



# Long term energy and climate scenarios in Denmark

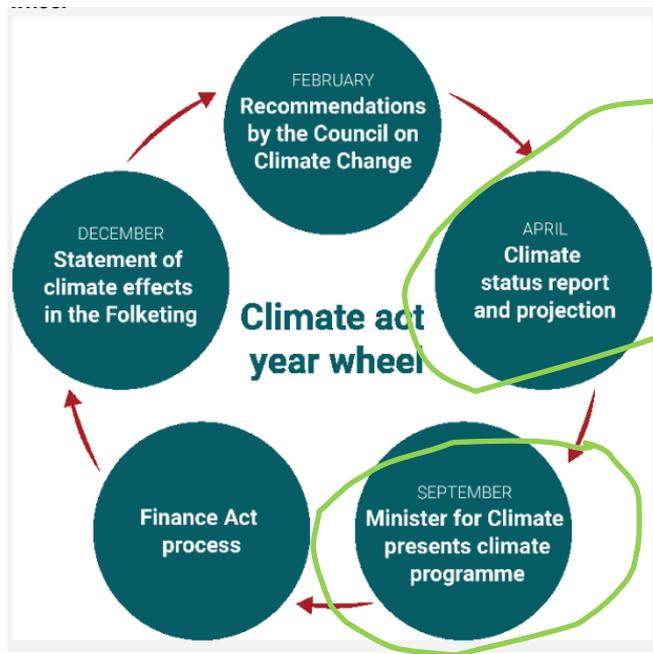
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# HOW WE USE EMISSIONS PROJECTIONS TO STEER CLIMATE POLICY



Climate status and outlook  
(Danish Energy Agency)

Update on climate strategy  
(Ministry of Climate, Energy and Supply)



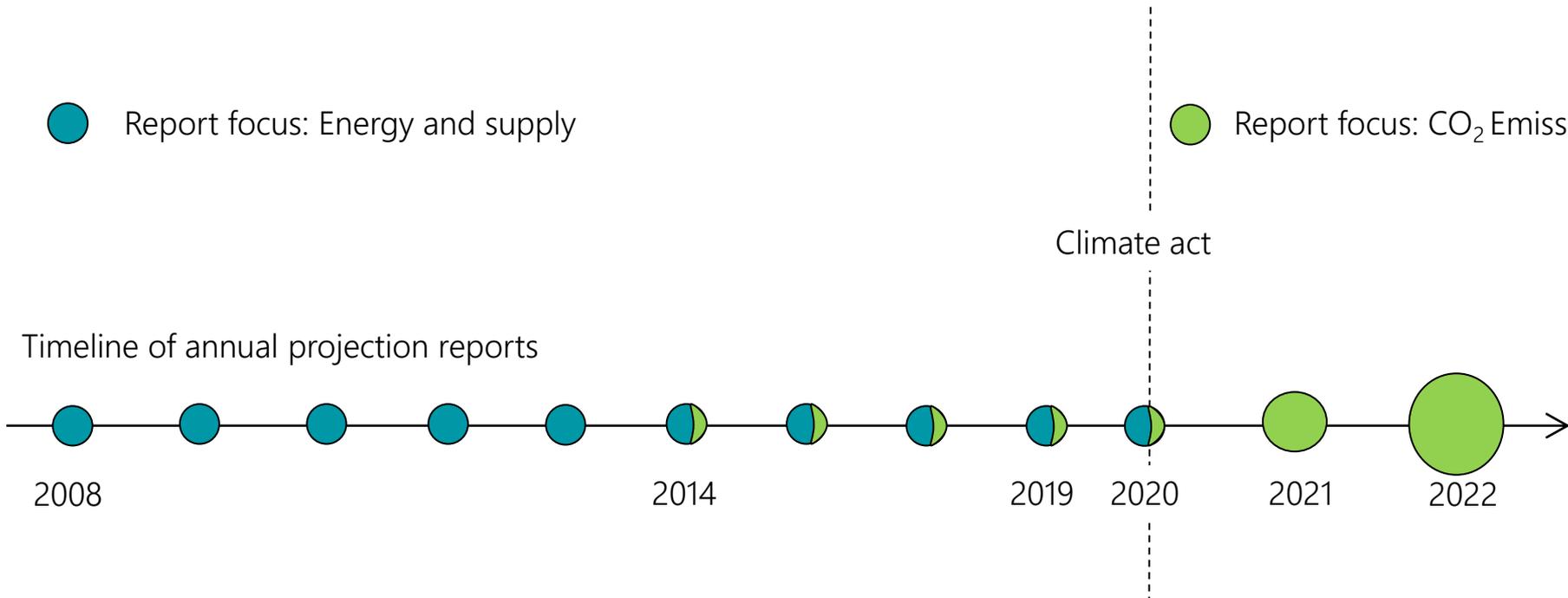
# FROM SUPPLY OUTLOOK TO EMISSION OUTLOOK

Climate, energy and supply in same ministry (since 2007)

 Report focus: Energy and supply

 Report focus: CO<sub>2</sub> Emissions

Timeline of annual projection reports







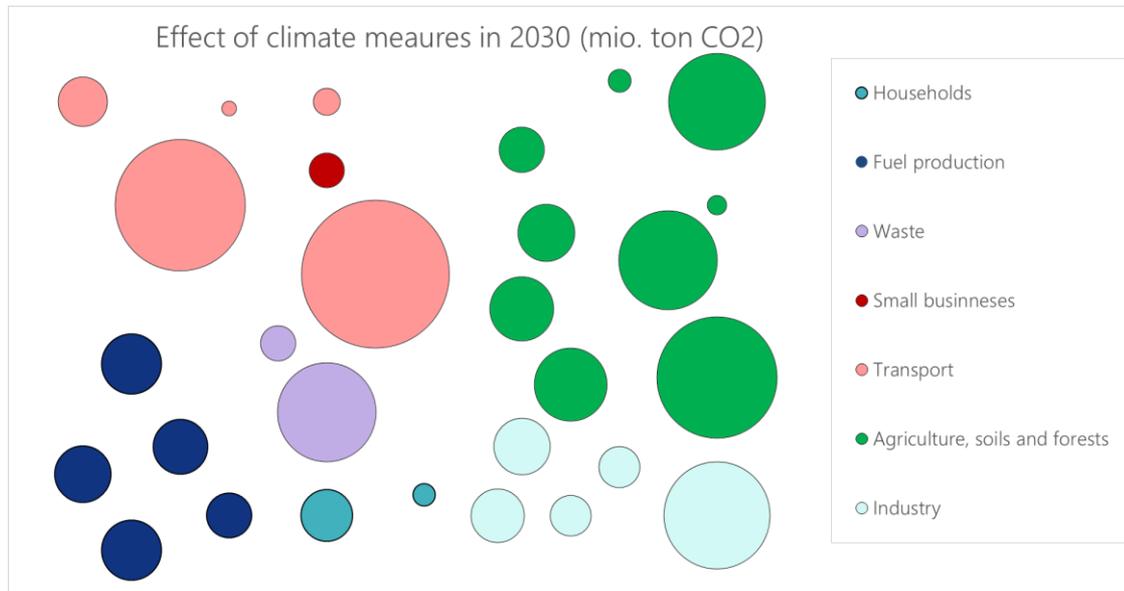
# COMPARING CLIMATE MEASURES AGAINST THE PROJECTION

**We can now answer the following question:**

For a specific climate measure, what is the consequence on the emissions in 2030?

**Using the following steps:**

- 1) Compute emissions from the activity under current legislation and development
- 2) Decide on change in activity or emission factor
- 3) Compute resulting change in emission projection



Sum:

Sum corrected for overlap:

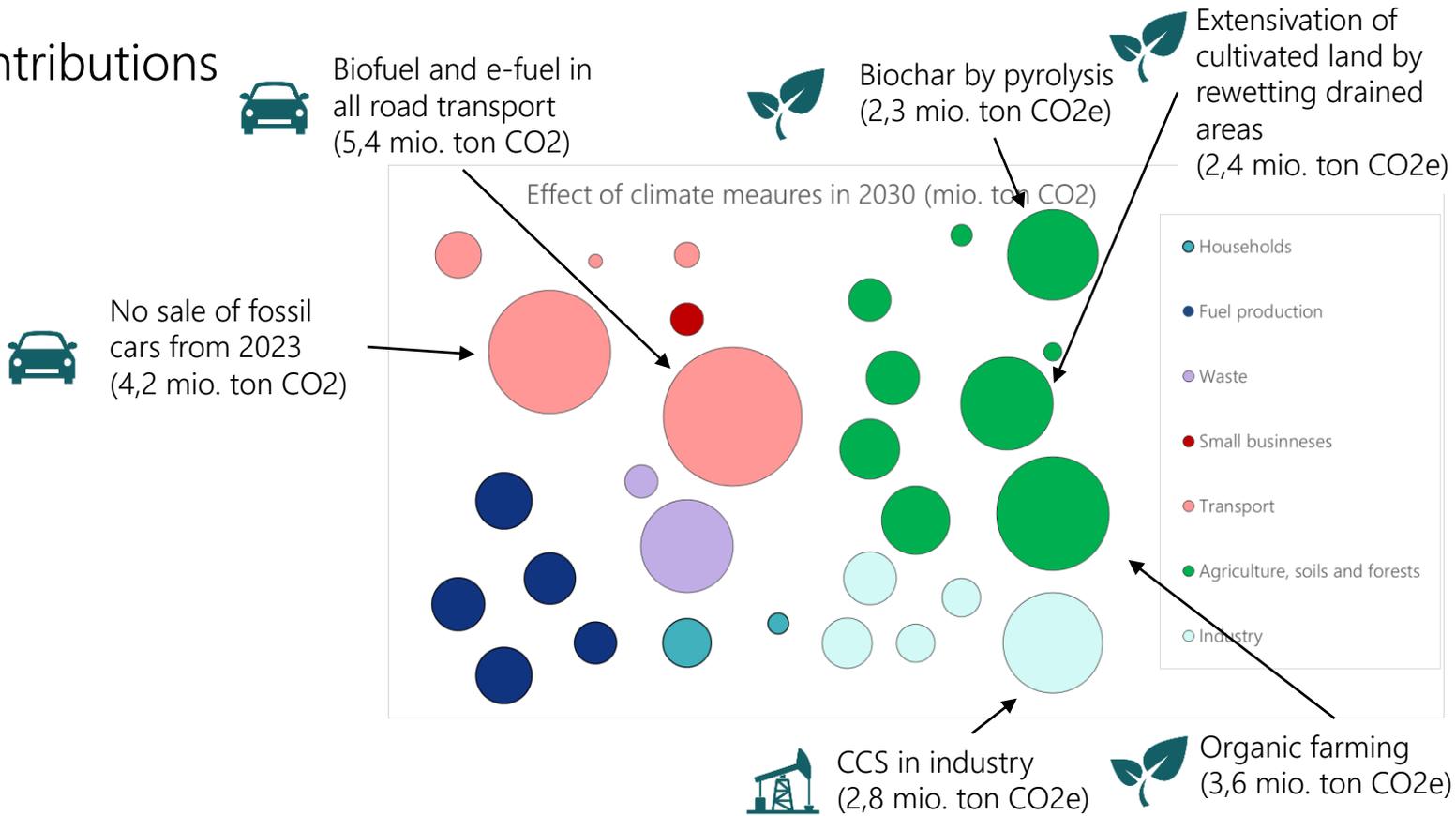
43 mio. ton CO<sub>2</sub>

31 mio. ton CO<sub>2</sub>



# COMPARING CLIMATE MEASURES AGAINST THE PROJECTION

## Big contributions





# COMPARING CLIMATE MEASURES AGAINST THE PROJECTION

## Small contributions



Heat pumps and district heating in all small business (0,3 mio. ton CO<sub>2</sub>)



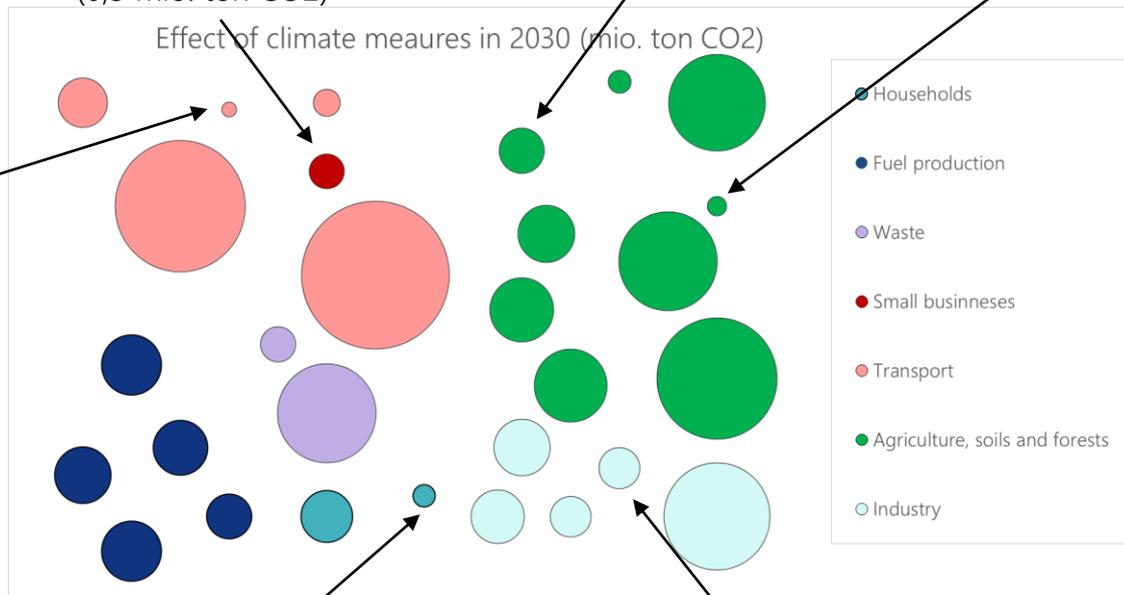
Planting trees (0,5 mio. ton CO<sub>2</sub>e)



Energy efficiency in farming (0,1 mio. ton CO<sub>2</sub>e)



Biofuels and e-fuels in domestic aviation (0,2 mio. ton CO<sub>2</sub>)



Energy savings in households (0,1 mio. ton CO<sub>2</sub>)



Energy efficiency in industry (0,4 mio. ton CO<sub>2</sub>e)



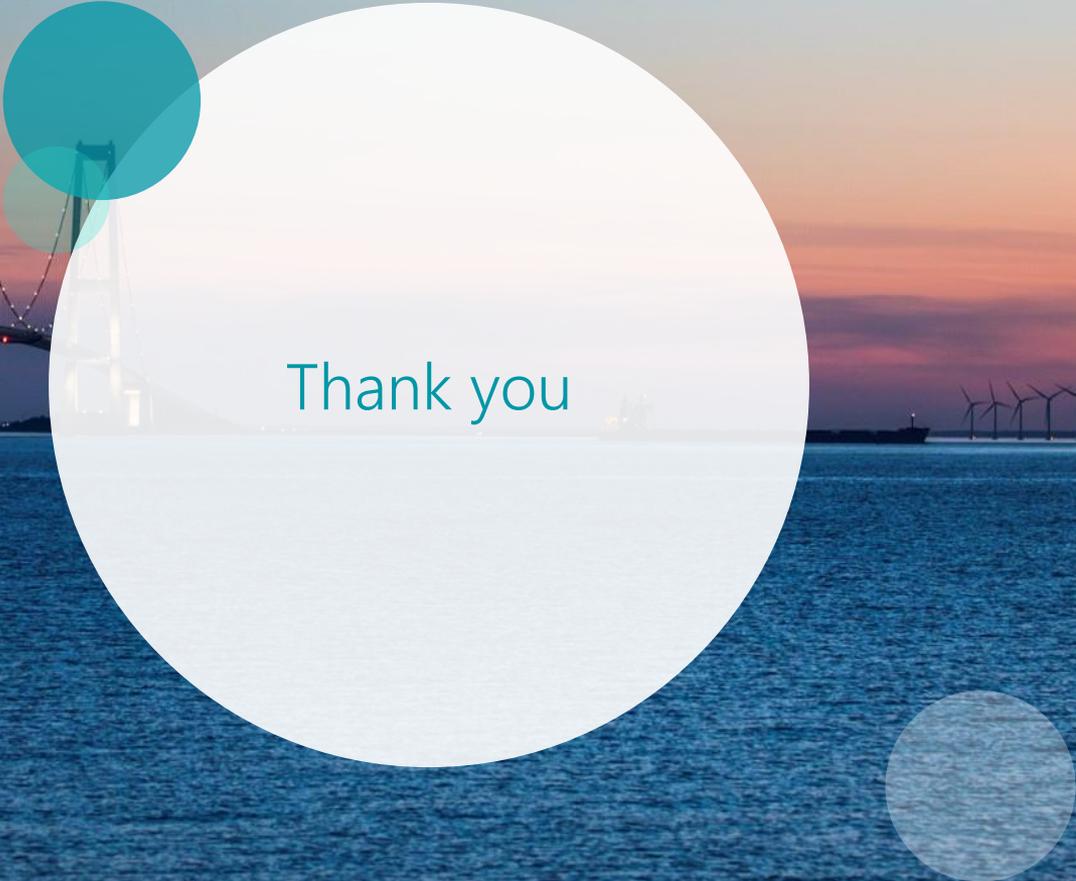
# GOOD PRACTICES AND CHALLENGES

## Good practices

- Measuring climate initiatives against the climate outlook
- One update per year, not more not less
- Annual update of historic data

## Challenges

- Ensuring good data input
- How to deal with uncertainties in the projection? Quantification and communication



Thank you