COMPETETIVE COMPANIES IN THE GREEN ECONOMY



DI'S MEMBERS REPRESENT

Over 20,000 companies

More than 1.4 mill. employees







DI promotes green growth

- •DI supports the Danish goal of 70% CO₂ reduction by 2030 and carbon neutrality by 2050
- •Climate is a central part of DI's 2030 plan
- •Business should contribute both to growth and to CO₂ reductions



TOGETHER

CREATE

Positive economic growth - stable energy consumption – reduced CO2 emissions





Danish climate targets (Energy Agreement 2018)



Green Transition in Denmark – the political landscape

- In 2020 the Danish Parliament adopted the Climate Law obligating Denmark to reach a 70 per cent reduction on CO2 emissions by 2030 and climate neutrality by 2050
- In 2021 the Danish Parliament decided to introduce a CO2-taxation for all companies
- The CO2 taxation is in addition to the existing EU Emission Trading System (quota system taxing CO2 emissions)





INNOVATIVE PUBLIC-PRIVATE PARTNERSHIPS MODEL

During DI's AGM in 2019, Prime Minister Mette Frederiksen announced a new initiative based on an innovative partnership with the private sector called "Climate Partnerships", distributed among 14 business sectors. The partnerships to help achieve the Danish 70 % in 2030 target.

Dubbed "the greatest brainstorm in Denmark", DI actively got involved as BMO in a secretariat function, and results have shown that the business sector is taking ownership and are contributing to provide specific solutions to shared sustainability challenges.





14 Climate Partnerships and a forum

- The climate partnerships **represent sectors** in the Danish economy
- The overall purpose of the partnerships was to establish a 2030-vision for how each sector will contribute to the 70% reduction target
- The Ministry of Industry, Business and Financial Affairs oversees the overall process
- Specific Climate Partnerships are linked to specific ministries
- Each Climate Partnership has been assigned a Secretariat a business organisation





The organization of the partnerships

- In March 2020, each partnership published a list of recommendations to both industry and government
- A total of over 400 recommendations were made more than 80 percent are partly or fully implemented
- The partnerships have actively participated in various political discussions





CLIMATE PARTNERSHIPS – VISION FOR 2030

ENERGY INTENSIVE INDUSTRY THE VISION FOR 2030 IS FOR DENMARK TO HAVE THE <u>MOST CLIMATE</u> FRIENDLY ENERGY INTENSIVE INDUSTRY IN THE WORLD WHILE CREATING GREEN EXPORTS, GROWTH AND JOBS IN DENMARK

MANUFACTURING INDUSTRY THE VISION FOR 2030 IS FOR DENMARK TO HAVE <u>THE WORLD'S FIRST</u> <u>CLIMATE-NEUTRAL MANUFACTURING INDUSTRY</u> WHILE CONTINUING TO CREATE GREEN EXPORTS, GROWTH AND JOBS IN DENMARK.

Source: State of Green, 2020

DI: Climate target is possible and necessary

DECREASING GHG EMISSIONS IN DENMARK

GHG emissions



Percentage of electricity demand covered by wind





The climate partnership for energy and utilities

The energy and utilities sector's Co2 emissions have already been cut by 58% from 1990. When Denmark reaches its 70% reduction target in 2030, the energy sector and its energy customers will have made significant investment in renewable energy, energy infrastructure and new energy- efficient technologies.

Recommendations:

- 95% reduction in the energy and utilities sector
- 50 % less fossil fuels for buildings, transport and industry
- 10 years roadmap for hydrogen fuels focusing on cooperation between government and industry
- Target for an expansions of renewable energy ensuring sufficient capacity for a complete, green transformation
- Framework to upgrade Denmark's energy infrastructure to support a complete, green transformation

CARBON REDUCTIONS IN THE ENERGY AND UTILITIES SECTOR TOWARDS 2030

Reduction impact 2030 **Reduction initiatives** Million tonnes of carbon emissions **Baseline projection** Phasing out coal at Asnæs and Amagerværket power stations in 2019 2.5 Phasing out coal at Nordjyllandsværket power station in 2028 1.5 Phasing out oil-fired and natural gas-fired boilers for individual heating 1.2 7.5 million Phasing out coal at Esbjerg power station in 2023 1.1 tonnes Phasing out natural gas in decentralised district heating 0.6 0.5 Energy efficiency improvements and optimisation of the North Sea production (natural gas) Phasing out fossil waste in waste-to-energy plants 0.1 Further identified initiatives Phasing out 95% of oil-fired boilers and 70% of natural gas-fired boilers for individual heating¹ 1.6 Carbon capture and storage of emissions from waste and biomass 1.3 Increased separation and recycling of plastics in waste-to-energy plants 0.7 5.4 million Phasing out coal at Fynsværket power station 0.7 tonnes Optimisation and electrification of energy consumption (natural gas) in the North Sea production 0.6 Phasing out oil and natural gas in district heating peak load and reserve load boilers 0.3 Phasing out natural gas at gas-fired CHP plants 0.2 Total 12.9



THE CLIMATE PARTNERSHIP FOR ENERGY INTENSIVE INDUSTRY

- **Challenge:** the energy intensive industry contributes with crucial materials for society for buildings, manufacturing, transport, food processing and energy production. The sector accounts for approx. **14% of Denmark's overall emissions.**
- The sector has reduced emissions by 7% as compared to 1990 levels. This has primarily been achieved through increased energy efficiency.
- The Danish energy intensive industry's 2030 vision to be the most climate friendly energy intensive industry in the world while creating green exports, growth and jobs in Denmark.
- The climate partnership shows that it is possible for the sector to **reduce direct emissions by 70 %** in 2030.



RECOMMENDATIONS

- Reduction of 30 % by 2030 is possible through investments in further energy efficiency measures, increased use of alternative fuels (such as biogas and waste)
- Additional 20% reduction can be achieved though replacing coal and natural gas with biogas, and the electrification of processes at low and medium temperatures
- Additional 20% reduction through carbon capture at the largest emitters. The methods and technologies for CCUS are still in their infancy, so establishing a public-private partnership to develop them further is proposed.



1. Change in product mix towards more sustainable products (recycled materials, new materials, less waste)



2. Shift away from coal and petcoke towards alternative fuels (biomass, waste)



3. Increased focus on energy efficiency



4. Own investments in utilization of waste heat



5. Public-private partnerships on carbon capture



Source: State of Green, 2020

Considerable decrease in CO2 emissions among Danish manufacturing companies

Manufacturing companies have reduced their CO2 emissions by 23 percent since 1990 - the reductions are significantly higher when adjusting for the increasing value added during the period.

Indexed development in total greenhouse gas emissions and the ratio between greenhouse gas emissions and value added (GVA). 1990-2021.









Use of sustainable energy in the industry has tripled since 2014







Manufacturing companies deliver sustainable solutions all over the world

The industrial companies export green solutions for more than DKK 70 billion annually. The development in the export of green goods and services. 2012-2021

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Source: GRON1, Danmarks Statistik, data er hentet 10.03.2023.

Bn danish, kr.





Benefits of the partnerships

Engagement

The private sector emphasizes their commitments to establishing long-term climate targets

Innovation

New technological solutions and business models are unlocked in the process of establishing new partnerships and developing recommendations

Acceleration

Decarbonisation and the development of new technologies are accelerated through concrete initiatives and increased awareness

Co-creation

Collaboration and co-creation across public and private sectors as well as businesses and industries towards one common goal The Danish Government's Climate Partnerships

