



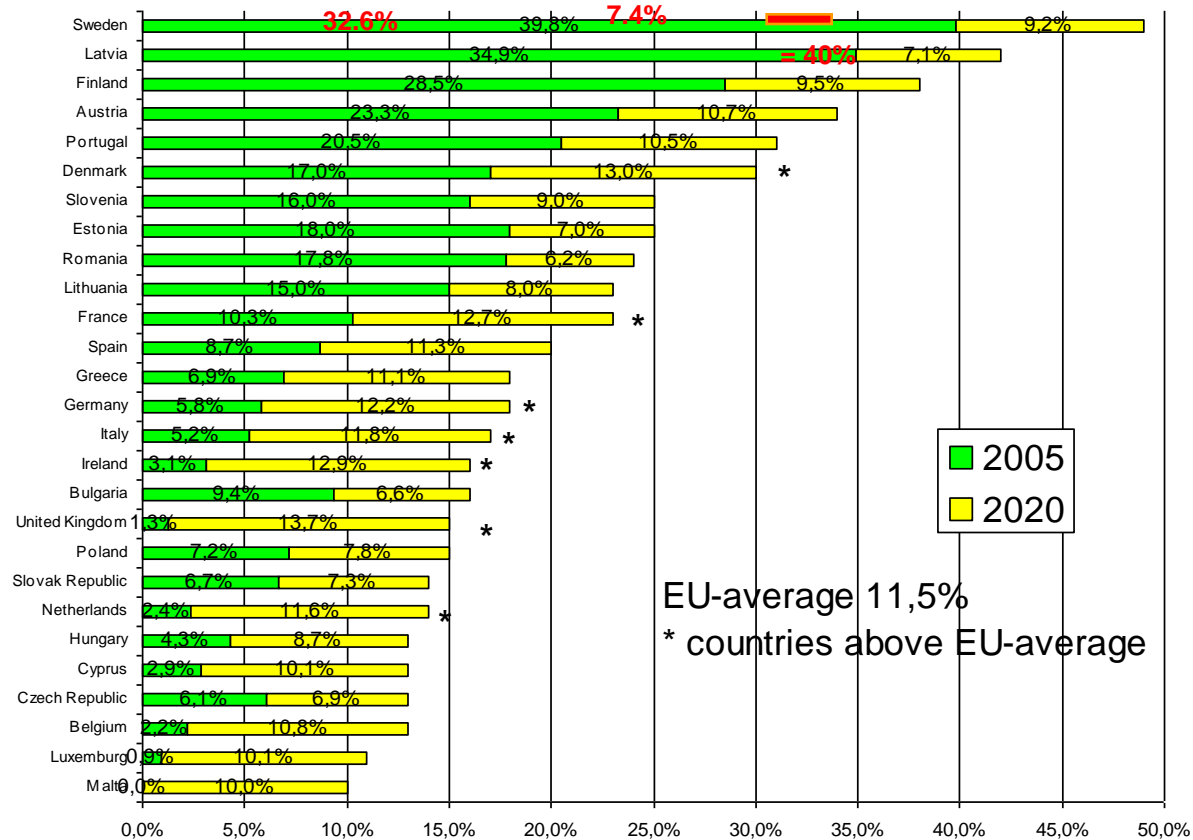
# Unleashing the RES potential

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Vice-Chairman of the Energy Policy Committee,  
EURELECTRIC

***REXChange – 22<sup>nd</sup> April 2009***

# RES targets are challenging and time is short!



# Key challenges for the new RES directive

1. Maximise RES business opportunity

2. Achieve targets at least cost

“Business goal”

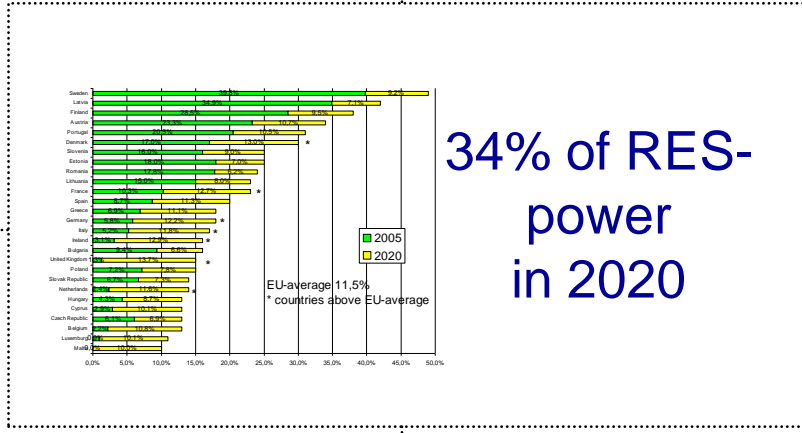
“Societal goal”

“Supply security goal”

“Policy coherence goal”

3. Minimise grid impact

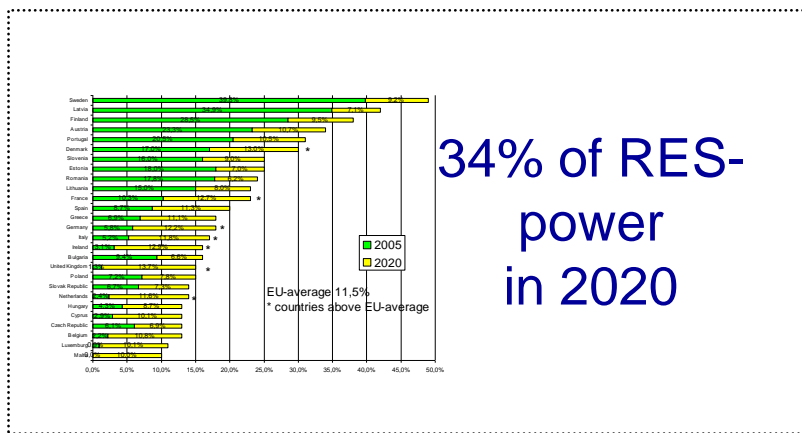
4. Minimise distortion to power market



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1. Maximise RES business opportunity

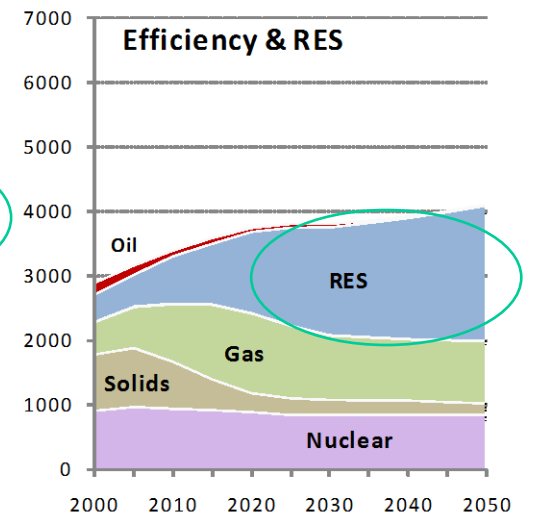
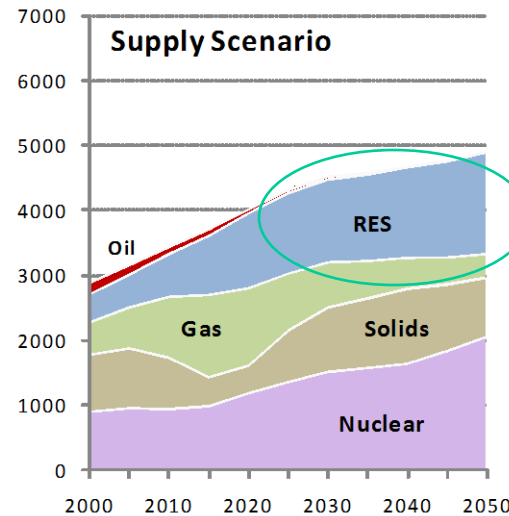
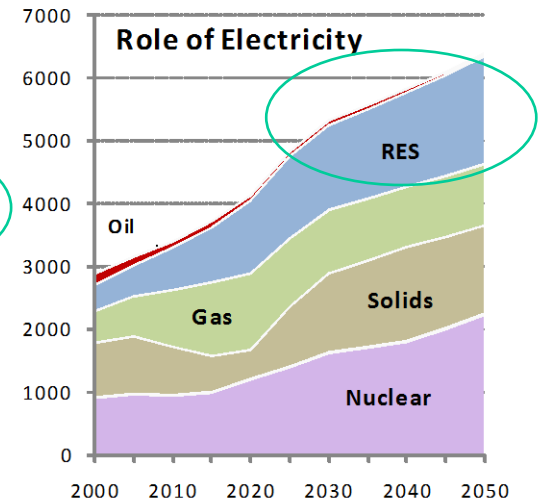
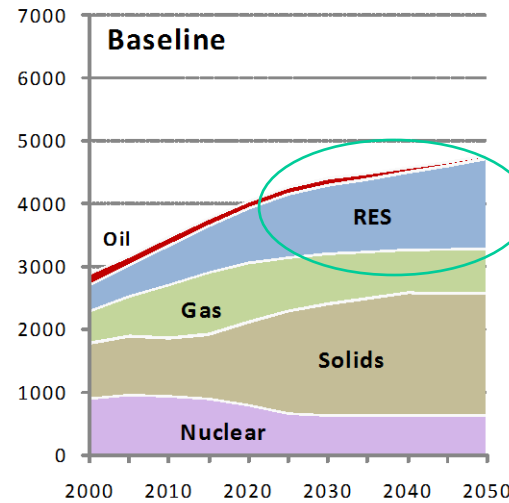
2. Achieve targets at least cost



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4. Minimise distortion to power market

# RES is part of any energy scenario



# RES is a major business opportunity

- From 8.5% to 20% RES is a tremendous challenge, and opportunity, in just 10 years' time...
- ...and many power companies are large RES-investors:
  - EON: target 10GW wind by 2015, 18% of production from RES by 2015
  - Statkraft: 13 GW RES today, >1 bn/y growth
  - RWE Innogy: target 4500MW RES by 2012, 1bn / y; long-term goal 10GW by 2020
  - Vattenfall: 40 bn SEK investment in RES by 2016
  - Iberdrola: 2008-2012: +11GW of RES, 19 bn EUR
  - EnBW: 20% of generation from RES by 2020

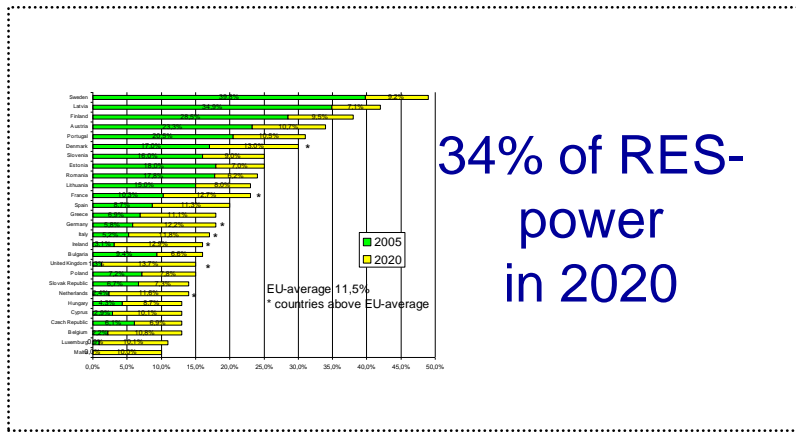
# **National Action Plans to maximise RES business opportunity:**

- Provide optimum incentive for investment in RES
- Maximise the use of heat pump potential
- Maximise the use of electric vehicle potential
- Member States should develop joint strategies on the basis of their RES-strengths

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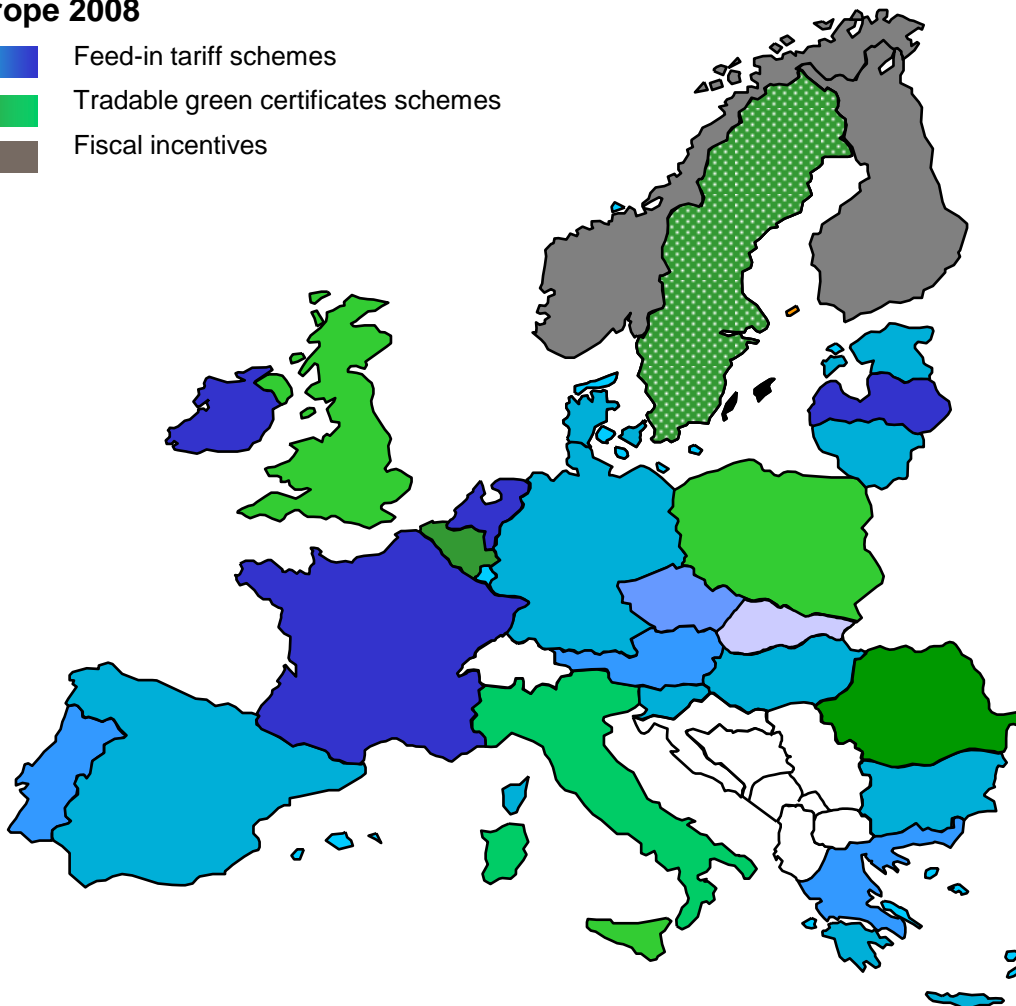
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# Some 30 different support schemes today

## Europe 2008

-  Feed-in tariff schemes
-  Tradable green certificates schemes
-  Fiscal incentives

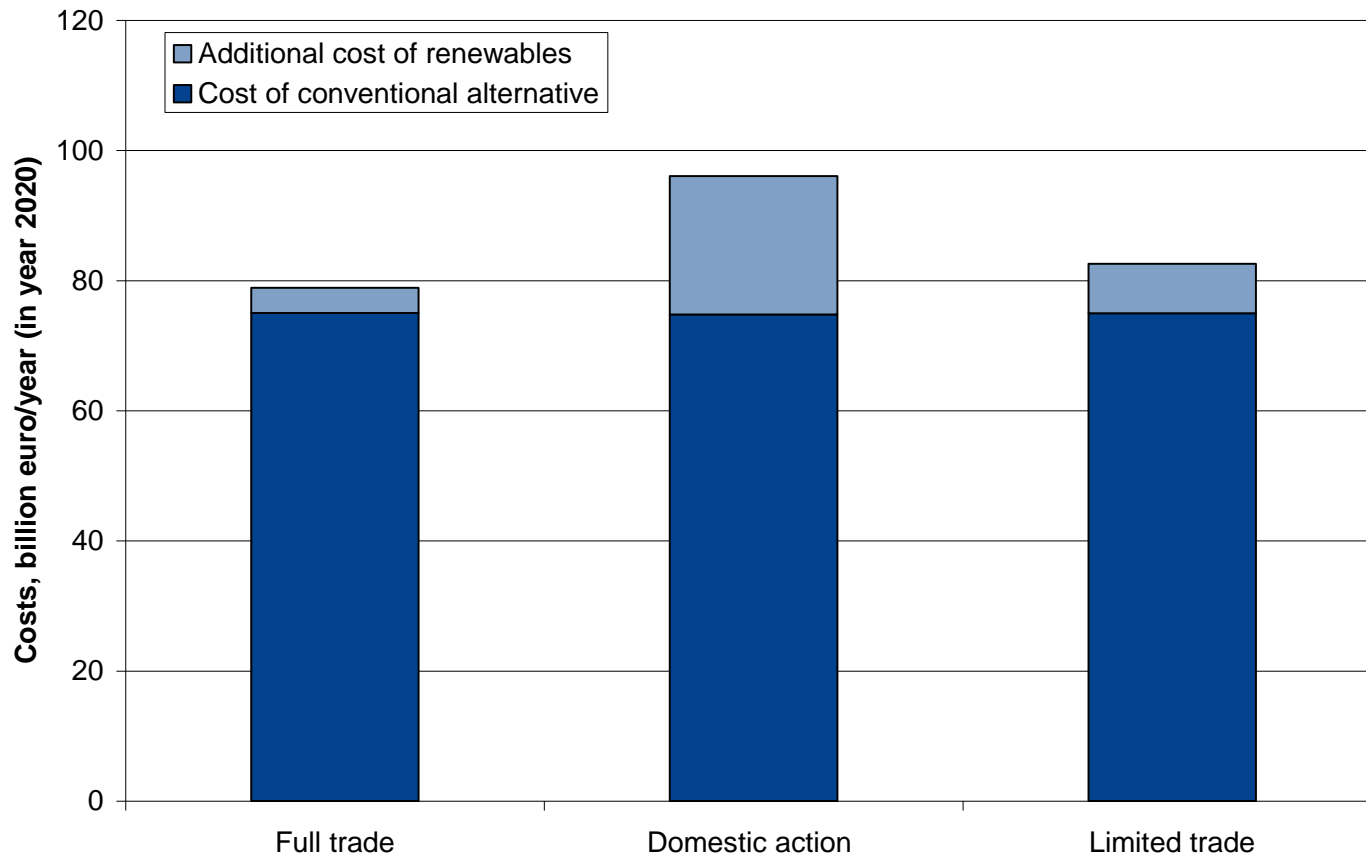


- > The Directive maintains Member States as key decision maker
- > More buyers than sellers?
- > Revision clause in 2014

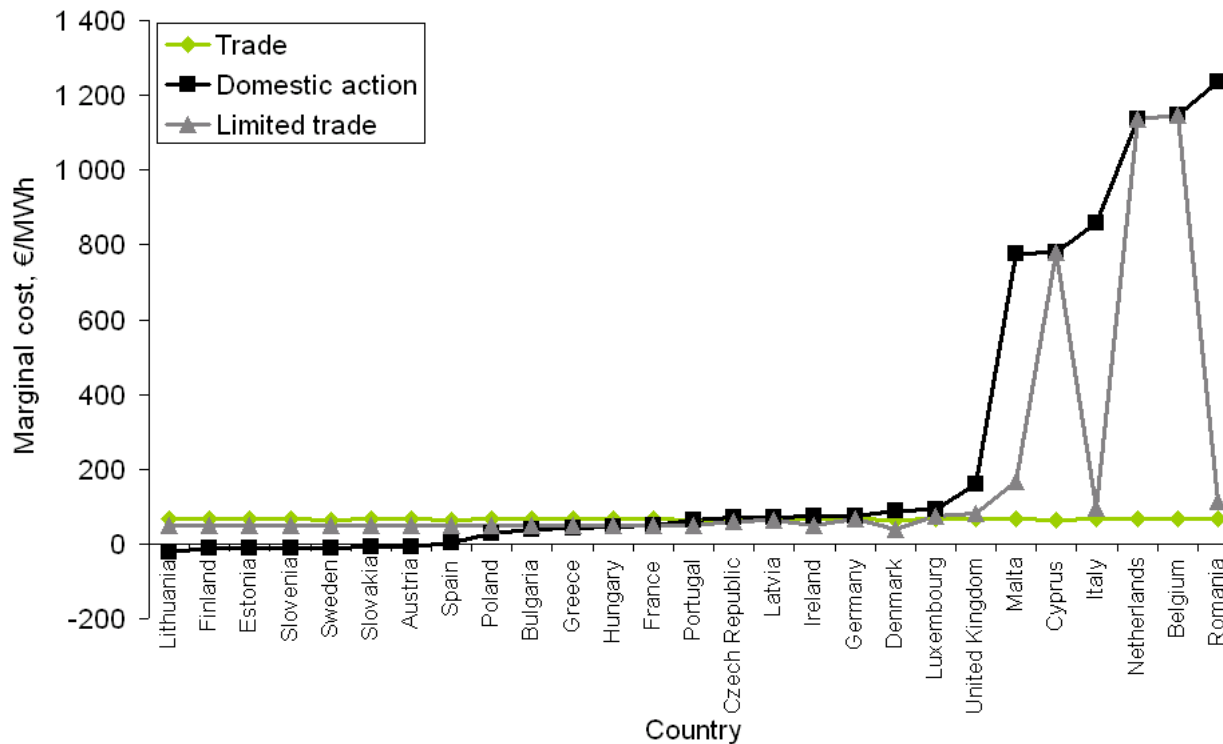
# Flexibility/Trading would significantly reduce the costs of reaching the target

EURELECTRIC study with Poyry Energy Consulting indicates that cost of reaching the 2020 RES Target would be €17bn per year lower in 2020 if full RES Trading were allowed

...but even with limited trading, €13bn/year in 2020 would be saved (limited trading scenario involved up to 20% of national targets being realised by trade)

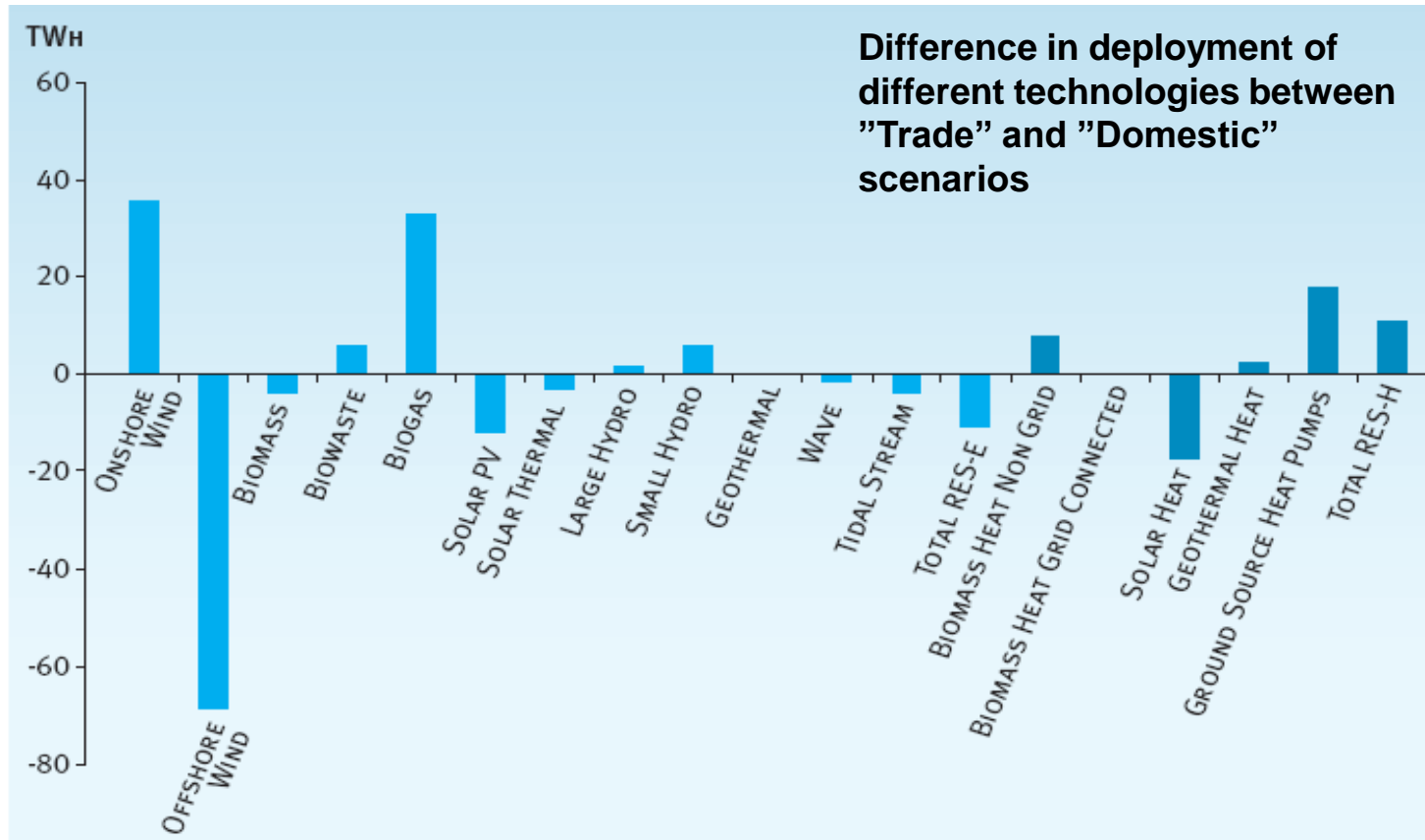


For some member states, reaching the targets will be very expensive without some level of trading or flexibility....



e.g. Belgium, Netherlands

## ....and trade affects technology choices



Note! A positive number in the graph indicates that the deployment of the technology is larger in the trade scenario compared to the domestic action scenario. Blue bar indicate RES-E technology and orange bar indicate RES-H technology.

Source: Euren model output, Pöyry Energy Consulting team analysis

## **Flexibility will be crucial...**

Even if Full RES Trading is not allowed by the RES Directive, a degree of flexibility, allowing import of “RES Target counting value” from other member states will be crucial for some member states in ensuring they can reach the RES Targets at reasonable cost

In the final RES directive, flexibility = “Cooperation mechanisms”

## **Member states must fully exploit the flexibility offered by cooperation mechanisms:**

- Make cooperation mechanisms work:
  - Statistical transfers
  - Joint support schemes
  - Joint projects

.....joint projects are likely to be the easiest of the mechanisms to use initially
- Member States must talk to each other: avoid “closed borders and national thinking”

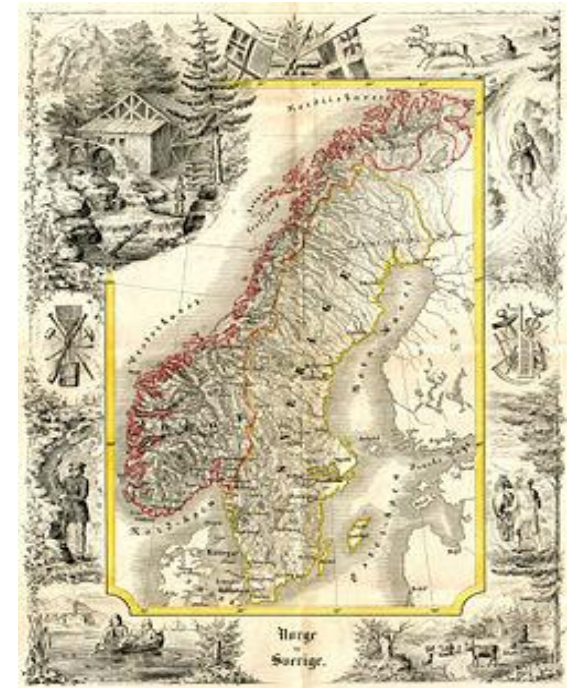
## Energy community – an added potential

- The Directive opens up for the Energy community parties to implement the RES Directive
  - Where all Treaty countries would have national targets
- Member State(s) may agree a (new) “joint project” for production of electricity from renewable energy sources in a 3rd country



## Norway will join EU 27 on RES Directive

- Norwegian government has stated that Norway will implement the Directive through the EEA agreement
- Norwegian and Swedish governments have ongoing dialogue on a common green certificate market
- Upcoming Norwegian RES commitments have intensified discussion on interconnection capacity from Nordic market



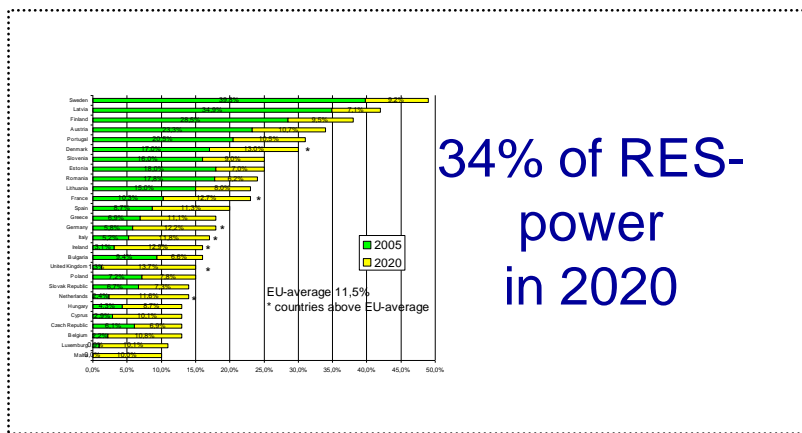
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# Provisions on access to electricity grids will depend on national implementation

- **Member States shall provide priority access or guaranteed access**
  - Whatever is chosen depends on RES support system chosen
  - Priority access may not function in a system where RES competes on equal terms with conventional power.
- **Member States shall ensure that TSO:s prioritise RES installations in dispatch “... insofar as the secure operation of the national electricity system permits ...”**
  - When this is applied (the clause “secure operation” should provide certain room for manouvre), this gets especially problematic in cases of grid bottlenecks where a share of the transmission capacity needs to be reserved for RES electricity. Such a removal of capacity from a possible capacity auction further reduces the possibility to build away the bottleneck.
- **Grid planning must become an integrated regional activity!**

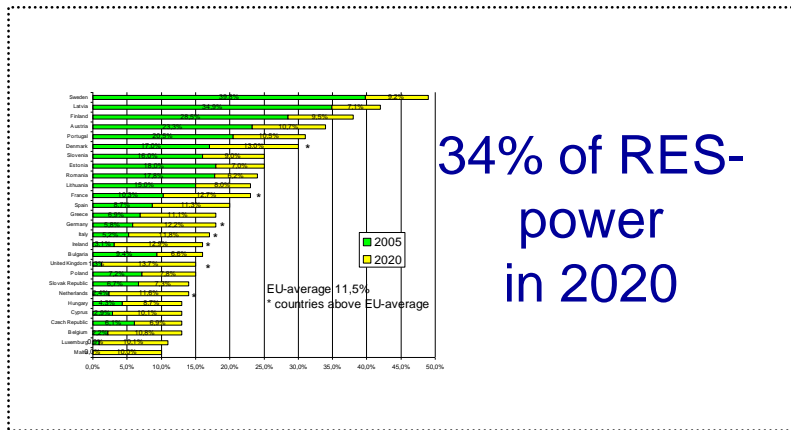
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# Minimise RES impact on wholesale market

- **Back-up costs and balancing**
  - Large-scale variable generation will increase back-up costs: who will pay?
  - Need more integrated grids to have wider balancing areas
- **RES as a lever to integrate markets**
  - 20% RES will not happen without better integrated markets!

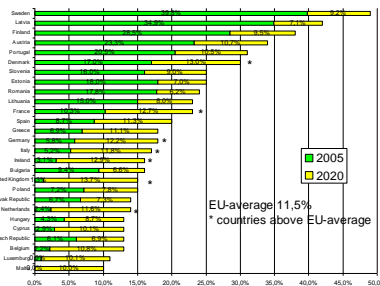
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34% of RES-power in 2020

EU-average 11.5%  
\* countries above EU-average

## **Concluding remarks**

- 1. Maximise RES Business Opportunities**
  - Provide stable, market-based framework
  - Heat pumps and electric transport – potential for a major contribution
  
- 2. Achieve targets at least cost**
  - Close-to-market RES to be utilised first
  - Maximise use of cooperation mechanisms
  - Member States should build joint strategies based on their strengths
  
- 3. Minimise impact on grids**
  - Grid planning to take on a regional perspective
  - Facilitate authorisations
  
- 4. Minimise impact on wholesale markets**
  - RES cannot happen without better integrated power markets
  - Use RES as lever to integrate European markets