

# **The Danish Ministry** of Defence: Green **Action Plan** 2021-2025

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### Foreword

The Danish Armed Forces will be strengthened with a new climate action plan.

Climate change leads to major defence and security policy challenges. Shortages of water and food create conflicts and wars. Population groups begin to move. This creates unrest and instability – both in Denmark and worldwide. At the same time, the melting ice cap has revealed the resources of the Arctic and opened up new sailing routes.

Thus, there will be security policy consequences if we do not solve the challenges to the climate. Therefore, all sections of the Danish Ministry of Defence (MoD) will contribute towards green conversion, both in the short and long term.

Tanks, aircraft, and ships are dependent on fuel, and the MoD's climate efforts will therefore go hand in hand with operational considerations.

Our green ambitions will not lead to a scenario where a tank might run out of power in the middle of a battlefield, or that we will stop flying with the fighter jets that assert Danish sovereignty – the new F-35 fighter jets do not fly on green fuel – so, all the more reason to redouble our efforts in all areas where we can do things better and greener.

With the MoD as one of the Danish state's largest property owners, with the largest fleet of lorries and other vehicles, and a relatively large air and naval fleet, we have a special responsibility to contribute to the development of new technologies and to the reduction of Denmark's CO<sub>2</sub> emissions. At the same time, the green solutions will benefit operational considerations because independence in supply chains is a dream scenario for any future defence and emergency management agency. Energyefficient solutions will undoubtedly provide more operational freedom of action for the Armed Forces and The Danish Emergency Management Agency.

We have established a clear ambition with this action plan: The MoD's various areas will be at the forefront of the green transition, be far more climate friendly, and to a much greater extent take on a share of the responsibility for climate-technological development.

Even though we are already underway, we can and will do even more.

The plan sets out an ambitious green direction for the MoD in 2021-2025. At the same time, there is room for innovative thinking. The green transition is, as well as our Armed Forces and Emergency Management Agency, in the process of rapid development. Therefore, the initiatives of this action plan are updated and adjusted as we become wiser in how we achieve our green ambitions.

Everyone has a responsibility for our climate and nature – including the Ministry of Defence.

Trine Bramsen Minister of Defence





### THE MINISTRY OF DEFENCE: GREEN ACTION PLAN

# The Aim is a Greener Defence

The MoD's annual climate account concludes that about 75% of  $CO_2$  emissions come from the use of fuels, while around 18% come from the operation of establishments.

In other words, fuel consumption is the largest source of CO2 emissions in the MoD's area. At the same time, we can see an increasingly complex threat landscape, which leads to an increased need for training activities and the acquisition of new capabilities – a development that makes further demands on green solutions.

Because we need to continue to use fossil fuels in order to carry out our tasks, the development of new, climate-friendly fuel types is essential in order to reduce emissions. Moreover, energy dependency contributes to the difficulty of inserting our capabilities in international operations.

The MoD has a major interest in the development of new technological solutions which can both reduce the need for fossil fuels and consequently make the Armed Forces greener. This is an area that the MoD will support through our cooperation with industry and research, as well as through climate-aware procurement.

The MoD will contribute to the ability of Danish defence companies to test, develop, and sell green technological solutions on the Danish and international markets. The innovative strength which is found in the society around us and in the civilian sector has the potential to give the Armed Forces security of supply and operational stability. This is ultimately of high significance to the safety of our Armed Forces personnel.

If we are to counter the global climate challenges, it is essential that we all work together. Therefore, the Ministry of Defence cooperates with NATO and the other Nordic countries on reducing the  $CO_2$  footprint of military exercises and deployments.

In addition, nature and The MoD's activities are closely connected. Our land areas constitute some of the country's largest continuous areas of nature, and this entails obligations. For this reason, we strive to make our shooting and exercise terrains as wild as possible, and ensuring that everyone can experience our rich military nature areas when we are not carrying out training or exercises. Therefore, there is public access to the vast majority of our green areas.

These green initiatives will also go hand in hand with our core tasks. The initiatives will support operational assignments and not limit them. Therefore, the plan does not set goals which limit the operational effectiveness of the Armed Forces, Home Guard or Emergency Management Agency or our ability to cooperate with allied forces.

### The seven focus areas

We have designated seven focus areas which will have the greatest effect on green considerations:

#### 1. Nature

Our shooting and exercise terrains generally have a high nature quality, where flora and fauna can thrive. This can, to a large extent, be attributed to the presence of the Armed Forces and their use of these areas. The MoD has jurisdiction over 32,000 hectares, and in activity-free periods the vast majority of these areas are open to the public, so everyone has the opportunity to experience our unique military nature. Agricultural activities will be phased out and more forest and natural habitat will be created in the areas where it is possible. At the same time, biodiversity around our military barracks will be promoted.

#### 2. Energy consumption

Fuel for our ships, aircraft, and vehicles constitutes the MoD's most significant form of energy consumption. The Navy and the Air Force respectively use around 34 million litres of propellant annually, while the Army uses about 8 million litres, equivalent to a total of 776 million kWh. There is also significant energy consumption associated with our properties.

Energy consumption must therefore be reduced wherever possible. We cannot cease essential operational activities. But in relation to properties especially, we can, in the short term, go a long way by reducing our energy consumption and energy optimisation, make new construction, and restructure our energy supplies to renewable sources. A new and more long-term investment strategy for energy optimisation will ensure that we reach the joint government goals on energy savings of a minimum of 10% by 2030.

#### 3. Air pollution

The MoD's discharge of airborne-emissions from buildings and installations is the largest source of air-polluting substances and greenhouse gases. In 2019, the MoD registered emissions of 83,800 kg SO<sub>2</sub>, plus a minimum of 220,000 kg NOx and 7,300 kg PM10. Therefore, heating installations in our buildings must be replaced and converted to renewable energy. Correspondingly, ships, vehicles, and IT hardware will be more energy friendly.



National Service men and women on a field exercise near Karup, February, 2020. Photo: Iben Valery



Search And Rescue exercise outside of Frederikshavn, June 2018. Photo: Kristian Vinther Brøndum.

#### 4. Soil and groundwater

Large amounts of fuel and other environmentally damaging substances are transported, stored and used every day at the MoD's establishments. This entails a risk of spillage, which can lead to pollution of soil and groundwater. We have a special focus on protecting our drinking water resources. Pesticides may not, as a general rule, be utilised, and we will have a greater focus on minimising pesticide consumption in the areas where there is an exceptional requirement for their use.

#### 5. Wastewater and surface water

The Armed Forces and Emergency Management's use of de-icing agents, fire extinguishing agents, and discharge of wastewater from polluting workshop activities means that wastewater and surface water are defined as essential environmental concerns. We will, of course, live up to legal requirements and will increase the use of alternative products.

#### 6. Resource consumption and waste production.

This is an area where we have had, and will continue to have, a special focus through, amongst other things, resource aware behaviour, reuse, and reduction of waste. Accordingly, it is essential that, in all of the MoD areas, environmental and energy considerations are taken into account in connection with procurement. This is in compliance with the Government's green procurement policy.

#### 7. Noise and vibration

The MoD's exercise activities on land, sea, and air are crucial for the training of our personnel. Such activities constitute a source of noise and vibration. Our efforts involve living up to legal requirements; therefore, we will optimise training and education with increased use of simulators, and we will test electric aircraft for basic flight training.





Trying out the obstacle course at Ryes barracks in Fredericia, at the inspiration day for women, October 2019.

### **Organisation of Efforts**

All branches of the Ministry of Defence have a responsibility to contribute to the green efforts. The green area is mainly anchored in the Ministry of Defence Estate Agency, which is the responsible procurement authority in the establishment area. It is the Ministry of Defence Estate Agency which publishes the relevant provisions, prepares presentations for revision of the MoD's green action plan, and is responsible for continuous adoption and adjustment of the MoD's environmental and energy management system. The MoD's environmental and energy management system is a group-wide management and leadership tool, which ensures that our work is goal-orientated and systematic in optimising, and if possible, reducing energy consumption and environmental impact across all MoD organisations.

Logistics Organisation is the responsible procurement authority in the capacity area and is responsible for ensuring that environmental and energy considerations are taken into account in the acquisition and disposal of capacities.

To achieve a noticeable effect on the green agenda, we work together, share knowledge, and coordinate across the MoD's organisations. A group-wide steering group and an underlying project group have been formed, consisting of representatives from the MoD and all subsidiary authorities. The steering group and the project group ensure and support the transverse coordination of efforts between the MoD's various authorities.

The MoD's green action plan is valid from 2021 and is updated annually.

The Danish Ministry of Defence Acquisition and

### **CONCRETE INITIATIVES**

# **Establishments**

Discharge of greenhouse gases from the heating of MoD buildings has been reduced by around 80% since 1990. There are several reasons for this. The building mass has been reduced, energy conservation has been optimised, and energy supply comes partly from renewable energy sources. But we can still do more.

The MoD is one of Denmark's largest building owners and presides over more than 6,000 buildings spread over the entire country. This corresponds to roughly 2.3 million m2, of which 1.8 million m2 are heated. Herein lies a great responsibility to contribute to reducing the discharge of greenhouse gases from the state's total building mass.

Many of our buildings are outdated and will be either renovated or demolished and rebuilt to modern building standards, so that they can be more energy efficient and sustainable. We will continue to make our buildings more energy efficient, phase out the use of fossil fuels and restructure our equipment to use sustainable energy. This also applies to buildings in the Arctic, where we will review and assess every individual building.

In addition, we will change over to energy-saving LED light sources wherever possible, in line with the government measures regarding LED light sources in the strategy for green public procurement.

At the same time, we will increase our focus on making data centres, servers, and IT equipment as energy efficient as possible. We will work towards being able to use wastewater from refrigeration systems in server rooms for heating purposes. These efforts will include following the government's measures for green data centres in the strategy for green public procurement.



Inauguration of the new workshop at the Guard Hussar barracks in Slagelse, August 2019.

#### **Concrete plans and initiatives**

#### 1. Life cycle costing model for the building mass

A life cycle costing model will be developed which will make it possible to carry out complete economic calculations for new buildings as an alternative to renovating the MoD's building mass. With the model the needs and requirements for the building mass will be assessed from a strategic approach in relation to what is most profitable from an economic and total lifespan perspective.

#### 2. Model and plan for building renovation

a. A plan will be developed for the phasing out of the MoD's oil and gas-fired boilers for heating individual buildings. The plan can be included in the government's unified energy conservation efforts.

b. A priority overview for renovation of the MoD's building mass will be continuously made available.

#### 3. Phasing out of oil and gas-fired boilers.

a. Der skal udarbejdes en plan for udfasning af Forsvarsministeriets olie- og gasfyr til individuel bygningsopvarmning. Planen kan indgå i statens samlede energispareindsats.

b. All oil and gas-fired boilers will be converted to an improved, greener solution, although the specific solutions are not yet known. The current oil consumption for heating discharges is approximately 2.8 million Kg of  $CO_2$ , and the use of natural gas discharges around 11.4 million Kg of  $CO_2$ . Thus, the maximum saving potential is in the region of 14.2 million Kg of  $CO_2$ .

The transition to greener heating systems will lead to operating savings in the energy budget, which will be a part of the total financing of activities.

#### 4. LED light sources in buildings.

The MoD will, where it is in accordance with operational requirements, continually convert to exclusive use of LED light sources in the MoD's buildings. The scope for interchangeable light sources has not been surveyed. It is assessed that LED light sources will create savings in energy consumption of between 20-70%.

#### 5. More energy-correct buildings in the Arctic

a. A monitoring structure will be established on an individual building level and on an hourly basis, which will measure the consumption of electricity for heating, heating of domestic hot water, indoor and outdo or lighting, plus consumption of diesel for production of electricity at one or several establishments in the Arctic.

b. Analyses will be carried out of the possibilities for optimising energy production and reducing energy consumption in the Arctic.

c. A systematic analysis and assessment of every building in the Arctic will be carried out to clarify whether buildings can be renovated to modern standards or be set up for demolition and potential reconstruction.



Station Nord in Greenland, April, 2015. Photo: Julia Liberati

#### 6. Renewable energy

a. The MoD will initiate an analysis of all district heating conversion options for the MoD's establishments as well as the consequences of using bio-natural gas. Conversion from fossil fuels to district heating is expected to minimise CO<sub>2</sub> consumption, provide higher security of supply, and lower operating costs.

b. The MoD is working on establishing a green supply solution on Christiansø.

c. The MoD will carry out an analysis with recommendations for a potential effort for Power-to-X in MoD establishments.

#### 7. Datacentres

The MoD will prepare a strategic plan for the exploitation of wastewater from refrigeration systems in server rooms for heating purposes.

#### 8. Heat pumps

The MoD will take into operation the first heat pump plant for heating purposes.



The island of Christiansø. Photo: the Armed Forces.

## Environment, Nature and Land

The MoD possesses around 32,000 hectares of shooting and exercise terrain. Because we do not cultivate these terrains, nature can unfold within the framework that exercise activities provide. The Armed Forces' activities and nature are not incompatible; on the contrary, there are numerous ways in which they supplement each other.

Shooting and exercise terrains are training facilities that ensure a realistic deployment environment and relevant training frameworks. On that basis, there may, due to changes in the general threat landscape, be a need to adapt and develop the terrains so that they better support training and education activities. We want a stronger focus on reducing CO2 emissions and on climate-friendly operations. Therefore, we will plant trees and create more natural cover on our land. In addition, we will help to increase biodiversity for the benefit of insects and other species.

Certain cases of pollution and potential sources of pollution have been identified on our land, which can pose a significant risk to drinking water resources and surface water. Therefore, we will make efforts to protect surface water and drinking water resources on our land.



Tank tracks in Oksbøl forest, June 2020 Photo: Henrik Kastenskov

#### **Concrete plans and initiatives**

#### 1. Forest and nature

The MoD will plant more trees and create more wild nature on our land where it is compatible with the function as military training facilities. It is estimated that planting new forest will, on average, bind around 10 tons of CO<sub>2</sub> per hectare annually in the lifetime of the forest. Afforestation will also give more room for nature to develop.

#### 2. More wild and varied nature on shooting and exercise terrains.

Shooting and exercise terrains will accommodate more wild and varied nature, e.g. with grazing.

#### 3. Green Christiansø

a. The MoD will work to increase the number of visitors to the island of Christiansø to approximately 50,000 annually, so more tourists, students, etc., can experience the special natural environment and cultural history as an integrated part of the island's green ambitions.

b. The MoD will continue to work on further green, user driven transition of the island, including a focus on sustainable local waste management.

#### 4. Increased biodiversity

An analysis will be prepared for how development of biodiversity on barrack areas, as well as shooting and exercise terrains, can be included in the daily operation.

#### 5. No agricultural operations

The MoD will phase out agricultural operations on its land. This must happen as the existing leases gradually expire.

#### 6. New military-nature guides

a. To promote the public's recreational experiences in the MoD's shooting and exercise terrains and to strengthen communication about the Armed Forces' activities and unique military nature, a pilot project with a 'military-nature guide' will be established.

b. The Estate Agency will review all maintenance and care plans for the purpose of creating an overview of how, and to what extent, the public can gain better access to nature in the MoD's shooting and exerci se terrains, without this posing a security risk to visitors or leading to operational constraints for the Armed Forces.

It is essential to operational assignments that public access to exercise terrains does not reduce flexibility in the operational use of these areas.

#### 7. Focus on water quality

a. The MoD will prepare a nuanced risk assessment that can form the basis for carrying out any remedial measures or monitoring against pollutants that may pose a significant threat to drinking water resources or the environmental condition of surface water.

b. The MoD will enter into both national and international cooperative agreements to obtain knowledge regarding pollution with the poisonous substance group PFAS. A pilot project will be launched to test remediation methods against PFAS pollution.

#### 8. Reduction of pesticide use

a. The MoD will reduce the consumption of pesticides on its land. Based on an analysis, actions will be initiated which will lead to the greatest possible reduction to the use of pesticides, while maintaining operational activities.

#### 9. Recycling of waste fractions

Increased reduction of waste and recycling of water and soil containing waste fractions will be ensured. Based on an analysis of the area, changes in disposal methods will be implemented.

#### **10.** Marine environmental guardians

The Danish Navy's marine environmental guardian scheme contributes with an established network of 25,000 volunteers to report oil spills at sea and to collect marine debris along Danish beaches. In 2020 alone, 400 tons of marine debris was collected. The marine environment scheme will be further devel oped so that it will, to an even greater extent, contribute to the monitoring and handling of pollution.



Refuelling of the Thetis during the Joint Warrior NATO exercise near the Hebrides, April 2019. Photo: the Armed Forces

### **Capacities and Activities**

The MoD has a clear objective to sail, fly, and drive more energy efficiently, while upholding the level of our operational assignments. This is achieved by following two main trajectories. On the one hand, we will optimise our behaviour and activities. On the other hand, we will implement the technological developments within more energy and environmentally efficient equipment. As part of this, we want to change over from fossil fuels to fossil-free, green solutions.

The MoD seeks to reduce greenhouse gas emissions – i.a. from our flying units. For example, only the just sufficient amounts of flying hours, sailing days, exercise days, etc. is used in order to meet the operational requirements. We want to increase the use of modern, advanced simulators concurrently with the need to train under realistic conditions. In addition, we will test the suitability of electric-powered aircraft for training and test flights.

The use of the current F-16 fighter jet is fully optimised in relation to the use of simulators. The number of flying hours for individual pilots cannot be reduced any further, within the NATO standards for training that the Air Force is subject to. We will increase the use of simulator training for our upcoming F-35 fighter jet.

There are a number of technological solutions for our seaborne units, which can contribute to reducing energy consumption and emission of greenhouse gases. We will install a number of measures in chosen naval ship classes. Additionally, by installing Energy Dashboards on ships, we can collect and process data on the ships' energy consumption and thus further optimise operational assignments.

The government has launched a strategy for greener public procurement containing a wide range of concrete measures. Therefore, our efforts will also include implementation of these measures, including energy-labelled procurement and conversion of the public vehicle fleet in 2030. We will thus prepare a plan for the replacement of the MoD's administrative vehicles to emission-free vehicles.

#### **Concrete plans and Initiatives**

#### 1. Energy technologies

a. We require that at least five percent of diesel fuel can be replaced with diesel fuel from renewable sources with a low  $CO_2$  imprint. The focus will be on diesel fuel delivered to capacities via the North European Pipeline System. The potential yearly reduction in comparison to the use of conventional, fossil diesel fuel is assessed to be between 550 and 2,800 tons of  $CO_2$ .

b. The MoD will prepare an analysis with recommendations for a potential effort for Power-to-X in the MoD's capabilities.

#### 2. Energy-correct ships

a. The MoD will install Energy Dashboards on ABSALON class ships, the IVER HUITFELDT class, and the KNUD RASMUSSEN class of naval ships. This will create greater visibility about energy consumption on board the ships and will thus increase the crew's attention to efficient propulsion.

b. The MoD will install LED and light control on the ABSALON class, IVER HUITFELDT class, and the KNUD RASMUSSEN class. This will lead to a potential energy saving of 800,000 kWh per year per unit and a reduction of approximately 400 tons of CO<sub>2</sub> annually per unit.

c. The MoD will replace generators and/or establish battery systems, as well as replacing pumps, ventila tion, and heating/refrigeration systems on ABSALON class ships, the IVER HUITFELDT class, and the KNUD RASMUSSEN class. This will lead to a reduction of energy consumption and thus CO<sub>2</sub> emissions.

#### **3. Emission-free vehicles**

The MoD has many administrative vehicles. In 2021, there are over 2,114 cars and 2,527 vans. Our ambition is that administrative vehicles will be changed over to emission-free vehicles (electric or other), where possible when taking into account the requirements for assignments of the Armed Forces and Emergency Management Agency, and as the necessary charging infrastructure is established. An imple mentation plan is being prepared.

The plan is being developed in cooperation with the Defence Acquisition and Logistics Organisation, the Defence Estate Agency and other relevant authorities, so that vehicles and the necessary infrastructure converge.

#### 4. Green camps

a. The MoD will introduce equipment for setting up camps that is based on renewable energy technology in order to reduce energy consumption and the overall environmental impact.

b. Drawing on experience obtained from the NATO project, SPS 5525 Harmonized "Energy Monitoring and Camp Simulation Tools", Denmark will initiate the collection of data on Energy consumption in operational camps where it is deemed appropriate.



HDMS Thetis on patrol in Disko bay in Greenland, February 2021. Photo: Julia Liberati

#### **5.** Civil emission-free transport solutions

It is the objective that the MoD will reduce emissions from civilian-procured transport solutions. This will be achieved by including emissions as a parameter when choosing a supplier.

#### 6. Logistics and transport in the Arctic

It is the objective that all of the Kingdom of Denmark's logistical transport activities in the Arctic are coordinated, in order to reduce CO<sub>2</sub> emission in the area. The relevant authorities within the Kingdom of Denmark will be included in the on-going efforts.

#### 7. Improvement of driving training

The Armed Forces' driving training will be improved with a greater focus on energy-optimised driving. These measures are directed towards drivers of buses and lorries for road transportation who will com plete a special course on energy-optimised driving.



Celebration of NATO's seventieth anniversary day at Kastellet, the 4th of April 2019.

### **International Organisations**

Climate change requires a global effort and only by working together can we change the negative development. It is necessary that our capacities are compatible with our allied armed forces and partners when we participate in joint exercises and operations. The Danish Armed Forces cannot work alone in finding the green solutions. The green transition must also be achieved by our contributions and by pushing the climate agenda in relevant international organisations in the defence sector, such as NATO, the EU and NORDEFCO.

In 2020, Denmark, during its presidency of NORDEFCO, had as its central priority to initiate a dialogue between the Nordic countries on how to work together to reduce the CO<sub>2</sub> imprint of military exercises and deployments. Denmark will continue to work actively for this agenda in the Nordic region.

In addition, the Estate Agency cooperates with the other Nordic countries and the Baltic states on buildings, energy and environment within the framework of the Nordic-Baltic Defence Estate Cooperation (NBDE). Within this framework, the Environment Working Group has, among other things, worked on the handling of PFAS challenges, with on-going discussions and suggestions for further efforts on the matter.

Denmark also has a focus on climate change in NATO and the EU and will work towards a greater incorporation of climate change and green conversion into the defence cooperation. Denmark will work towards creating a greener armed forces, without allowing environmental measures in NATO and the EU to compromise military effectiveness or the alliance's ability to deter and defend, by, among other things, striving for higher energy effectiveness and more sustainable energy sources, which can also strengthen the armed forces' resilience and operational abilities.

The mapping of the alliance's emissions can contribute to focusing on efforts with the greatest effect. Denmark will contribute to updating NATO's framework for green defence, the EU's work on climate and defence and work with relevant actors from the defence industry and the green industry.



C-130 Hercules over Northern Jutland. Photo: the Armed Forces.

## **Environment-friendly and Energy-correct Behaviour**

In order for the MoD to contribute within all areas of the green transition, it is essential that the green efforts include every single employee. The individual employee must focus on changing their own behaviour by focusing on travel activities and waste management.

Over the last few years, the MoD's travel activities have been reduced – i.e. by 2.2% from 2018 to 2019 – and we want to continue this trend. Transportation to destinations abroad is, to a great extent, linked to essential assignments, while domestic transportation entails a potential for reductions. Emissions from transportation is calculated to be 10.5 million Kg  $CO_2$ , not including the military's shared cars. We will provide an improved basis for data analysis by segregating non-operational transportation activities from operational. This improved overview can target behaviour campaigns towards areas where the potential for savings is greatest. The aim is to reduce the number of civilian flights by MoD personnel by the increased use of virtual meetings, alternative forms of transportation, and increased carpooling. Thereby, we contribute to the government's measures for  $CO_2$  reduction via climate compensation for governmental flights, in the same way that we support the goal of converting the car fleet to emission free vehicles.

#### **Concrete plans and initiatives**

#### 1. More carpooling

The Acquisition and Logistics Organisation will optimise the use of vehicles for carpooling. In 2019, 14,000 active users made around 71,000 bookings for carpooling. The new carpooling platform supports carpooling both by encouraging users to use carpooling and by technically interconnect identical boo kings. The effort has been initiated with the purpose of streamlining the use of shared cars and, at the same time, achieving a greener profile.

#### 2. Experimental scheme with charging stations for electric cars

a. The requirements for establishing electrical charging stations at the MoD's establishments will be mapped and initiated.

b. Cooperation between relevant municipalities and the MoD will serve as the basis for coordinating on opportunities for the establishment of new charging stations on and near the MoD's establishments, with opportunities for civilian use.

#### 3. Climate-friendly food

The MoD will, in dialogue with local administration, provide an opportunity for more sustainable and organic food in the MoD canteens. At the same time, the food provided must support the wishes and needs of the MoD staff

#### 4. Increased waste segregation

The MoD wishes to increase waste segregation efforts and reduce waste output. An analysis will be conducted to serve as the basis of this effort

#### 5. Environmentally friendly and energy-efficient management

The MoD will systematically, via the Environment and Energy Management System based on ISO stan dards, ensure that all administrative bodies under the MoD, on all relevant levels, are aware of and fulfil their duties. Furthermore, by way of all available data and audits, it should be made certain that these bodies continuously make efforts to limit their environmental footprint.

#### 6. Reduced use of air travel

The MoD will run a campaign to limit the use of air travel for non-operational purposes.

# **Evaluation and Report on Climate Impact**

Since 2012 the MoD has published an annual climate evaluation. This evaluation depicts the MoD's total emissions and therefore does not account for changes in levels of activity. For this reason, The MoD seeks to re-evaluate the methodology of its climate evaluation, so as to account for national methods as well as changes in the MoD's level of activity.

#### **1.** Climate Evaluation

The MoD will re-evaluate the methodology of the climate evaluations produced by the MoD so that they are in accordance with national accounts of state energy usage, including CO<sub>2</sub>-emissions.



The front pages of the Ministry of Defence's climate evaluations from the past three years

### **Implementation Overview**

The 47 action points of the action plan will be met in the years 2021-2025. The implementation overview outlines when these efforts are expected to be completed or initiated, depending on whether these are final or continuous efforts.

Focus Areas:	Action point	Completed in 2021	Completed in 2022	Completed in 2023	Completed in 2024	Completed in 2025		
Life cycle costing model for the building mass	1.1.a	x						
Model and plan for building renovation	1.2.a		х					
	1.2.b		х					
Phasing out Oil- and gas-fired boilers	1.3.a		x					
	1.3.b	X (Continuous Effort)						
LED-light sources in buildings	1.4.a	X (Continuous Effort)						
	1.5.a		x					
More Energy- efficient buildings in the Arctic	1.5.b			X				
	1.5.c				x			
	1.6.a		x					
Renewable Energy	1.6.b					x		
	1.6.c		x					
Data centres	1.7.a			X				
Heat Pumps	1.8.a				x			
Forests and Nature	2.1.a		x					
More wild and diverse nature in shooting- and exercise terrains	2.2.a			x				
	2.3.a	X (Continuous Effort)						
Green Christiansø	2.3.b	X (Continuous Effort)						
Increased Biodiversity	2.4.a		х					
Phasing out of agricultural activities	2.5.a	X (Continuous Effort)						
New military- nature guides	2.6.a	x						
	2.6.b		x					

Focus Area	Action Point	Complete in 2021	Complete in 2022	Complete in 2023	Complete in 2024	Complete in 2025		
Focus on	2.7.a					x		
improved water quality	2.7.b				x			
Reduction in pesticide use	2.8.a				x			
Recycling of waste fractions	2.9.a		x					
Marine Environmental Guardians	2.10.a	X (Continuous Effort)						
	3.1.a				х			
Energy technologies	3.1.b		х					
	3.2.a	X (Continuous Effort)						
	3.2.b	X (Continuous Effort)						
Energy-correct ships	3.2.c	X (Continuous Effort)						
Emission-free vehicles	3.3.a	x						
	3.4.a			х				
Green camps	3.4.b		х					
Civil emission-free transport solutions	3.5.a	X (Continuous Effort)						
Logistics and transport in the Arctic	3.6.a	X (Continuous Effort)						
Improvement of driver training	3.7.a	X (Continuous Effort)						
More ride-sharing	5.1.a	X (Continuous Effort)						
Experimental scheme	5.2.a	х						
with charging stations for electric vehicles	5.2.b				x			
Environmentally friendly food	5.3.a	X (Continuous Effort)						
Increased waste management	5.4.a		x					
Environmentally								
energy-efficient management	5.5.a	X (Continuous Effort)						
Reduced use of air travel	5.6.a			x				
Climate evaluation	6.1.a	X (Continuous Effort)						

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