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 hectares of land. (1 hectare=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 CO₂-e > 2020: 230.000 tons CO₂-e**
  
  Reduction **10.3%** from 2019 to 2020
Focus areas and action points

- Life cycle costing model for the building mass
- Model and plan for building renovation
- Phasing out Oil- and gas-fired boilers
- LED-light sources in buildings
- More Energy-efficient buildings in the Arctic
- Renewable Energy
- Data centres
- Heat Pumps
- Forests and Nature
- More wild and diverse nature in shooting- and exercise terrains
- Green Christiansø
- Increased Biodiversity
- Phasing out of agricultural activities
- New military-nature guides
- Focus on improved water quality
- Reduction in pesticide use
- Recycling of waste fractions
- Marine Environmental Guardians
- Energy technologies
- Energy-correct ships
- Emission-free vehicles
- Green camps
- Civil emission-free transport solutions
- Logistics and transport in the Arctic
- Improvement of driver training
- More ride-sharing
- Experimental scheme with charging stations for electric vehicles
- Environmentally friendly food
- Increased waste management
- Environmentally friendly and energy-efficient management
- Reduced use of air travel
- Climate evaluation
Ministry of Defence: Climate report/status

• Yearly since 2012 > 2020
• Detailed summary and status within each focus area
• No concrete CO₂ reduction targets
• Gives and 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.

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CLIMATISING SECURITY POLICY

A Panorama and Implications for Denmark