

# Green Defence

No time to wait  
– priorities and goals

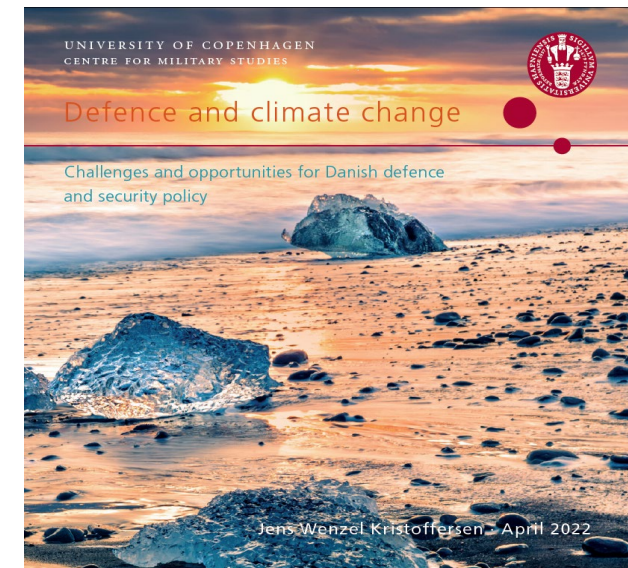
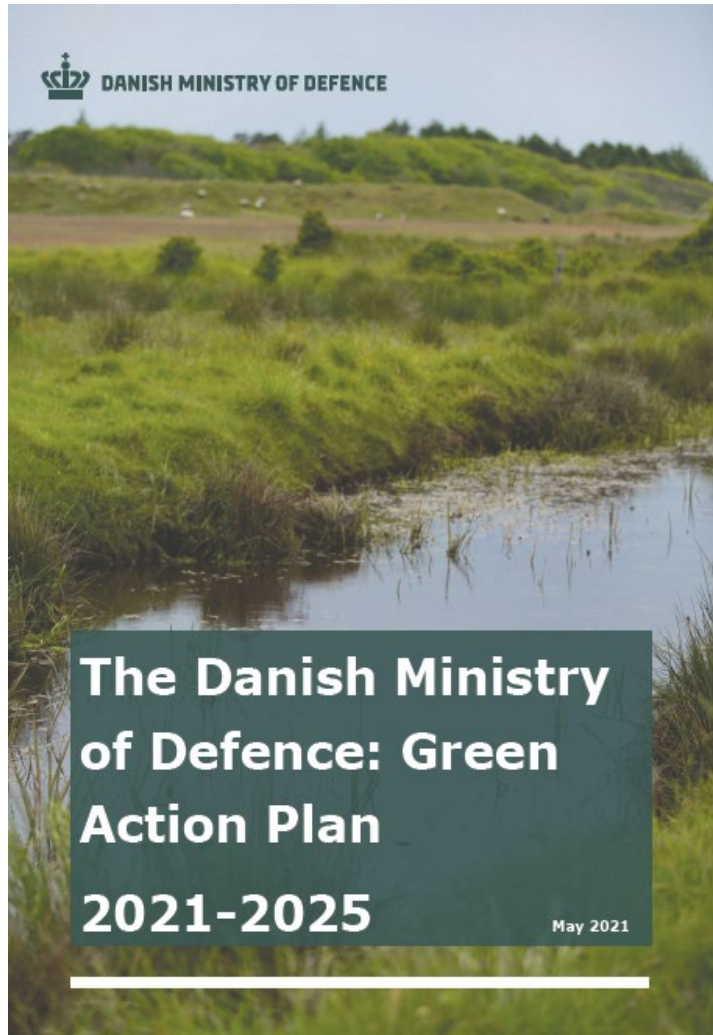
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# Greening of Danish Defence



## Fact & Figures (2020)

- Danish Defence CO2 emissions amounts to 230.000 tons = 0.5 % of Denmark's total CO2 emissions of 61 mio tons CO2
- Approx. 75-82 % of Defence emissions stem from fossil fuels from the primarily Navy and Airforce
- Navy/Airforce use approx. 34 million liters of propellant annually – army 8 million liters
- 15-18 % from buildings (312 GWh)
- Own solarpower production (4.3 GWh)
- 2 % related to travels etc.
- Danish Defence landowner approx. 32.000 hectars of land. (1 hectar=100mx100m=2 football fields)
- Until 2020 no concrete **reduction targets** – primarily ideas and areas for focus
- From 2019 to 2020 overall **reduction of approx. 10,3 % CO2 emissions**
- From 2021 **reduction estimates** stated in the Green Action Plan 2021-2025
- Contributes to governments 70% reduction target by 2030. How much ? Uncertain!

# Green Action Plan 2021-2025

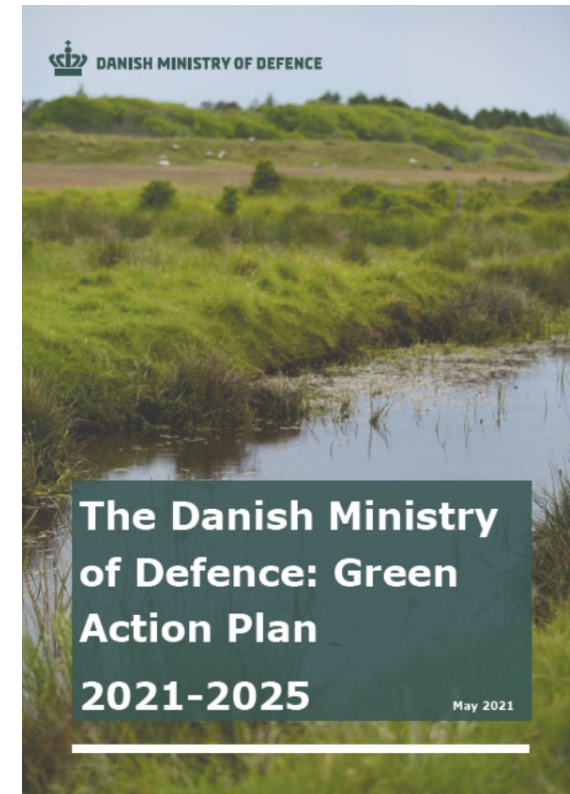
- **7 focus areas**

1. Nature
2. Energy consumption
3. Air pollution
4. Soil and groundwater
5. Wastewater and surface water
6. Resource consumption and waste production
7. Noise and Vibration

- **47 action points to be implemented in the years 2021-2025.**

- **2019: 254.000 tons CO<sub>2</sub>-e > 2020: 230.000 tons CO<sub>2</sub>-e**

**Reduction 10.3% from 2019 to 2020**



# Focus areas and action points

**Life cycle costing  
model for the  
building mass**

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**Model and plan for  
building renovation**

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**Phasing out Oil- and  
gas-fired boilers**

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**LED-light sources in  
buildings**

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**More Energy-  
efficient buildings in  
the Arctic**

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**Renewable Energy**

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**Data centres**

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**Heat Pumps**

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**Forests and Nature**

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**More wild and diverse  
nature in shooting- and  
exercise terrains**

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**Green Christiansø**

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**Increased Biodiversity**

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**Phasing out of  
agricultural activities**

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**New military-  
nature guides**

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**Focus on  
improved water  
quality**

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**Reduction in pesticide  
use**

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**Recycling of waste  
fractions**

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**Marine Environmental  
Guardians**

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**Energy technologies**

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**Energy-correct ships**

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**Emission-free  
vehicles**

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**Green camps**

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**Civil emission-free  
transport solutions**

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**Logistics and  
transport in the Arctic**

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**Improvement of  
driver training**

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**More ride-sharing**

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**Experimental scheme  
with charging stations  
for electric vehicles**

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**Environmentally  
friendly food**

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**Increased waste  
management**

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**Environmentally  
friendly and  
energy-efficient  
management**

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**Reduced use of air  
travel**

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**Climate evaluation**

# Ministry of Defence: Climate report/status

- Yearly since 2012 > 2020
- Detailed summary and status within each focus area
- No concrete CO<sub>2</sub> reduction targets
- Gives an overview of “greening” activities.
- Dilemma between “operational” readiness and “green” operations

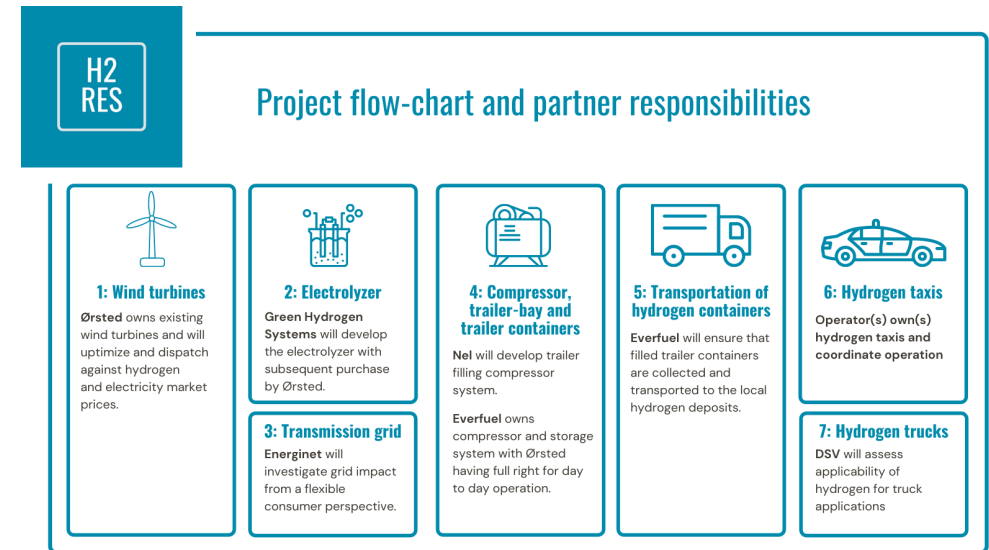
# Priorities & Goals

## Priorities

- 01 Alternative propellants – a foundation for the armed forces of the future
- 02 A green, energy-efficient and sustainable navy
- 03 Simulation as a Danish stronghold
- 04 Promotion of green operational concepts such as 'green camps'
- 05 Innovation and research – increase green co-financing
- 06 Optimised transport can make a difference
- 07 Optimisation of buildings and premises
- 08 Climate and environmental requirements for all purchases and supply chains

## Goal

- Contribution to the 70% governmental reduction goal 2030 compared to 1990 level.
- Flexible contribution – no Ministry of Defence CO2 commitments
- Big challenge to reduce the use of approx. 80% fossil of the 230.000 CO2 tons in military operations.
- Low hanging fruits – establishment reduction, travels, industry cooperation on new types of green fuel.
- No time to wait in choosing and planning the path before 2025.



# CMS soon to be published - mid September.

