Fair Low/Zero Carbon & 100% RE Strategies, South & North Countries, Villages, including Women Initiatives UNFCCC COP21 Side Event, Paris, France December 3, 2015



National and EU-wide Transitions to 100% Renewable Energy With Good Economy

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VedvarendeEnergi

Presentations are available at the UNFCCC web site and at INFORSE: www.inforse.org/europe/conf15_COP21.htm

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National and EU-wide Transitions to 100% Renewable Energy



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International Network for Sustainable Energy

Vision for EU-27, 2040

- Belarus, 2045
- Bulgaria, 2040
- Denmark, 2030
 - Estonia, 2040
- Hungary, 2040
 - Latvia, 2040
- Lithuania, 2040
- Romania, 2040
- UK ZeroCarbonBritain, 2035
 - Ukraine, 2050

Fast Transition to Renewable Energy until 2030 with Local Integration of Wind and Solar in Denmark 100% renewable energy system for all sectors. An electricity system with 84% windpower and 7% solar can supply energy in all hours of the year. Cheaper than fossils in 2030, if we save energy and change transport. Only domestic biomass needed. 100 % RE scenario fits into a zero carbon transition for Denmark.



Windpower on land and near shore with local participation and benefits (offshore is more expensive) More district heating Energy efficiency in industry Transport transition with less commuting, more public transport Fuel shift to electricity + H₂ General assumptions used







Why is 100% renewable cheaper in 2030?

Savings by 100% renewable energy compared with partly transition (Danish Energy Agency Scen. 20305)

Less transport Phase-out fossils for transport Less off-shore wind More energy efficiency -Other -**Total savings of 100% RE**

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0.83 bill. €/y
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oort 0.93 bill. €/y (oil at 90$/barrel)
0.09 bill. $/y
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- 0.27 bill. \$/y
- 0.33 bill. \$/y (less grids, oth.) 1.2 bill DKK/y

30,000 New Jobs During Transition

Employment in Danish Energy Supply + EE



Fast transition to renewable energy: 30-37.000 extra jobs till 2030

We a have a blanet - and you are part of it

C Vedvarende Energi

More:

www.inforse.org/europe/VisionEU27.htm www.inforse.org/europe/VisionDK.htm www.ve.dk (in Danish)