



**MINISTÈRE
DES ARMÉES**

*Liberté
Égalité
Fraternité*

DEFENSE ENERGY STRATEGY

SEPTEMBER 2020

10 key points

Make energy an operational advantage

ACT

- 1 Energy is crucial for all activities related to defence: from electricity for infrastructure and equipment to fuel for mobility and stationing forces in operations. In a context of rising tension and increasing awareness of the need for energy transition, energy is more than ever at the heart of global competition strategy.
- 2 The Ministry for the Armed Forces therefore developed a defence energy strategy. This means reducing its dependence on oil products for mobility of its systems, and adapting to the energy transition by integrating new energy technologies and disruptive fuels. Controlling and optimising consumption would allow the Ministry for the Armed Forces to reduce its energy, logistical and environmental footprint.

CONSUME SAFELY

- 3 Securing access to operational energy is a major concern. Sources are mainly from fossil fuels, and they must simultaneously guarantee the resilience and the operational performance of the armed forces. It is partly ensured by the single fuel policy, which consists of running all equipment on jet fuel, which guarantees logistical quality and simplicity. In order to secure supply streams, the military system will be adapted to geostrategic changes.
- 4 The optimisation of consumption and the development of low-carbon technologies are combined with an increased use of digital technology in the energy sector. The protection of data and cyber defence of the energy sector are therefore areas the Ministry for the Armed Forces will focus on.

CONSUME LESS

- 5 In all areas, energy consumption by systems is constantly increasing (heightened mobility, growth in energy-intensive equipment). For the Ministry for the Armed Forces, this means controlling its energy use. This passes through several successive and complementary stages: the precise measurement of consumption by usage, their analysis, and the implementation of an optimisation strategy for energy performance.
- 6 A culture of energy sobriety will be widely spread within the Ministry for the Armed Forces. It will be taught in schools and training centres in line with operational priorities. New methods of design, operation, and usages that are more sober will also be favoured. In terms of digital sobriety, this means monitoring that the environmental footprint is taken into account, including in the choice of data hosting solutions (*data centres*).

CONSUME BETTER

- 7 A true capacity-based approach to energy needs to be developed, and we need to go beyond the solely technical approach that was used up to now. Henceforth, the armament programmes will systematically include requirements in terms of ecodesign and energy efficiency, and the entire life cycle will be analysed in terms of its environmental impact, and in terms of energy consumption. This renewal of the energy perspective will impact the defence industrial and technological base (BITD).
- 8 The consequences in the technical aspects translate into the widened use of new energy technologies and disruptive fuel technologies, both for mobility and for stationing infrastructures. Hybridisation of powertrains seems promising for ground operations. In the area of disruptive fuel technologies, biofuels seem like the best option for the medium term, making it possible to decarbonise the defence aviation sector. In the naval sector, energy optimisation on board will be given priority. For stationing, self-consumption will be studied.

COOPERATE

- 9 The energy transition generates new dependence in raw materials needed to build low-carbon technology and digital equipment (batteries, solar panels, wind turbines, digital objects, etc.). To ensure strategic autonomy, it is indispensable that we strengthen cooperation with our European partners. In order to develop interoperability and to share know-how in the area of operational energy support, we will also seek out partnerships within NATO.

ORGANISE

- 10 This ministerial strategy will be steered by specific, robust governance to improve the circulation of information and coordination of ministerial actors. This means facing the numerous challenges of the energy sector in a cross-cutting and consistent manner, and allowing the implementation of a global energy policy. In so doing, the Joint Staff is creating a division dedicated to operational energy. The Joint Petroleum Service, by becoming the Service of operational energy, broadens its perspectives by assuring an increased role in the field of operations.