

# STATKRAFT

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**Statkraft**  
PURE ENERGY

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# AGENDA

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- Deregulation in Norway
  - Experiences and lessons learned
- Energy Management

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## DEREGULATION IN NORWAY, WHY?

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- > In Norway we had 500 power companies in 1990, many of which had both power production and transmission/distribution (with local monopoly)
- > There were overinvestment in production capacity
- > Investments with low ratability were realized before better projects
- > Main reason for all three above mentioned facts were that the power companies could cover all their costs by increasing power prices to consumers (there were no efficiency requirement)
- > The goal with deregulation was more efficient use of invested money and a more equal price level all over the country
- > The hope was a significant reduction of number of power companies

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## DEREGULATION IN NORWAY, HOW?

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- > Transmission was defined as natural monopoly. Transmission and production should be separated in different companies.
- > The first step from the Government was to divide 'Old Statkraft' into Production company Statkraft and Transmission company Statnett
- > Statnett was given the system operator responsibility (TSO)
- > Nord Pool was established as the market place
  - From the beginning as part of Statnett, later as an independent company
- > Connection fee to grid for production and consumption substituted the old system where you paid for the distance between production and consumption
- > The 'local companies' lost their local monopoly, consumers could buy power from anybody, (and not necessarily from a producer)
- > Transmission and distribution companies have income caps (normal return of investments and operating costs, combined with efficiency requirements)

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## DEREGULATION , STEPS

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- > 1991 - New Energy Act in Norway
- > 1992 - Statkraft and Statnett established, connection fee introduced
- > 1995 - Sweden deregulated after same principles
- > 1996 – Swedish TSO Svenska Kraftnät acquire shares in Nord Pool, common Swedish/Norwegian market established (for day ahead, meaning among other things that export/import was a result of market bids)
- > 1999 – 2001 Finland and Denmark joined
- > 2002 and onwards: Further harmonization of Balancing Market, Intra Day Market and Ancillary Services

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# STATKRAFT IN THE DEREGULATION PROCESS

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- > Splitting of the 'old' Statkraft into:
  - One System Operator and Owner of main grid, Statnett
  - One pure producer, Statkraft
  
- > Statkraft are organized and act as a limited company (although owned by the State)
  
- > Professional Board of Directors, (not politicians)
  
- > Maximize revenues (within laws and regulations)
  - And with strong focus on ethical operations

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# IMPORTANT PROVISIONS

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- > The grid is the market place
  - Connection fee for producers and consumers (in NOK/MW)
- > An independent System operator
- > We need a Regulator to avoid abuse of market power
- > The players in the market must be treated equal (independent of size, ownership, localization..)
- > The market has trust and liquidity
  - Market relevant information should be open to all (maintenance plans for generators and transmission, aggregated up to date reservoir fillings , transmission capacity+++)
- > The day ahead spot market balances the system (production equals consumption hour by hour)

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# EXPERIENCES FROM DEREGULATION

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- The electric power industry did not want deregulation, it was driven by the authorities (politicians)
- The model to choose was under discussion, especially who should have System Operation responsibility
  - Nowadays everybody agrees the TSO model is the best
- Nord Pool as the market place has been a success
- Statkraft is happy as producer
- Prices for power has equaled for different parts of the country and in all Nordic countries (but still transmission costs, taxes and other fees differs substantially)
- The industry has lowered the costs significantly (both operation costs and investment costs)
- The number of companies are still too high, especially in distribution



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# IMPORTANCE OF WELL FUNCTIONING POWER MARKET

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- First point is that prices reflects costs
  - For production this means that cheap units are scheduled before more costly units
  - For consumption it means that consumers with flexibility gets price signals for when to reduce or shift consumption
  - For society this leads to effective use of recourses and gives investment signals for new production, consumption and flexibility
- High liquidity is important
- For investments, both in new production capacity and new consumption, a trustworthy price for the future is a must
- There should be stability and predictability in future framework (taxes, concessions, legal framework, political climate, +++)

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