

Danish climate policy

– Targets and Progress

SBI 45 Working Group Session

Multilateral Assessment

12 November 2016

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Denmark - a Member State in the European Union: the joint EU quantified economy-wide emission reduction target for 2020 applies

The EU and its Member States:

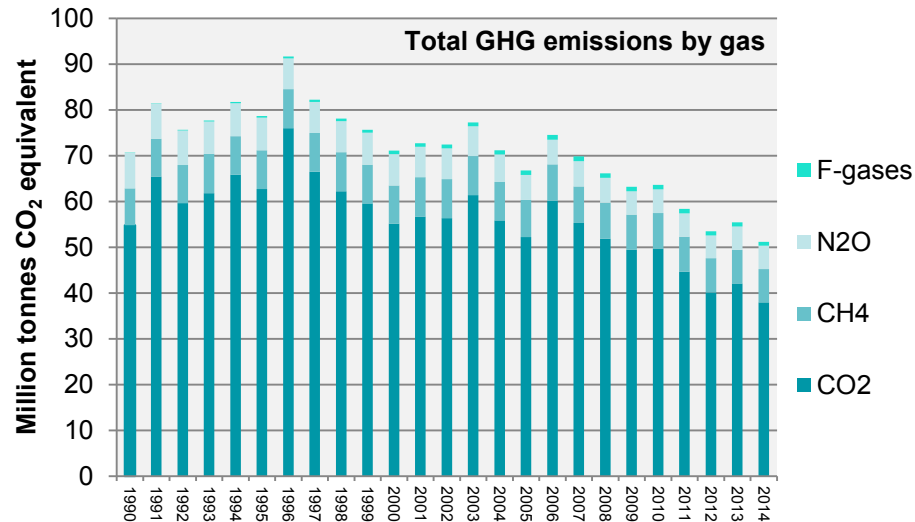
- An unconditional quantified economy-wide emission reduction target of a **20 % reduction of greenhouse gas emissions by 2020 compared with 1990 levels**
- The EU pledge does **not** include emissions/removals from **Land Use, Land-Use Change and Forestry (LULUCF)**. The use of **international credits** generated through the Kyoto Protocol's project based flexible mechanisms (i.e. JI and CDM) is possible subject to qualitative and quantitative limits set out in EU legislation.
- As this 20 % economy-wide reduction target by 2020 will be fulfilled jointly by the EU and its member states, **no individual economy-wide target for Denmark** is included in the joint EU 2020-target under the Convention.
- Denmark will contribute to the achievement of the joint EU target under the Convention by a 20 % reduction of greenhouse gas emissions in sectors **not covered by the EU Emissions Trading Scheme by 20 % in 2020 compared with 2005 levels** in accordance with the EU legislation (the non-ETS target under the Effort Sharing Decision).

The "a-b-c" of Denmark's participation in the joint EU target for 2020

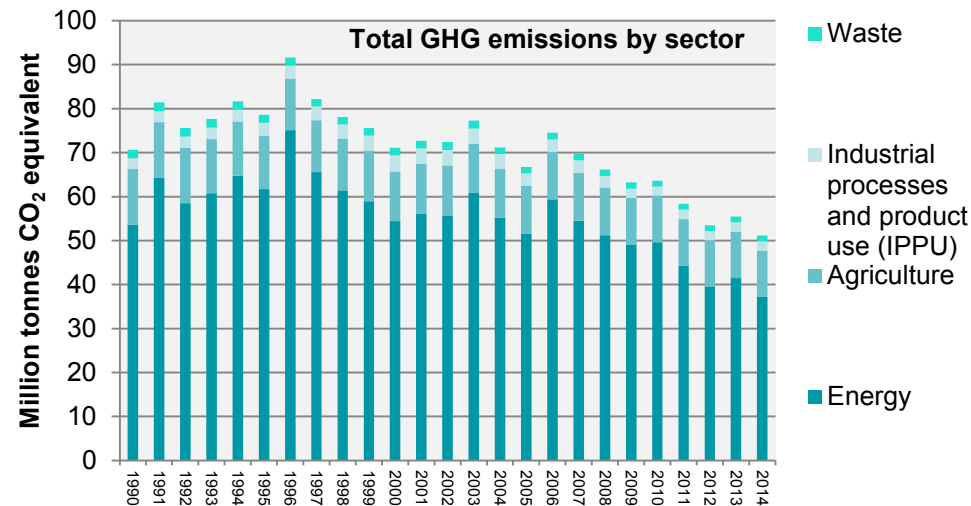
- a) **Greenhouse gas emission** trends in Denmark;
- b) **Assumptions, conditions and methodologies** related to Denmark's contribution to the attainment of the joint EU quantified economy-wide emission reduction target;
- c) **Progress** in Denmark's contribution towards the attainment of the joint EU quantified economy-wide emission reduction target.

(a) Greenhouse gas emission trends in Denmark 1990-2014

Total (excluding LULUCF), by gas and by sector



Total GHG emissions (excl. LULUCF):
 1990: 72 Million tonnes CO₂ equivalent
 2014: 51 Million tonnes CO₂ equivalent



Change 1990-2014: -28 %

(b) Assumptions, conditions and methodologies

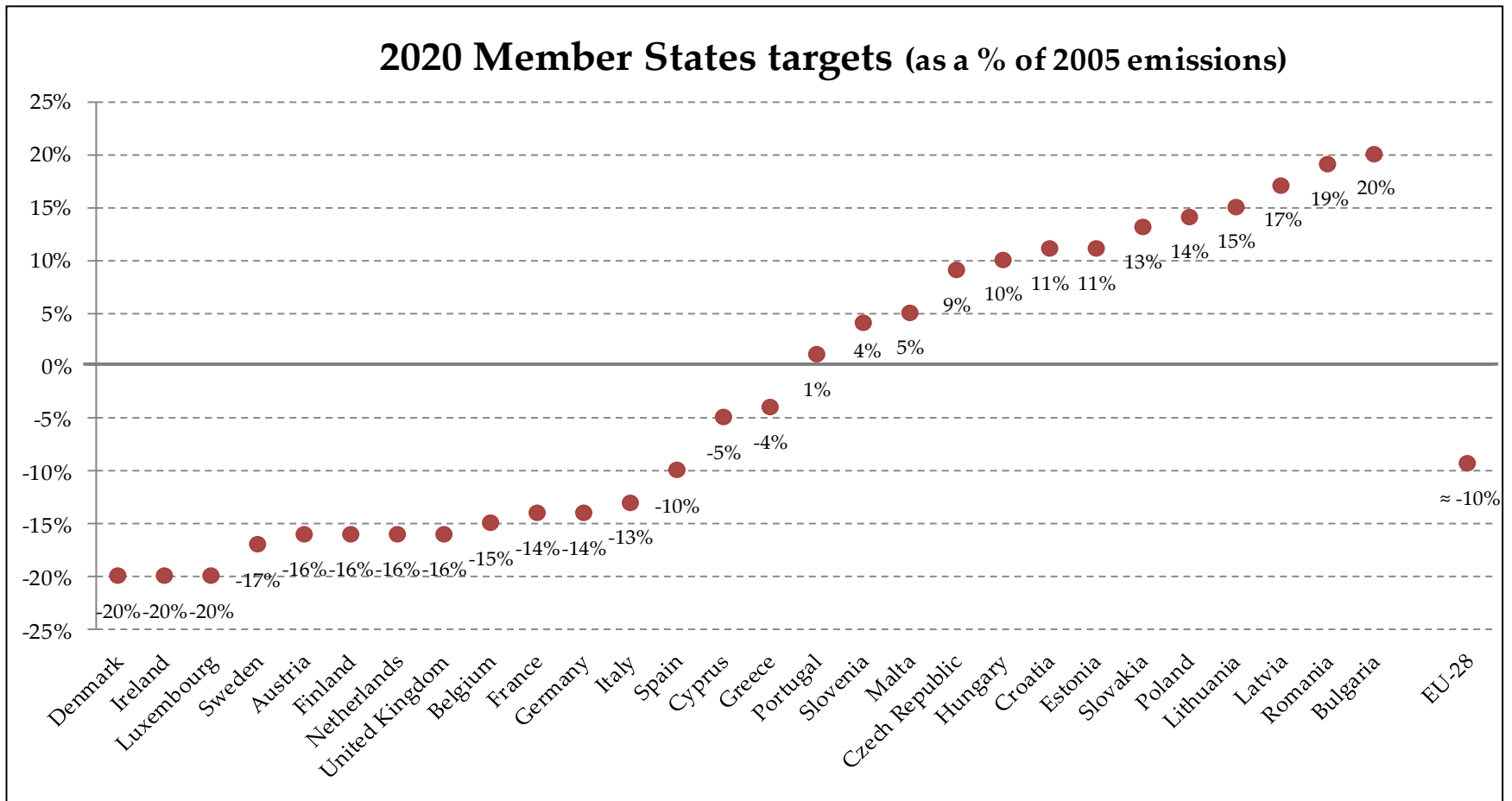
related to Denmark's contribution to the attainment of
the joint EU quantified economy-wide emission reduction target for 2020

	Denmark's contribution to the joint EU quantified economy-wide emission reduction target for 2020	Denmark's contribution to the joint EU target under KP CP2 (2013-2020)
Base year:	1990	CO ₂ , CH ₄ and N ₂ O: 1990 HFCs, PFCs, SF ₆ and NF ₃ : 1995
Target:	Part of the joint EU target which is a unconditional quantified economy wide emission reduction target of 20% by 2020, compared to 1990 levels and a conditional offer to move to 30% if other developed countries commit themselves to comparable emission reductions and if more advanced developing countries contribute adequately according to their responsibilities and respective capabilities.	An emission level of 32.803901 MtCO ₂ eq. as annual average 2013-2020 in the sectors not covered by EU Emissions Trading Scheme (ETS).
Period for reaching target:	From 1990 to 2020	From 1990 to 2013-2020.
Gases:	CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs and SF ₆ .	CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ and NF ₃
Sectors:	All GHG inventory sectors, excluding LULUCF, including international aviation.	All GHG inventory sectors, where KP LULUCF under art. 3.3 and 3.4 of the KP will be accounted for under the protocol, but not used (retired) for the achievement of targets under the EU ETS and the EU ESD (non-ETS).
GWPs:	IPCC 4 th AR.	IPCC 4 th AR.
Role of LULUCF:	Excluded.	Included in the reporting under the KP (activity-based approach), but not used (retired) for the achievement of targets under the EU ETS and the EU ESD (non-ETS).
Use of international market-based mechanisms:	Not planning to use international credits.	Not planning to use international credits.

(b) Assumptions, conditions and methodologies

related to Denmark's contribution to the attainment of
the joint EU quantified economy-wide emission reduction target for 2020

Denmark's and other EU Member States' non-ETS targets for 2020



(b) Assumptions, conditions and methodologies

related to Denmark's contribution to the attainment of
the joint EU quantified economy-wide emission reduction target for 2020

Denmark's domestic targets until 2020

- **Energy agreement for the period up to 2020 – with the following energy targets:**
 - More than 35% renewable energy in final energy consumption.
 - Approximately 50% of electricity consumption to be supplied by wind power.
 - Approximately 7-8% reduction in gross energy consumption in relation to 2010.

(c) Progress in Denmark's contribution

to the attainment of the joint EU quantified economy-wide emission reduction target for 2020

Progress according to the energy and greenhouse gas projections from December 2015 also reported in BR2 (the latest):

Climate:

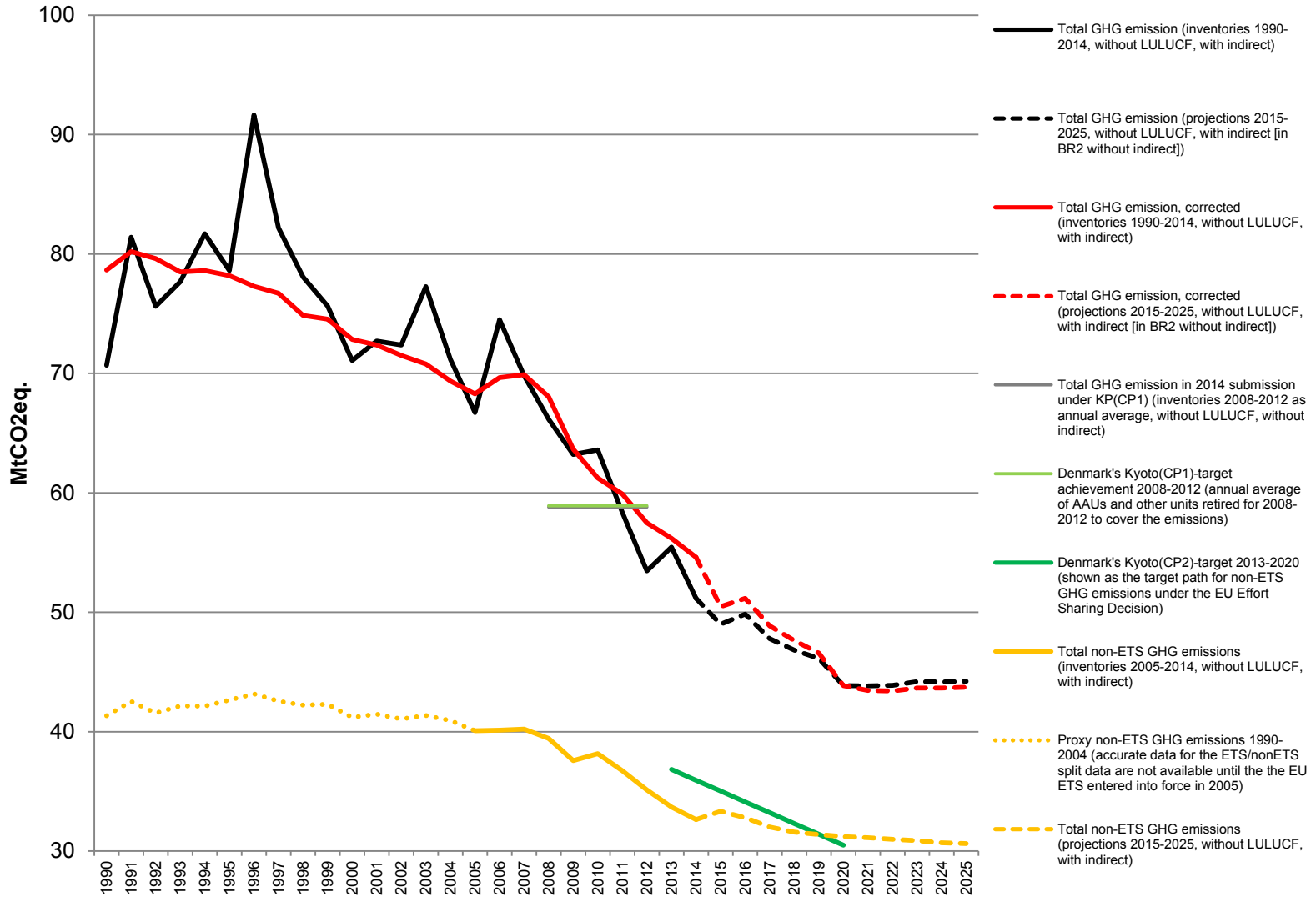
- Denmark is projected to achieve its EU GHG emission reduction target for 2013-2020 in the non-ETS sectors (the EU Effort Sharing Decision or ESD) with existing policies and measures and will stay below the target path in 2013-2020 when the use of the flexibility under the ESD is taken into account for 2020 (e.g. over-achievements in previous years can be used in years with under-achievements).
- Total GHG emissions are projected to decrease 37 % without LULUCF from 1990 to 2020.

Energy:

- The share of renewable energy in energy consumption by 2020 is expected to be around 40% (Denmark's 2020-target in the EU: 30 % / 2014-data: 28.5 %).
- Wind power is expected to cover up to 53-59% of electricity consumption by 2020 (domestic 2020-target: 50 % / 2014-data: 53.4 %).
- Gross energy consumption is projected to be around 755 PJ in 2020 or 7.2 % decrease from 2010 (domestic target: 7-8 % / 2014-data: 7.2 %).

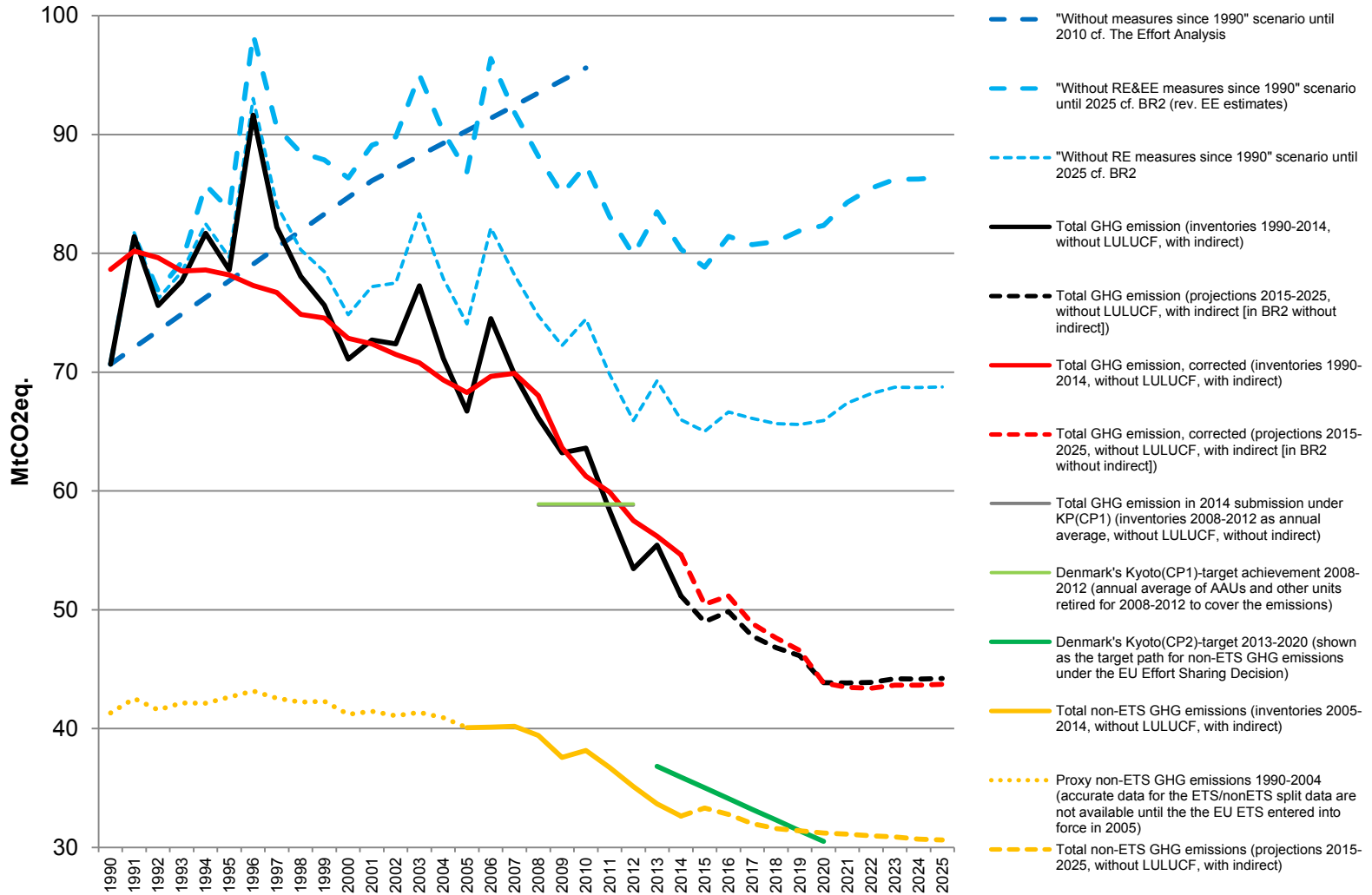
(c) Progress in Denmark's contribution

to the attainment of the joint EU quantified economy-wide emission reduction target for 2020



(c) Progress in Denmark's contribution

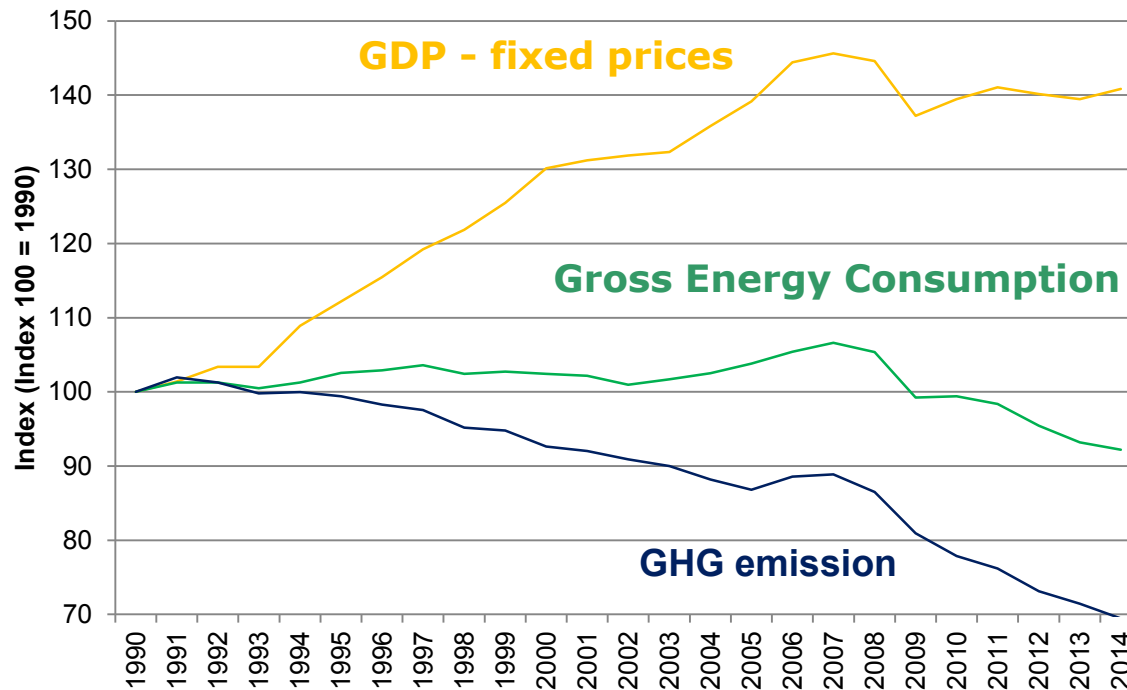
to the attainment of the joint EU quantified economy-wide emission reduction target for 2020



(c) Progress in Denmark's contribution

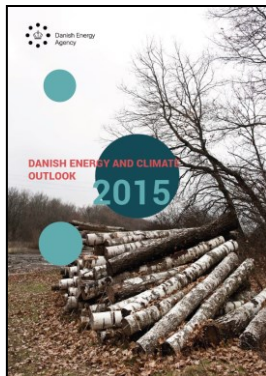
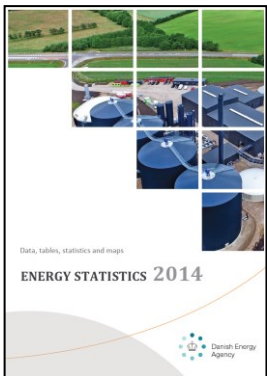
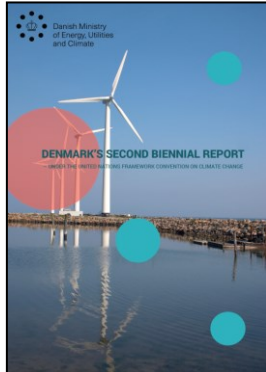
to the attainment of the joint EU quantified economy-wide emission reduction target for 2020

Decoupling of GHG emissions and energy consumption from economic growth



Main reasons:

- 1) Combined Heat and Power production
- 2) District Heating
- 3) Renewable Energy
- 4) Energy Savings



Further information:

Denmark's BR2/CTF:

http://unfccc.int/files/national_reports/biennial_reports_and_ia/submitted_biennial_reports/application/pdf/dnk-br2-january2016.pdf

http://unfccc.int/files/national_reports/biennial_reports_and_ia/submitted_biennial_reports/application/pdf/dnk_2016_v4.0_resubmission.pdf

Denmark's NC6:

[http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/nc6andbr1-dnk-2jan2013\[1\].pdf](http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/nc6andbr1-dnk-2jan2013[1].pdf)

The Energy Agreement:

<http://www.kebmin.dk/sites/kebmin.dk/files/climate-energy-and-building-policy/denmark/energy-agreements/FAKTA%20UK%201.pdf>

Energy Statistics:

<https://ens.dk/en/our-services/statistics-data-key-figures-and-energy-maps>

Danish Energy and Climate Outlook 2015:

https://vps184.rackhosting.com/sites/ens.dk/files/Analyser/danish_energy_and_climate_outlook_2015.pdf

Thank you for your attention.