

CF SEDSS - PHASE III

First High-Level Joint Defence and Energy Meeting Event report

CF SEDSS - PHASE III

Consultation Forum for Sustainable Energy
in the Defence and Security Sector

**Boosting the
defence energy
transition**



Abstract

Defence is a central public sector that consumes a significant amount of energy. Increasing energy efficiency and boosting renewable energy can bring substantial advantages to the sector and help with the protection of critical energy infrastructure. Considering the EU's objectives for reaching net-zero emissions by 2050, and with a view to enhancing the energy resilience of armed forces, the defence sector needs to benefit from the energy community's know-how. In this context, on **14 April 2021** the **European Defence Agency (EDA)** and the **European Commission's Directorate-General for Energy** organised **the first-ever joint defence and energy meeting**. The meeting was held in the context of the third phase of the [Consultation Forum for Sustainable Energy in the Defence and Security Sector](#) (CF SEDSS III) and was attended by more than 200 representatives from the defence and energy communities. This virtual **joint meeting** brought defence and energy experts together and enabled them to exchange views and best practices on strengthening cooperation in tackling energy security challenges. These discussions also explored how to contribute better to implementing the [European Green Deal](#) and the transition to clean and secure energy.

Opening Session: defence adaption for climate-neutral future

Mr Daniel Fiott, Defence Analyst, at the EU Institute for Security Studies (EU ISS), welcomed the participants and presented the objectives of the meeting. In his introductory remarks, Mr Fiott stated that an "all-inclusive approach" is required to reach climate neutrality by 2050. The defence sector has a key role to play and the EDA has, since at least 2015, effectively brought together key stakeholders. Mr Fiott went on to say that the "greening of defence" can unlock technological innovation and enhance operational autonomy, as well as contribute to the European Green Deal.



The remarks were followed by a [video clip](#) of the CF SEDSS project highlighting the **key objectives** of the Forum as **depicted below**.

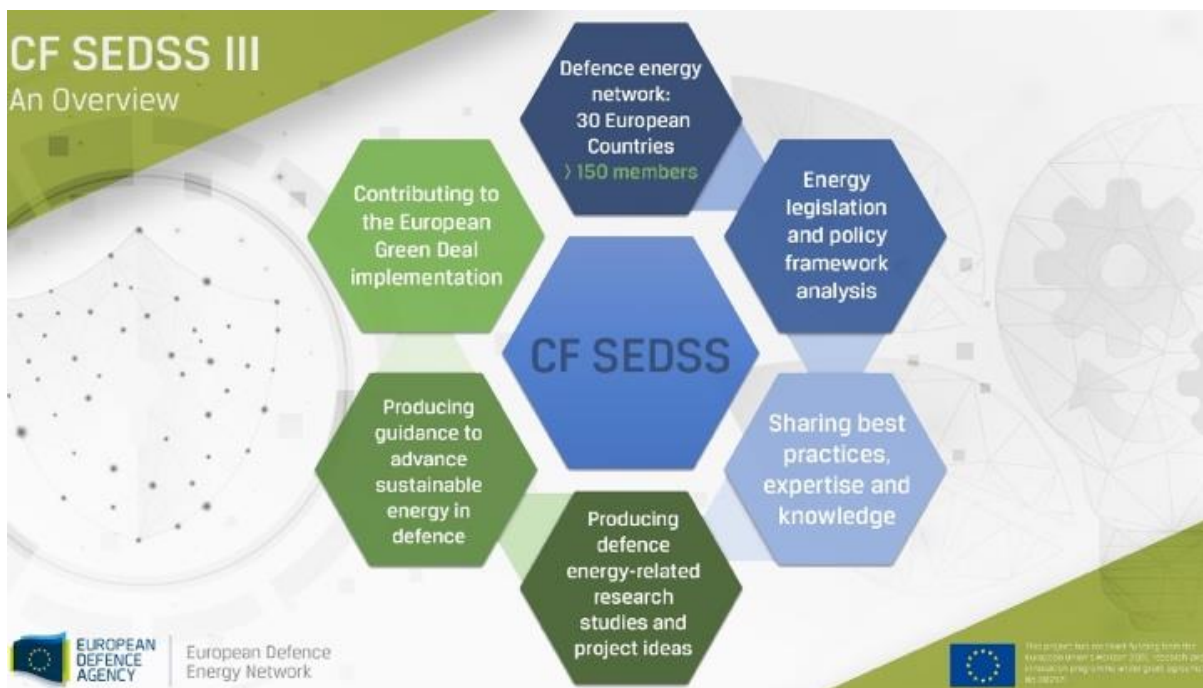


Fig. Key objectives of the Forum

In his **welcome address** the **EDA Chief Executive, Mr Jiří Šedivý**, noted "the high interest of the two communities in establishing contact, sharing insights in tackling energy and climate challenges and exploring how to complement efforts to advance sustainable energy." Mr Šedivý highlighted that, since 2015, the CF SEDSS III has provided the European Union Ministries of Defence (MoDs) and relevant stakeholders with "a platform to share knowledge and promote collaborative defence research and innovation in the field of sustainable energy".



The Forum has produced "an impressive record of achievements", including **becoming the largest European defence energy community** with experts coming from 30 European countries and more than 40 different EU institutions, SMEs, research and organisation centres. Building on this large community, know-how and substantial output of more than 60 different project ideas, data fact sheets and research studies and reports so far, the Forum contributes to the EU's efforts to address the links between defence and climate change while contributing to implementing the European Green Deal. The following figure presents the **diverse contribution of the CF SEDSS III project** in addressing the defence-related considerations while contributing to EU's objectives for climate neutrality by 2050.



Fig. The diverse role of the Forum

The EDA's Chief Executive also acknowledged that defence, as an **energy-intensive and large consumer of fossil energy with most of its buildings being energy inefficient** needs to **adapt to the changing environment and safeguard its sustainability by reducing greenhouse gas emissions**. There is an opportunity for the energy community experts to assist by sharing their knowledge, providing technical assistance, and helping defence in voicing its requirements at the national and EU level and facilitating access to national funds. The support of the energy community is necessary for removing barriers that constrain defence adaptability and ensure its transition to the EU's climate-neutral future.

In her **keynote speech**, the **Director-General of DG Energy, European Commission, Ms Ditte Juul Jørgensen** briefly explained the most recent initiatives launched within the framework of the European Green Deal. She stressed the importance of the EU Recovery Package and of the two flagships initiatives on energy, the revision of the Energy Efficiency Directive and the revision of the Renewable Energy Directive. She underlined that the **EU also aims for safe and sustainable energy, with renewables as the backbone**. She also acknowledged the **excellent results achieved by the CF SEDSS** over the last years.



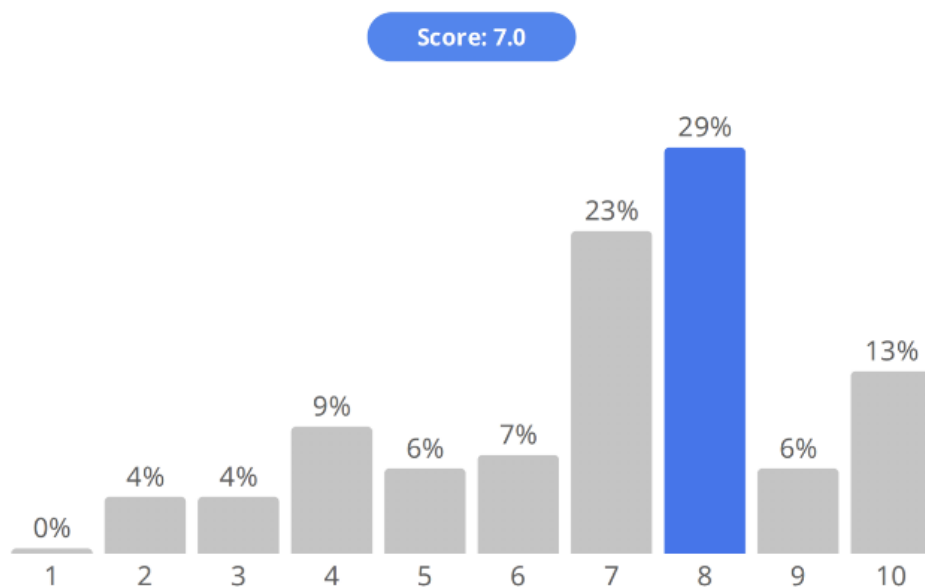
Finally, Ms Juul Jørgensen pointed out the key role that the defence and security sector needs to play in the process: **"A stronger focus on sustainability shall not mean less effective armed forces; rather the contrary"**. She noted that the concept of "strategic autonomy" is quickly spreading from its original domain in the defence industry to wider technologies and the energy sector. The Commission is eager to support the ideas for further cooperation that will be developed today and in the following meetings

Balancing military requirements and the green transition

The panellists shared their insights on the **EU's all-inclusive approach** to addressing climate change and energy challenges by focusing on how the armed forces can contribute to implementing the European Green Deal and how the energy community can support them in their transition towards clean and secure energy. Panel discussions also explored how to balance military priorities and climate change adaptation and pave the way to a framework that facilitates multinational collaboration and supports green defence projects with appropriate expertise and funding. During the first panel, participants provided their feedback to the **first poll** of the event, and they identified the important role that defence can play in the national efforts to achieve climate neutrality by 2050.

How important is the role of the defence sector in national efforts to achieve climate neutrality by 2050?

070



Poll 1. Participants sent 227 votes in 3 polls

Below is a short summary of the panel discussions.

Panel 1.

EU's all-inclusive approach to addressing climate change and energy challenges



In the **first panel discussion**, it was underlined that to achieve climate neutrality by 2050, an all of society approach, including the defence sector was required. With the phasing out of fossil fuels, renewable energy becomes increasingly important, but significant investments are still needed. The panellists also agreed that defence sector should reduce its dependence on fossil fuels. The energy efficiency of defence infrastructures and military activities were underlined as crucial factors. Here, the EU recovery fund and other EU funding schemes offer opportunities for EU member states to green and digitalise their economies, while also enhancing the overall efficiency of the defence sector. Several EU member states are already unlocking innovation in the defence sector by targeting investments and fostering public and private partnerships. However, the panel revealed that more is needed for a common approach at the EU level, including sharing best practices and greater awareness of funding opportunities.

Additionally, many existing or planned energy efficiency investments need to ensure that they contribute to rather than hinder military needs. There are lessons to be learned to ensure that renewable energy infrastructures such as wind turbines do not unduly affect the effectiveness of radar or other critical strategic enablers. Furthermore, there is a need to recognise that the introduction of renewable energy infrastructures such as offshore renewable energy platforms, and the greater digital connections and interdependences of such systems, can create vulnerabilities. This means an emphasis on prevention, early warning and risk preparedness are required - especially in terms of cybersecurity. Overall, it is essential to share data and information across all stakeholders and to ensure that new renewable energy infrastructures embed a 'security by design' ethos. Here, in this session, the audience **second poll** reiterated that funding is critically needed, but much more needs to be done to change mindsets and behaviour, as well as to develop and adopt the required regulations and processes.

Which is the most critical challenge that Member States face in addressing the EU's objectives in the energy and climate areas? (1/2)

0 8 1



Poll 2. Participants sent 227 votes in 3 polls

PANEL 2.

Defence contribution to the implementation of the European Green Deal



Bearing in mind "the mission comes first" principle, the defence sector still wants to be a part of the solution and lead by example, so solutions need to be found to strike a balance between military performance and energy efficiency. In this respect, there are many ways in which operational performance and autonomy can be maintained and even extended. For example, putting in place more climate-neutral supply chains and logistics can lead to lower costs, energy efficiency and operational autonomy and continuity. Examples such as developing hydrogen for military transport vehicles and investing in energy-efficient overseas bases and camps were cited. Additionally, the development of energy-efficient buildings, using renewables, investing in smart electric grids and supporting clean mobility on bases are major contributions too. However, more frequent, and comprehensive foresight studies to ensure that climate-neutral technologies are developed and integrated faster are needed. As per the EU Roadmap on Climate Change and Defence, there is a need for benchmarks to measure success and there is scope to build on the EDA's energy data collection efforts.

However, several challenges were also identified, such as energy security, fuel consumption and logistical challenges such as transferring fuel to where it is needed. Opportunities provided by hydrogen need to be unlocked to help the defence sector embrace more sustainable energy models. However, there are limits to what technology can provide today in areas such as propulsion systems. There is a need for a proactive approach in terms of cooperation with industry and research centres, as well as financing and funding opportunities through the Recovery Facility and European Defence

Fund (EDF). Joint procurement with other member states and pooling and sharing capabilities were identified as a good practice, but it is also true that procurement cycles and processes are still behind the curve, even if there is greater awareness that the "circular economy" principle can in many respects be applied to the defence sector. As showed in the **last poll** of the event, the audience poll identified the need for developing joint collaborative projects and sharing best practices, knowledge and expertise as the key areas where energy community can support the defence to advance sustainable energy.

In which areas can the energy community support the defence sector in tackling energy challenges?

076

(1/2)



Poll 3. Participants sent 227 votes in 3 polls

Concluding Remarks

In his concluding remarks, **Mr Jean-François Ripoche, EDA Director of Research, Technology and Innovation**, stressed that as part of the green, digital and circular economy transition in the EU, the defence needs to upgrade its efforts to ensure its adaptability and resilience. However, there are still many challenges and there is much work to be done in terms of raising awareness, facilitating the defence sector's access to national funds, providing technical assistance and removing legislative barriers that constrain defence adaptability.

Mr Ripoche underlined several key takeaways. Firstly, on the path to the EU's green and digital transition, military needs and priorities should be balanced with climate change adaptation and energy transition. The mission comes first but "reducing energy demand is an enabler for the armed forces to ensure readiness, performance, sustainability and resilience". Secondly, energy autonomy is critical. Applying sustainable energy models in defence will strengthen resilience against security challenges and secure strategic energy autonomy for European defence. Furthermore, Mr Ripoche stressed that, as critical energy infrastructure becomes more interconnected with other systems, it becomes more vulnerable and may endanger armed forces' operational effectiveness. Therefore, the defence sector needs to establish a dialogue with relevant public and private stakeholders to ensure preventive, continuity and recovery measures. He also highlighted innovative clean energy technologies and energy management policies as a means to lower the carbon footprint and increase energy efficiency. Finally, he stressed that adequate funding is required to enable the defence sector's transformation, adaptability and transition towards clean and secure energy. Mr Ripoche concluded that "sustainable energy and green transition matter for the defence sector".









About CF SEDSS

The Consultation Forum for Sustainable Energy in the Defence and Security Sector (CF SEDSS) is a European Commission funded initiative managed by the EDA. This Forum was established with the primary scope to create a defence energy-related community to share information, knowledge and best practices on improving energy management, increasing energy efficiency and buildings performance, utilising renewable energy sources in the defence sector and enhancing the resilience of defence-related critical energy infrastructure. To address these objectives, and with the support of the European Commission, EDA has implemented two phases (I. 2015-2017 and II. 2017-2019). Building on their successful outcome and to address emerging and future challenges in energy, EDA and the Commission launched on 1st October 2019 the third phase, which will run over a period of four years until 30 September 2023.

Quick links

CONSULTATION FORUM FOR
SUSTAINABLE ENERGY IN THE DEFENCE
AND SECURITY SECTOR – PHASE III
(CF SEDSS III)

-  [CF SEDSS website](#)
-  [Events webpage](#)
-  [Event's video clip](#)
-  [EDA press release](#)
-  [Commission press release](#)
-  [Contact](#)