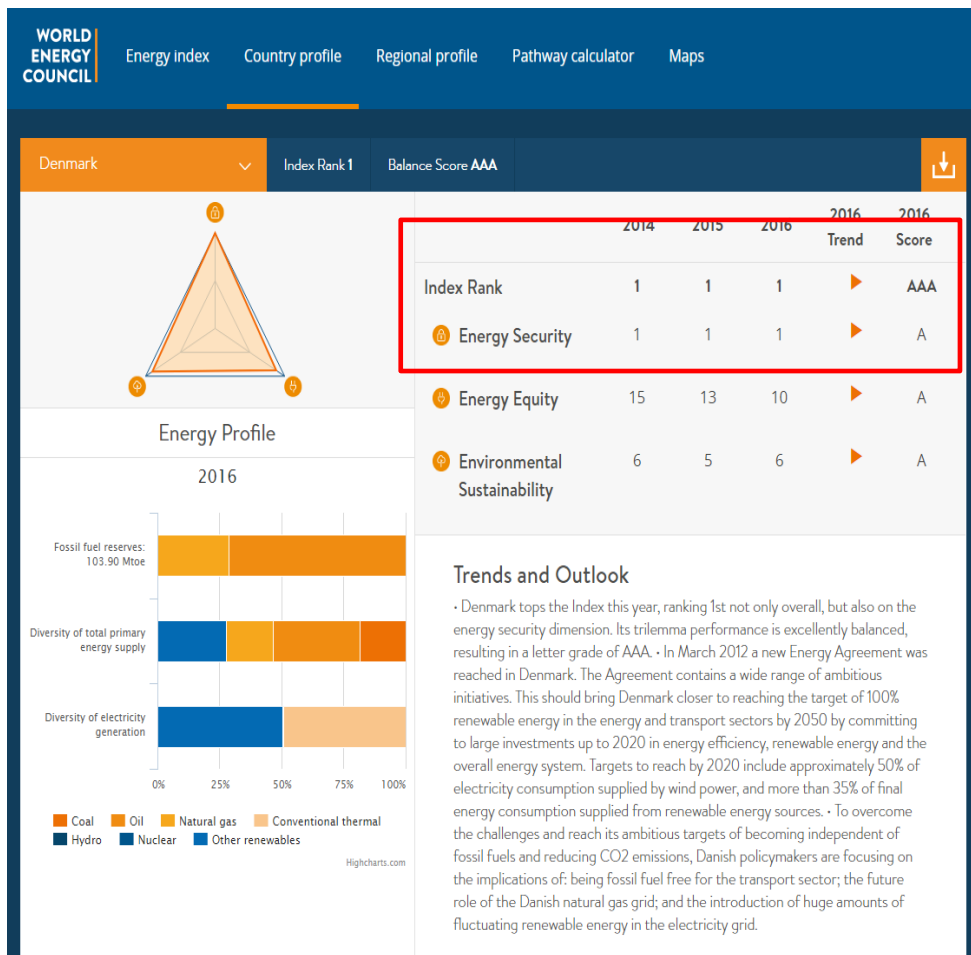


# **The Danish Energy Commission's Recommendations to a Future, Danish Energy Policy**

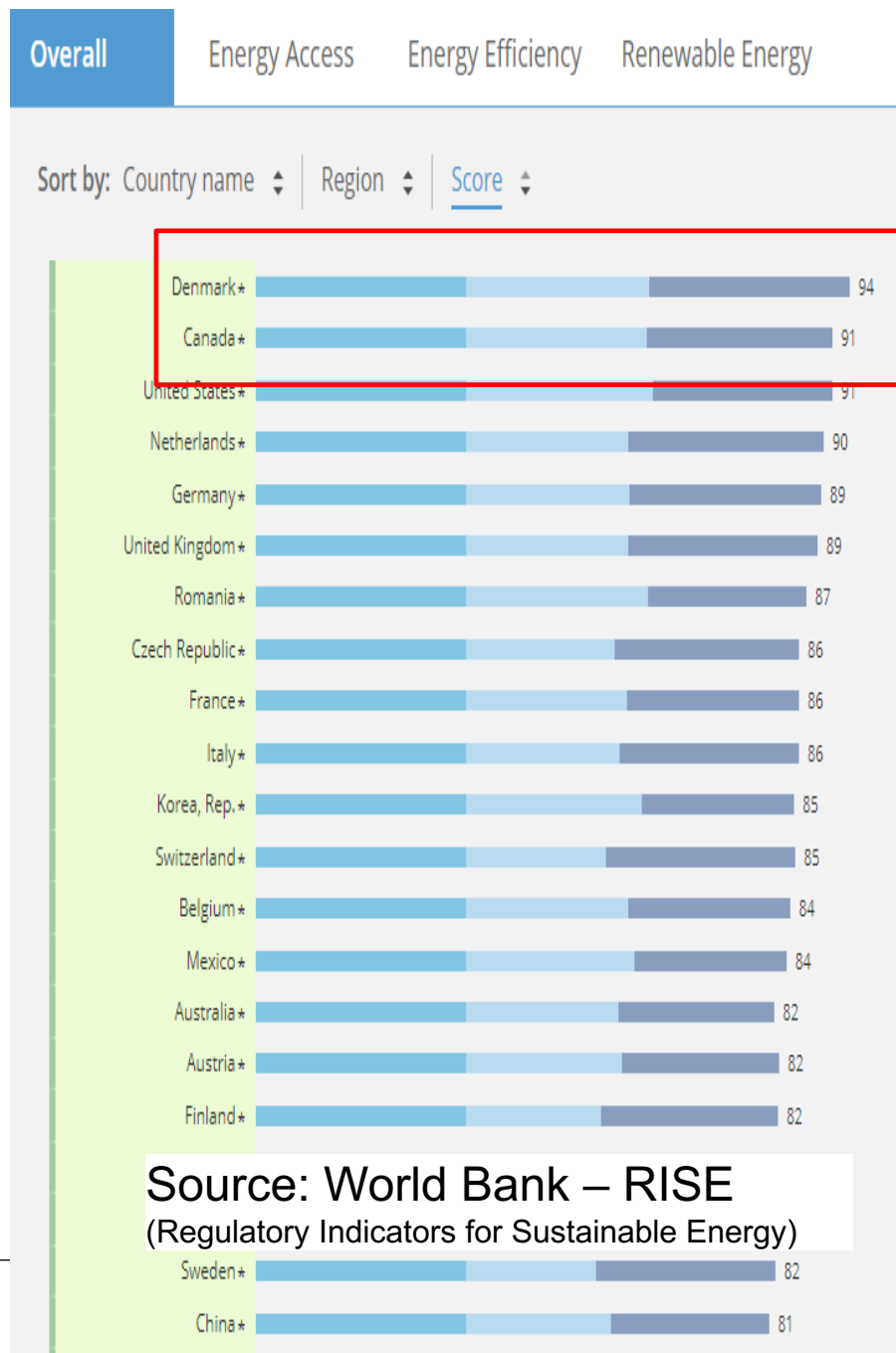
Kristoffer Böttzauw,

Deputy Permanent Secretary, Danish Ministry for  
Energy, Utilities and Climate

# A role model?



Source: World Energy Council



# The 2012-energy agreement

## Different elements



Wind:  
1.000 MW  
off-shore  
wind, near-  
shore wind  
400 MW

Expected  
wind-share  
in electricity  
production  
(2020): 48  
pct.



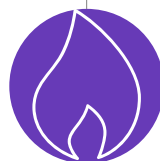
Subsidies for  
increased  
use of RE in  
industry

(1) Expected  
reduction in  
use of fossil  
fuels: 30 pct.  
(2) RE-share  
of final  
energy  
consumption  
: 40 pct.  
(2020)



Energy  
efficiency:  
Improved  
efforts during  
the period.

Expected  
stable  
energy  
consumption  
throughout  
the period  
2012-2020



Biomass:  
Improved  
framework  
conditions  
for biomass.

Expected  
increase in  
biomass-use  
from [40 PJ]  
(2012) to  
approx. 100  
PJ (2020).



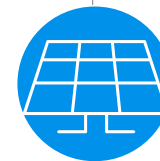
Transport:  
Subsidies for  
infrastructure  
in transport

Expected  
RE-  
penetration  
of 8,5 pct. in  
transport in  
2020



Finance:  
PSO and  
elektricity  
tariffs

Fully  
financed -  
the PSO has  
since been  
transferred  
to the fiscal  
budget

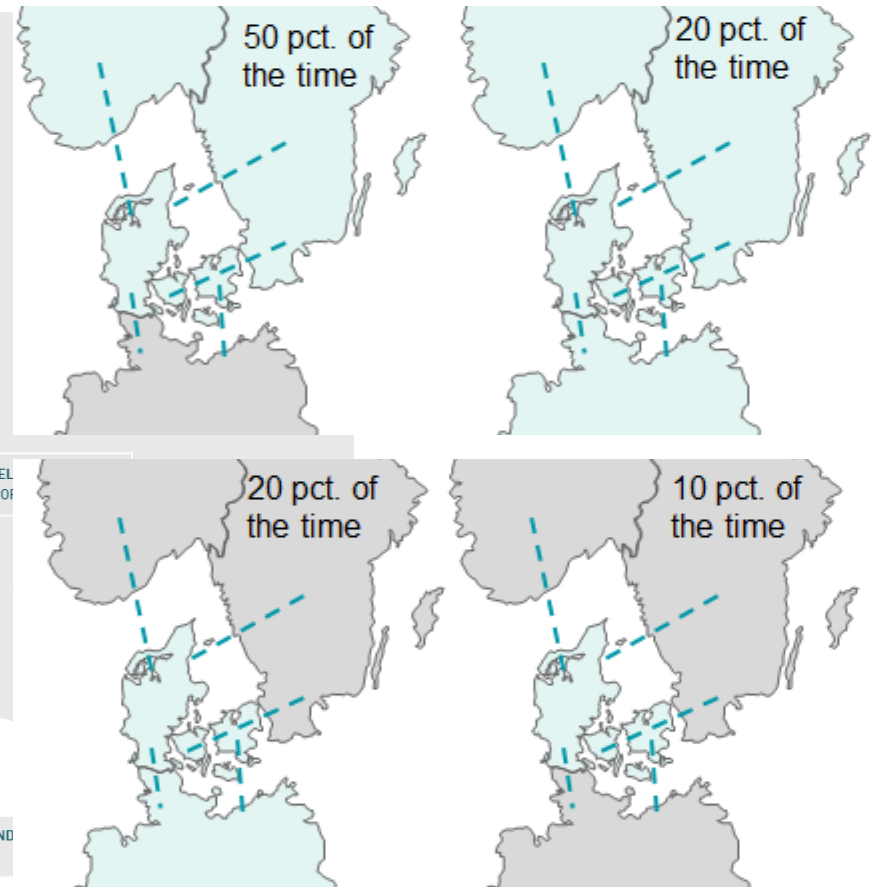
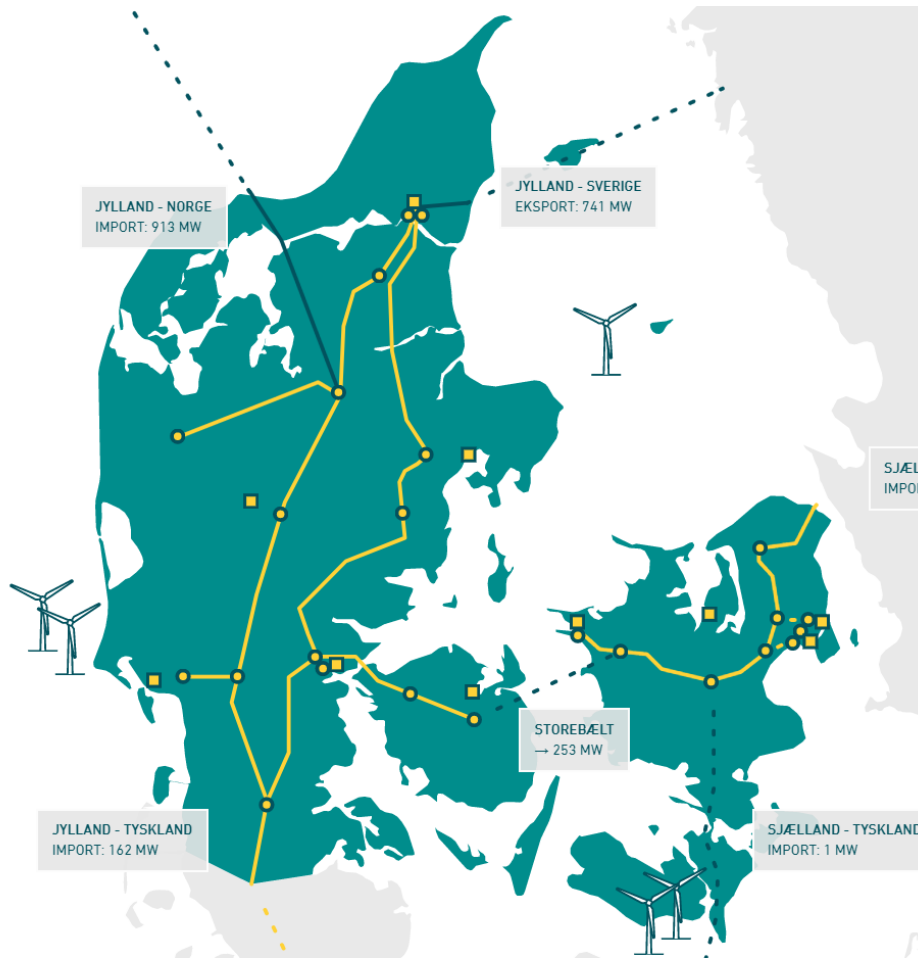


Solar not  
included in  
the  
agreement.

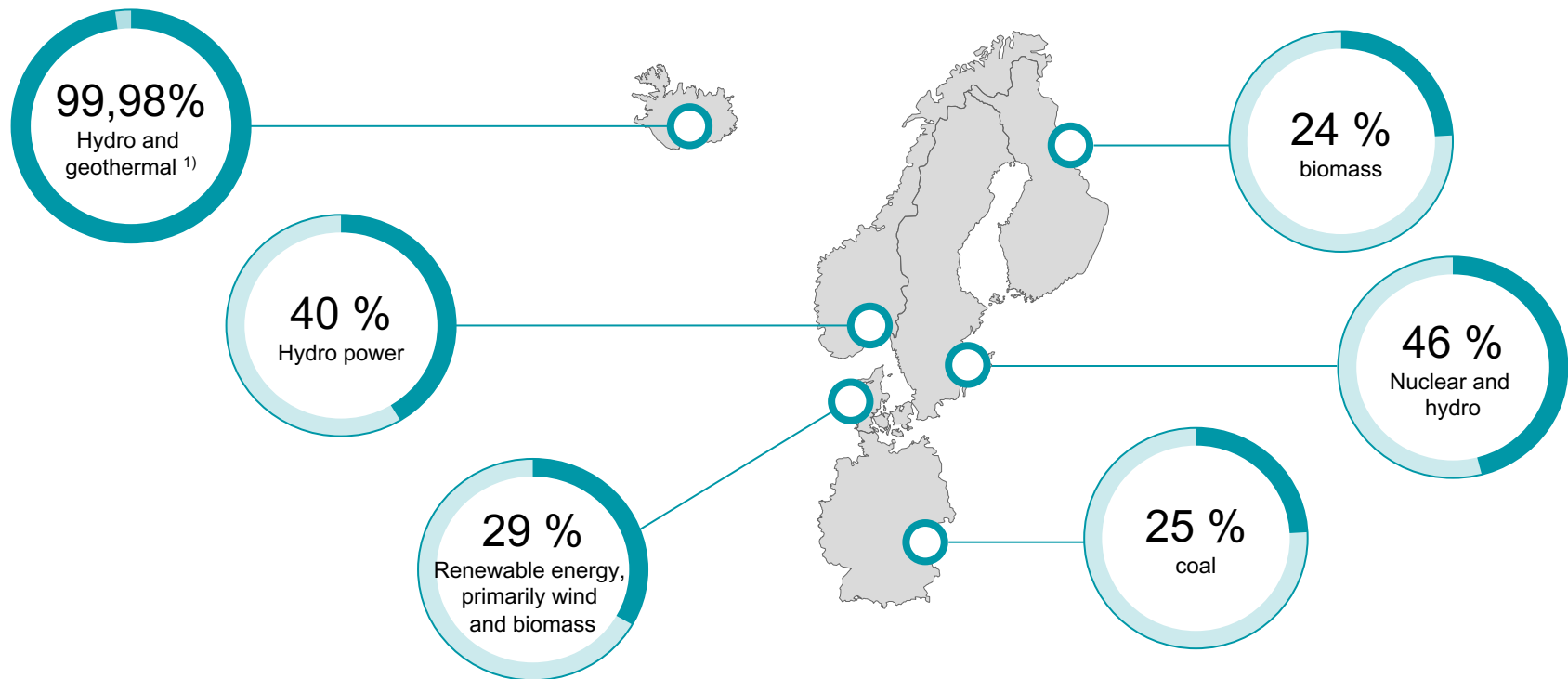
Targets for  
solar  
amended to  
the  
agreement in  
2013

# Regional approaches

## - interconnections



# Diverse characteristics of country-specific energy systems <sup>2)</sup>



Sources:

1) National Energy Authority, Iceland. NOTE: Only electricity production, data from 2016

2) Danish Energy Agency: Energistatistik 2015

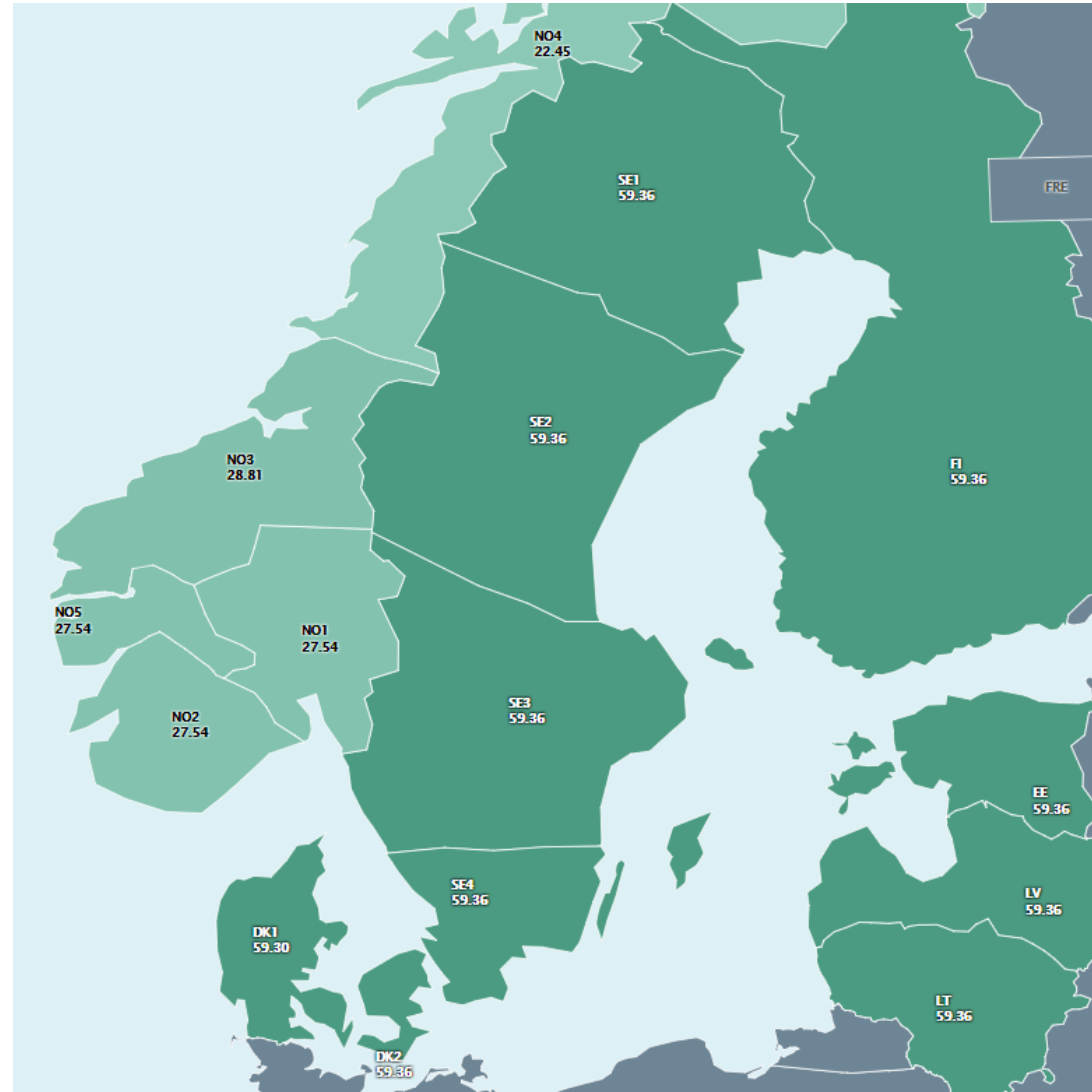
# Nord Pool

## - AN EXAMPLE OF REGIONAL COOPERATION

Denmark joined Nord Pool in 2000 – four years after Norway and Sweden established a joint power exchange.

The success of Nord Pool has been remarkable, with the exchange being appointed Nominated Electricity Market Operator (NEMO) across 14 European power markets in 2015-16; Austria, Denmark, Estonia, Finland, France, GB, Latvia, Lithuania, the Netherlands and Sweden, Belgium, Germany, Luxembourg and Poland.

Nord Pool is key to secure the cost effectiveness of the Nordic and



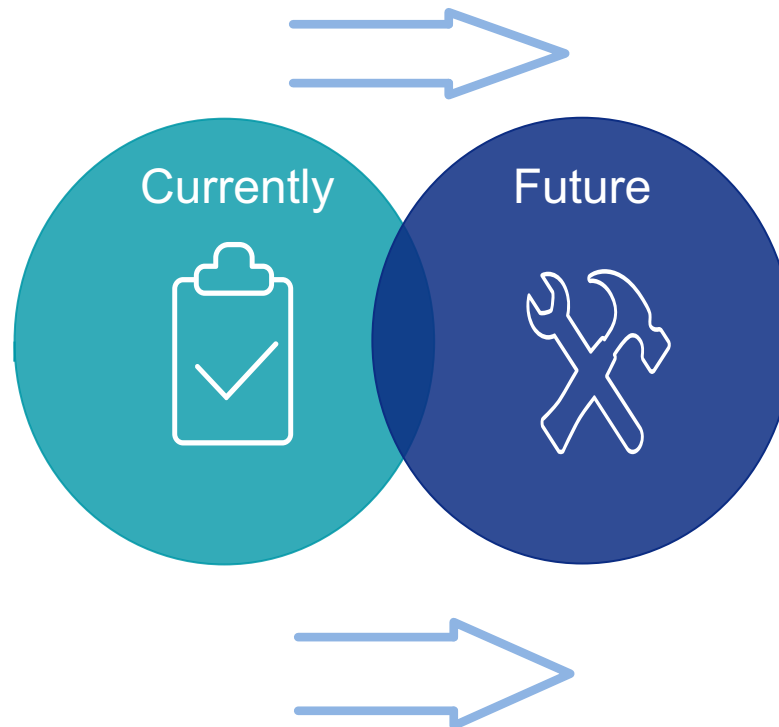
regional and European power markets.

# Developments – to keep an eye on

The Energy Commission's take...

## Where we are

- National focus
- “Handheld”, centralized energy system
- Supply side-focus
- Targeted energy savings
- Based on fossil fuels (approx. 70 pct.)
- Subsidized RE-deployment



## Where to go moving towards 2030 and 2050

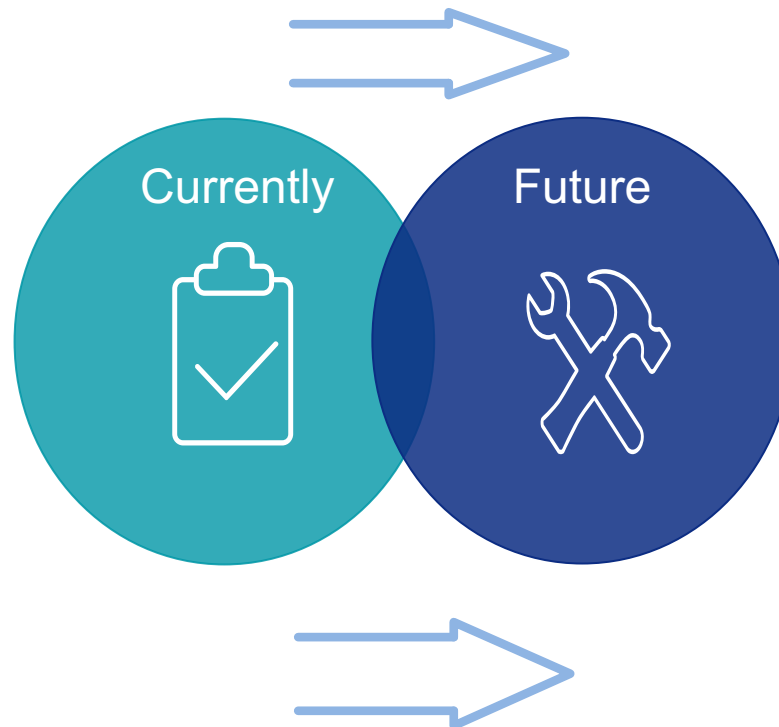
- Regional / international cooperation
- Demand-side-focus
- Cost-effective and market-based RE-deployment
- Technology neutrality
- Electrification and integration
- Cost-effective energy efficiency improvements

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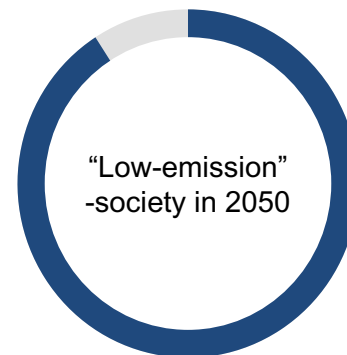
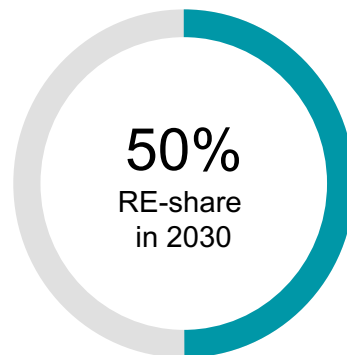


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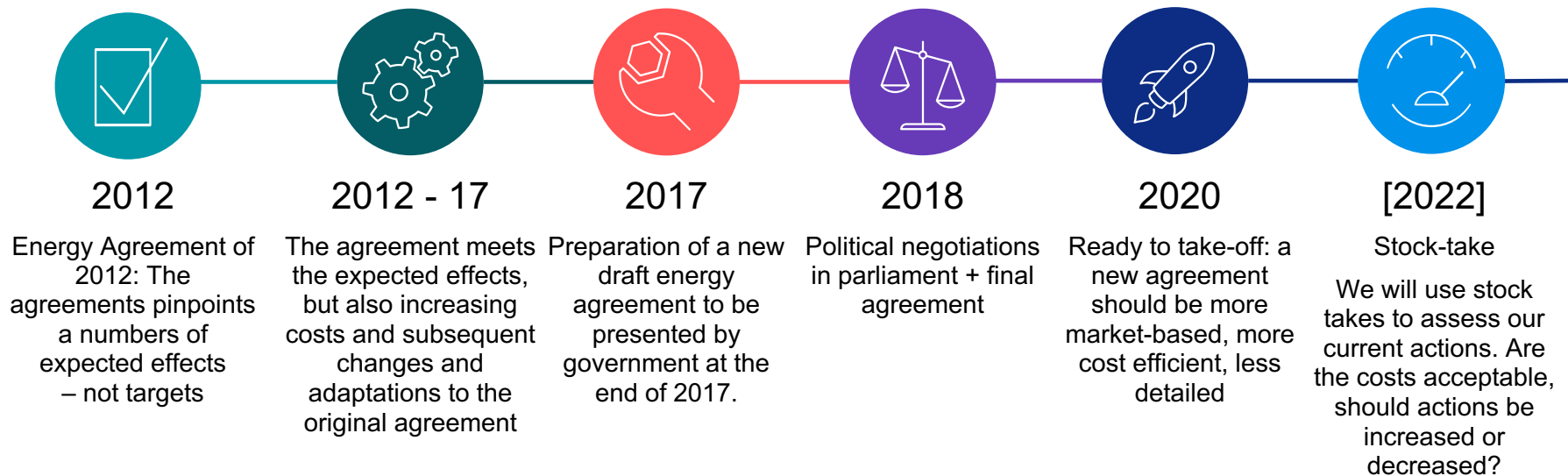
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- Cost-effective energy efficiency improvements



# Government ambitions



# Status and timeline: a future energy agreement of 2018



THE DRAFT AGREEMENT WILL HONOR A LONG-TIME  
DANISH TRADITION OF LONG-TERM, POLITICALLY  
BROAD AGREEMENTS

- BUT IT WILL ALSO SEEK TO BALANCE THIS OBJECTIVE AGAINST POLITICAL AND  
FINANCIAL FLEXIBILITY BY INTRODUCING STOCK TAKES SO TO ADJUST CURRENT

EFFORTS TO PRICE DEVELOPMENTS AND REGIONAL, INTERNATIONAL DEVELOPMENTS

# Elements in a future draft energy proposal

## “ IN AUTUMN 2017, THE GOVERNMENT

will come forward with a new broad energy agreement after 2020, partly on the basis of the work of the Energy Commission. A new energy agreement will aim to ensure continued transformation of the energy sector. ”

01

### **It will be a market-based energy agreement**

The Energy Commission finds the current agreement too detailed to be able to obtain the benefits of the market

02

### **It will be an agreement with a focus on international and regional developments**

The agreement must address international developments. Denmark will likely the current strong commitments in regional and European cooperations

03

**Economics will be key**  
The upcoming agreement will address economics head on – and make sure to boost the economy rather than impede it

04

### **Targets are not set in stone**

The energy agreement will introduce stock takes. This means that government will evaluate the pace of RES phase-in on a regular basis. The evaluations will assess the scale and speed of market maturity of RES.

By conducting the stock takes, it will be assessed whether the pace of RES phase-in should be increased. However if development is slow, the speed might be decreased.

# Thank you for your attention!