#### How have the opportunities and challenges for renewables changed in the last year? Hans Jørgen Koch

Chairman REWP and RETD

"Renewables – Policy and Market Design Challenges" REWP/RIAB Workshop, 27 March 2012, Paris

#### A mixed picture

- Part of the hidden costs of our current energy system have become visible:
  - Deep Water Horizon (damage: >40 billion USD and counting)
  - Fukushima (damage: > 250 billion USD)
- The accelerated phase-out of existing nuclear power plants in some countries offers opportunities for RE. But also for coal and even for new nuclear technology.....
- The world's addiction to fossil fuels has not changed, resulting in oil prices staying firmly above 100 USD/barrel.
- The economic crisis intensified, in many regions government budgets were significantly cut, affecting the support for RE.
- A conclusion of last years REWP/RETD meeting was "All that the RE industry needs is stable and predictable markets." The crises have resulted in more uncertainty.
- The misperceptions about RE are persistent and hard to correct. In several countries permitting stays to be a major barrier.

#### A mixed picture (2)

 But the deployment of RE is bigger than ever: in Europe more than 70% of the newly installed electrical capacity was renewable.

# Renewable energy: An evolving success story ...... with a happy end?

#### Short term action needed

- What actions can be taken by policy makers <u>now</u> to sustain the development trends of renewable energy?
- Bearing in mind the global economic and financial conditions/constraints?
- IEA-RETD will release the READy publication "Renewable Energy Action on Deployment" introducing the ACTION Star©

ACTION

www.iea-retd.org





Build alliances and reach agreements among policy makers and with relevant stakeholders including industry members, consumers, investors, and others.





Communicate knowledge about renewable energy resources, technologies and issues to create awareness on all levels, and to address concerns of stakeholders.





Clarify goals, set ambitious targets at all levels of government and enact policies to achieve them.





Integrate renewables into policymaking and take advantage of synergies with energy efficiency.



Optimize policies by building on own policies or other proven policy mechanisms and adapting them to specific circumstances.



Neutralize disadvantages in the marketplace, such as misconceptions of costs and the lack of a level playing field.

#### **DENMARK-BROAD CONSENSUS ON RENEWABLES**

- Agreement in Parliament covering 90% of the seats
- •MARCH 22, 2012
  - A STRATEGY FOR
- 2020
- 2030
- 2035
- 2050

# Energy policies and measures

## **Ambitious green energy transition**

- Entire energy supply is covered by renewables in 2050
- •By **2020** 
  - 12 % reduction of GEC compared to 2006
  - **35% renewables in energy mix**
  - •50% wind energy in electricity consumption

## 50% wind energy in electricity by 2020

Further 500 MW installed near the coast
Onshore development of total 1800 MW
Comprehensive strategy for Smart Grids
1000 MW offshore wind turbines

## **Converting to RE in buildings**

- From coal to biomass in large scale CHP
  Promotion of new technologies e.g. Geothermal energy and large heat pumps
- Banning installation of oil-fired boilers
  - In new buildings from 2013
  - In existing buildings in areas where district heating and natural gas is available from 2016

# Other initiative to reach RE goals

#### Electricity and biomass in Transport

- Subsidies for recharging stations (EV) and infrastructure (hydro and gas)
- 10% biofuels by 2010
- Better framework conditions for Biogas
  - Better and new funding schemes
  - Increased capital installation subsidies
- More renewable energy in Industry
  - Increase of RE in process
  - promote more industrial CHP

### Financing the energy agreement

Total costs ca 500 mill euro

- ca 165 euro/year per household
- Ca 3 euro/week per household

Financed through

- Tariffs on energy distribution
- PSO financing RE increase in electricity and gas grids financed through

Tax for heating

