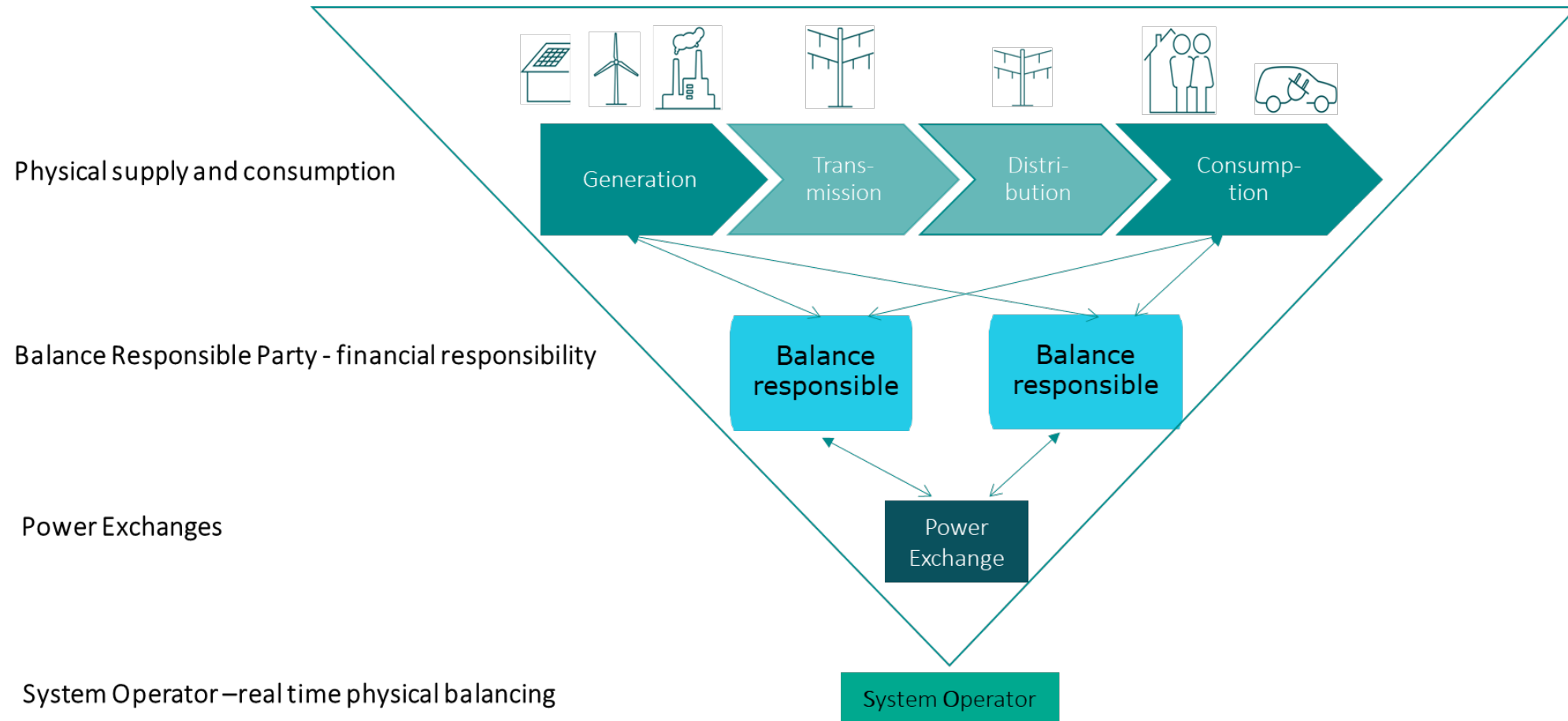
# REvision2019: Renewable Revolution

Tokyo, 6 March 2019

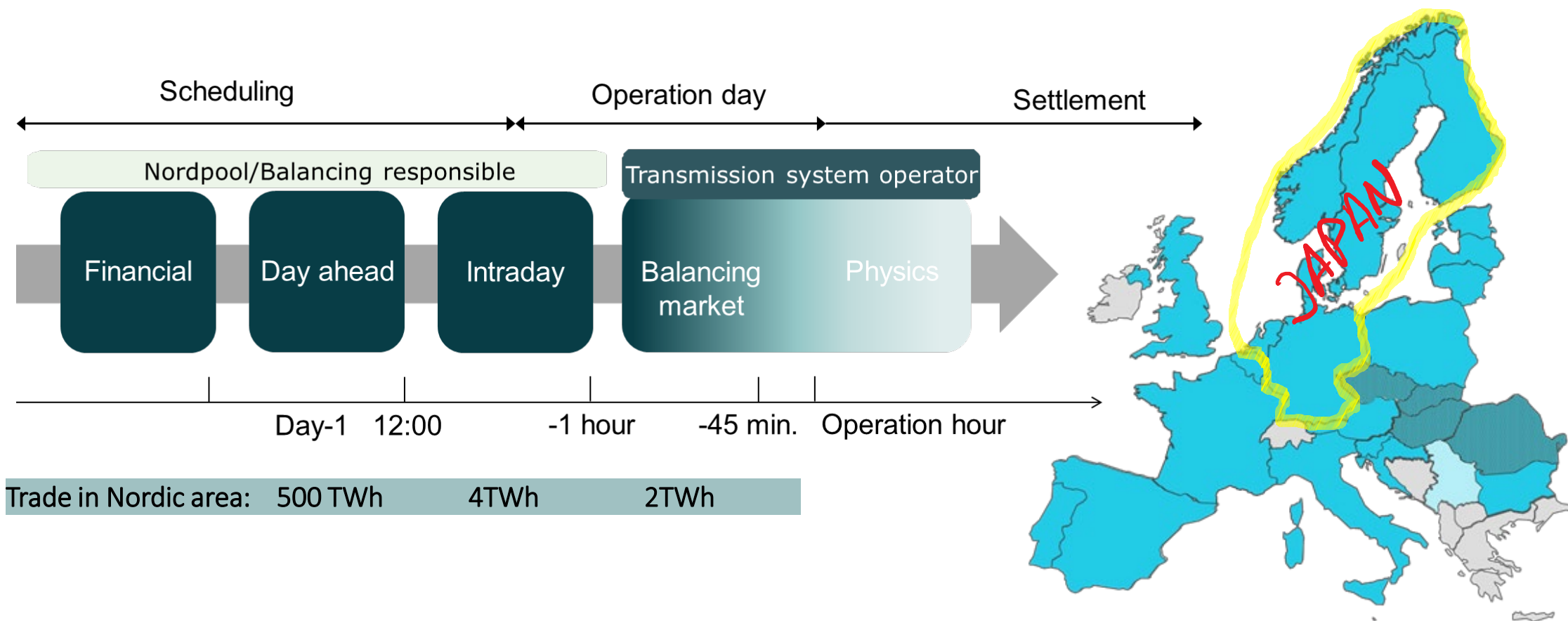
Energy Business Turnaround

*Peter Jørgensen, Vice President, Energinet, Denmark*

# MARKET OPENING, UNBUNDLING AND NEW ROLES

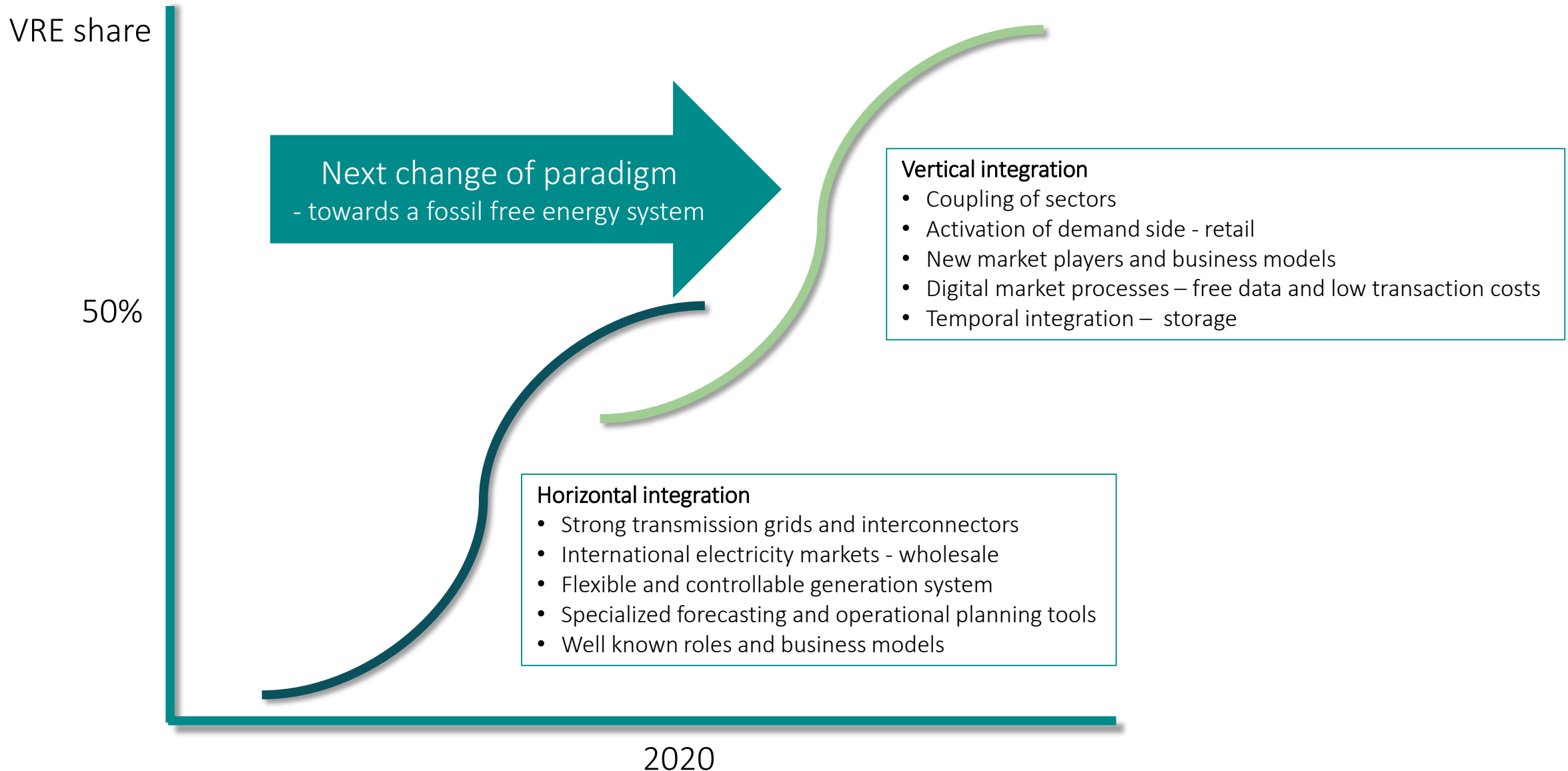


# WHOLE SALE MARKETS AND HORIZONTAL INTEGRATION



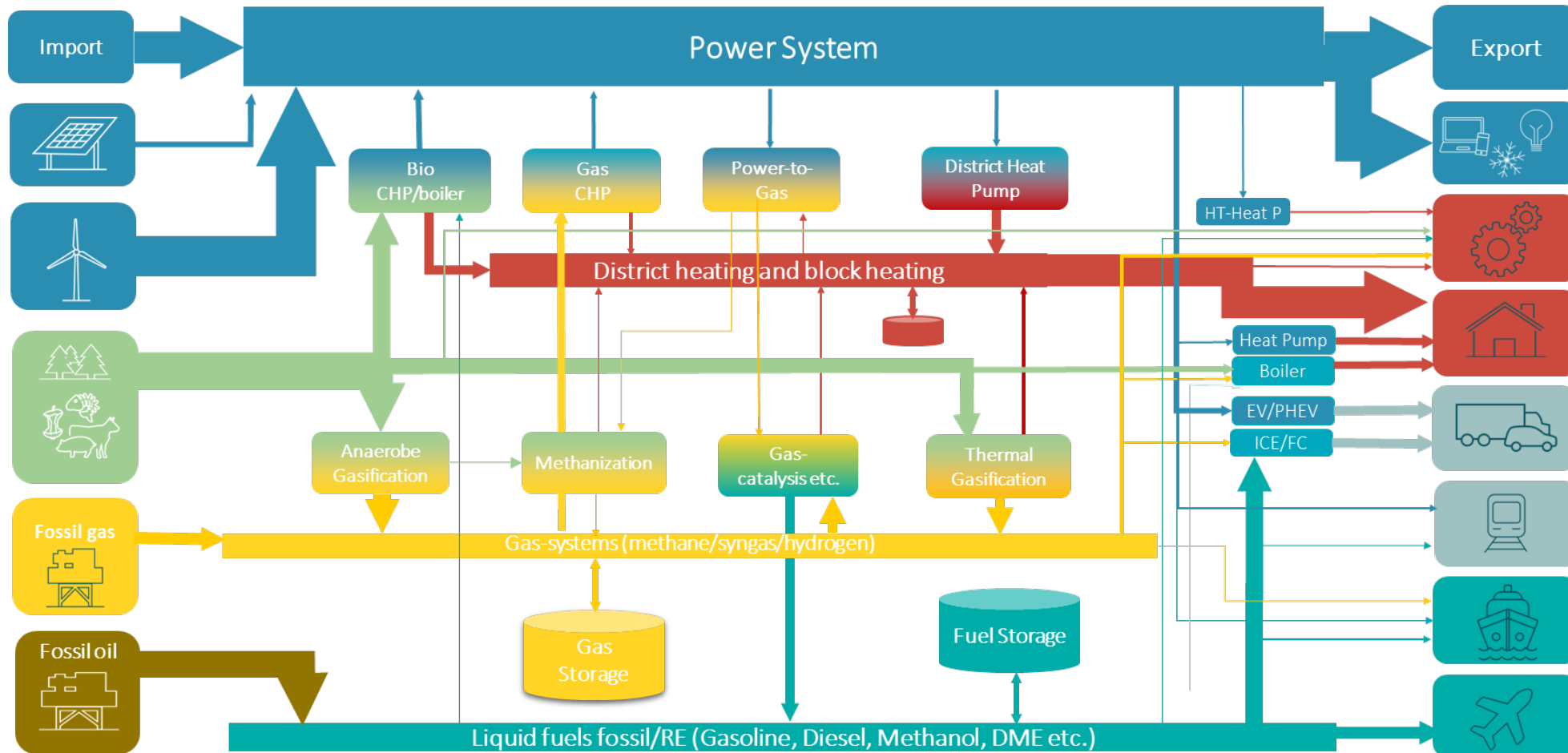
# INTEGRATION OF VRE

- AFTER THE FIRST 50% NEW CHALLENGES AND OPTIONS ARISE



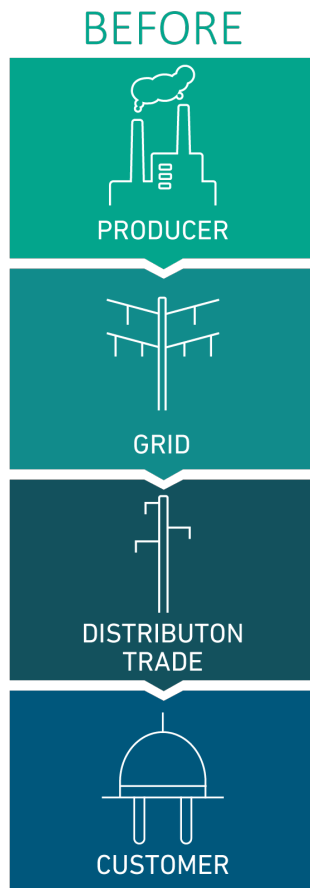
# COUPLING OF SECTORS

Simulated annual energy flows in Denmark 2035



Eurelectric : Max 40-60% of energy demand in 2050 can be covered by electricity directly

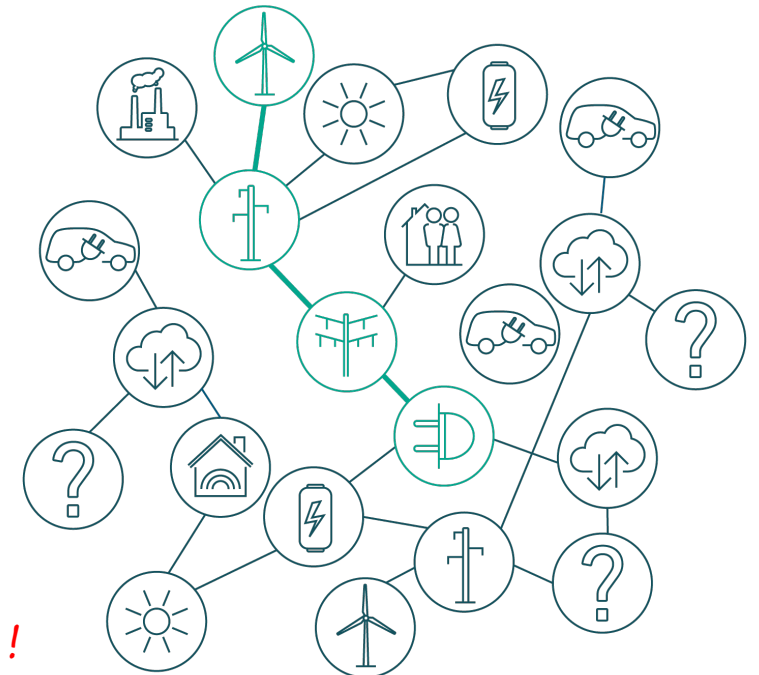
# THE ENERGY VALUE CHAIN IS TRANSFORMING



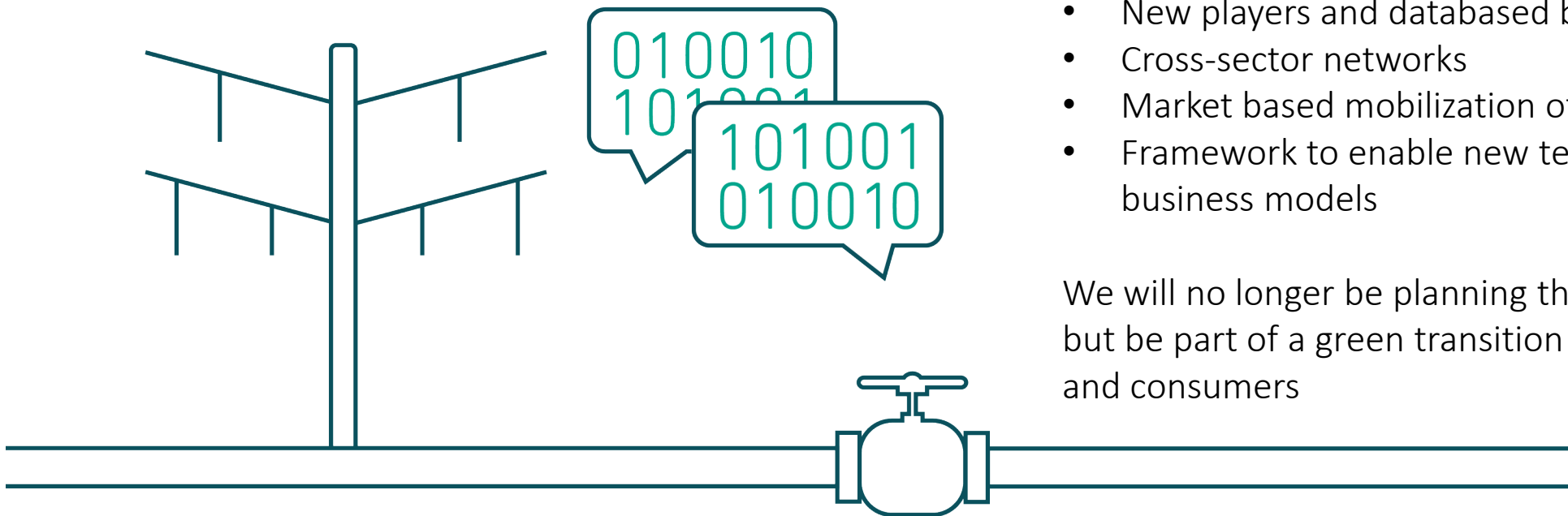
- Green energy does not have ~~has~~ to be subsidized
- Electricity can ~~not~~ be stored
- Electricity and gas consumers are active and flexible ~~passive and inflexible~~
- All do not demand and consumers receive the same product

*And it will require a lot of software !*

## IN THE FUTURE



## SYSTEM OPERATOR TO CREATE VALUE BETWEEN HARDWARE AND SOFTWARE



- New technology and digitalization
- Both large and small scale “plants”
- Green investments without subsidies
- New players and databased business models
- Cross-sector networks
- Market based mobilization of flexibility
- Framework to enable new technology and business models

We will no longer be planning the green transition, but be part of a green transition driven by market and consumers