

CLIMATE CHANGE AND THE ROLE OF THE MILITARY

25 FEBRUARY 2022

Organized by EUROMIL in association with the Global
Military Advisory Council
on Climate Change (GMACCC)



EDA role in tackling energy and climate considerations

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Boosting the defence energy transition



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EUROPEAN DEFENCE AGENCY: FACTS & FIGURES

Only EU Agency whose Steering Board meets at ministerial level



Established **2004**

Based in **BRUSSELS**



+180 staff
connected with 2,500 experts in
Member States

Jiří Šedivý
EDA Chief Executive

26 Member States

(all EU members except Denmark)

Administrative Arrangements

with Norway, Serbia, Switzerland and Ukraine

Budget 2020

€36,5 Mio

EDA Portfolio:

ca. 300 activities related to capability
development,
R&T and defence industry

Value R&T projects 2004-2017 run within EDA:
approx. €1 billion

EDA PRIORITIES AND NETWORK

SUPPORT

the development of **key capabilities**
structuring European defence



+

STIMULATE

defence **R&T** to prepare the capabilities
of tomorrow and support the EDTIB



+



ENSURE

that military interests are taken
into account in **wider EU policies**



EU's energy consumption

- Energy system accounts for **75%** of the EU's greenhouse gas emissions;
- **European buildings** are responsible for about **40%** of the EU's total energy consumption and **36%** of its GHGs emissions from energy;
- **Transport sector** represents more than **30%** of final energy consumption in Europe.

Buildings account for :



➤ **40%**
of energy
consumed



➤ **36%**
of energy-related
greenhouse gas
emissions

Delivering the European Green Deal - Fit for 55

REVISING THE ENERGY EFFICIENCY DIRECTIVE



17.0-17.4%

Current energy efficiency savings for primary and final energy consumption (in 2019)

32.5%

Current EU 2030 non-binding target (relative to 2007 projections)

36-39%

New EU 2030 binding target for final and primary energy consumption

9% increase compared to the ambition pledged by Member States in 2020 within their National Energy and Climate Plans

Renewables in the EU energy mix



19.7%

Current renewables share (in 2019)

32%

Current EU 2030 target

40%

New EU 2030 target

Delivering the European Green Deal

Making transport sustainable for all



Our transition to greener mobility will offer clean, accessible and affordable transport even in the most remote areas.

55%

reduction of emissions from
cars by 2030

50%

reduction of emissions from
vans by 2030

0

emissions from new cars
by 2035

A European Green Deal

Striving to be the first climate-neutral continent



Brussels, 9 November 2020
(OR. en)

12741/20

COPS 389
CFSP/PESC 977
CSDP/PSDC 545
POLMIL 171
CLIMA 289
ENV 694
RELEX 870

COVER NOTE

From: European External Action Service (EEAS)
To: Delegations
Subject: Climate Change and Defence Roadmap



Energy
Consultation
Forum



Energy and
Environment
Capability
Technology
group



Circular
Economy in
Defence
Forum

cross-cutting

Consultation Forum for Sustainable Energy in the Defence and Security Sector (CF SEDSS)



WORKING GROUP 1
Energy Efficiency & Buildings Performance

Improve the energy efficiency of military building stock and fixed infrastructure

WORKING GROUP 2
Renewable Energy Sources

Use renewable energy sources and technologies in the defence sector (generation, conversion, storage and use in transportation)

WORKING GROUP 3
Protection of Critical Energy Infrastructure

Increase the protection and resilience of defence-related critical energy infrastructure (tools, guidelines, methodologies)

TRANSVERSAL WORKING GROUP

<p>Policy & Management Observatory</p> <p>(Action plans, human factors, awareness, best practices, skills, etc.)</p>	<p>Technology, Research & Innovation Hub</p> <p>(Energy management, networks, cyber, AI, digitalisation, sensors, micro-grids, etc.)</p>	<p>Financing & Funding Gateway Cell</p> <p>(IdentiFunding methodology for defence energy projects, ad-hoc, SRSS, ECP, etc.)</p>
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CF SEDSS III

Contribution to implementing
EU's climate change and
defence roadmap

Explore the implications of applying in the defence sector the EU's energy and regulatory policy framework.

Explore the potential impact of applying Green Public Procurement options for fixed infrastructure (military buildings, offices, barracks/camps, hospitals, academies).

Explore the impact of defence activities on offshore renewable energy developments: constraints & recommendations for improving coexistence.

Increase the resilience of defence-related critical energy infrastructure (CEI) against hybrid threats, natural hazards, climate change and environmental risks and pandemics.

Assess the feasibility of establishing a suitable mechanism to act as the EU's repository, observatory and research platform.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 882171

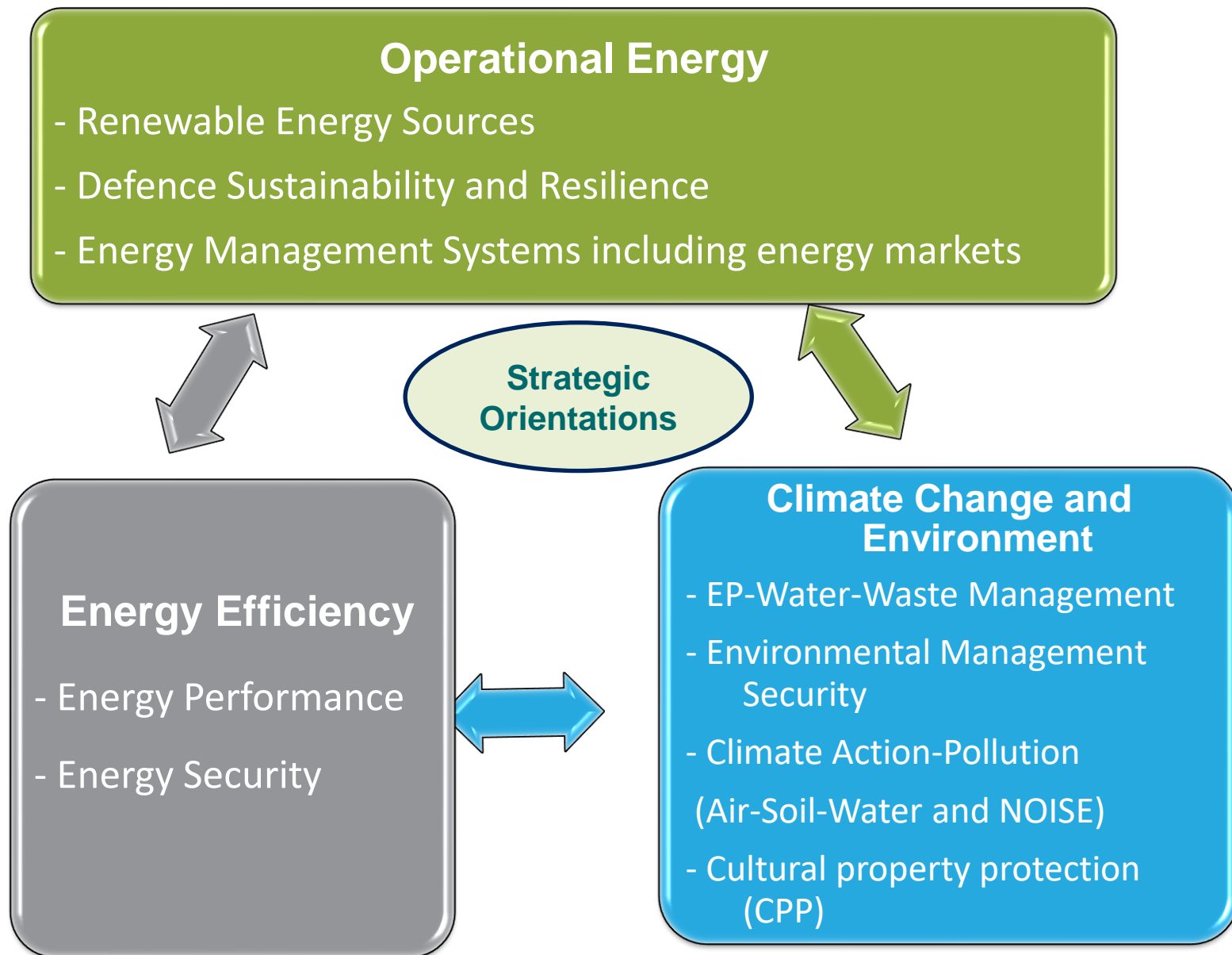


EnE Capability Technology Group (CapTech)

Mission

Address energy, environmental and climate change-related challenges by identifying technological gaps and proposing collaborative projects;

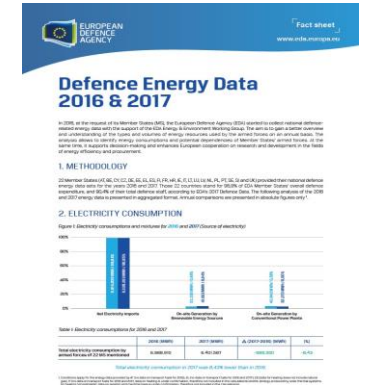
Provide capability awareness and strategically informed advice on Energy and Environmental factors affecting the Armed Forces, delivering tangible benefits in accordance with pMS guidance;



EnE CapTech– project examples

Defence Energy Data Collection, Analysis & Sharing

- *EDA collects and analyses national defence related data to support MoD's decision-making process to increase energy performance and reduce costs...*



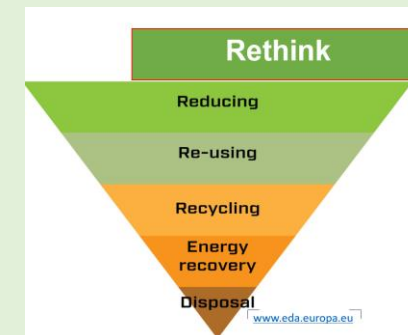
EDA's Technology Energy Foresight:

- analysis of energy-related needs and implications for future military platforms;
- advance collaborative technological research and synergies in sustainable energy...



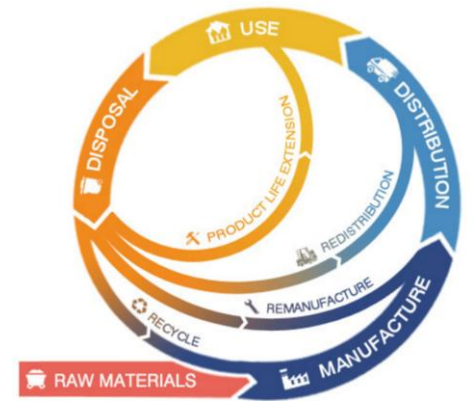
Waste to Energy Technologies in Defence project

...turn the waste burden into useful products and energy and create a circular system...



INCUBATION FORUM FOR CIRCULAR ECONOMY IN EUROPEAN DEFENCE (IF CEED)

- since October 2021 -



➤ KEY GOALS

- **Incubator of transnational projects for Circular Economy in European Defence** *implementing circularity (design, materials, life-cycle management, digitalisation);*
- Provider of models for **alleviating existing CEED barrier** and **bridging the gaps** *(to mitigate the environmental footprint of the overall defence sector).*

➤ STAKEHOLDERS

- MoDs, European Commission's DGs; any other EU/national/international pertinent public body/organisation, industry, RTOs, academic and financial institutions.

➤ OUTPUT

- **Experts** working in **9 "Project Circles"**, incubating collaborative projects and/or designing related roadmaps.

“Project Circles” - thematic areas

1. Critical Raw Materials
2. Circular Additive Manufacturing
3. Circular Materials for Textiles
4. Sustainable Ecodesign
5. Waste Framework Directive art. 9(1)(i)
6. Eco-Management and Audit Scheme (EMAS) Uptake Strategy
7. Green Procurement
8. Circular Data
9. Spare Parts Management

BENEFITS

- **Implement the EU Climate Change & Defence Roadmap**

“to develop concrete solutions ... leading to increased resilience and operational efficiency ... in the context of climate change”;

- **Moderate the eco-impact of Defence**
(e.g., optimising the use of resources via eco-design, innovative processes, repair and recycling; reducing both emissions and impact on ecosystems linked to extraction and processing of materials).

- For **joining EDA’s IF CEED:**
circular.economy@eda.europa.eu

Concluding remarks - reflections

Sustainable energy and green transition matter for the defence sector

An ongoing global rise of energy prices (gas producers have not increased their supplies despite rising demands - wholesale gas prices have almost doubled compared to one year ago)

By contrast, renewable energy prices have remained stable or decreased - European Green Deal and renewables are the solution to the rising electricity prices

Understanding of what energy transition and environmental change means (Military needs in balance with energy/green transition)

Since 2014 EDA has been assisting MoDs to decrease carbon footprint by managing energy and environment considerations and defining capability and technology requirements

Applying sustainable energy models in defence will reduce energy demands/dependency, strengthen resilience and ensure strategic energy autonomy for European defence

Several challenges/barriers to address (awareness, legislative constraints, human resources, re/up-skilling, technical support, funds and investments, etc)

National efforts combined with multinational collaboration and industry's expertise have a multiplier effect towards climate-neutrality.

EDA SUCCESS STORIES

First Energy Consultation Forum project to receive EU funding

Brussels - 10 March, 2020

RESHUB - Defence RESilience Hub Network in Europe

(SI MoD-led)



- Conceptualised under the CF SEDSS under the leadership of **Slovenia** and with the support of **Austria, Belgium, Germany** and **Hungary**.
- Received funding from the EU's Structural Reform Support Programme (SRSP) to conduct a feasibility study.

17 FEBRUARY 2022

New Energy Consultation Forum project to promote low carbon military camps



ENSSURE - ENergy Self-Sufficient RESilient military base

(FR MoD-led)

- Conceptualised under the CF SEDSS under the leadership of **France** and with the support of **Belgium, Bulgaria** and **Norway**.
- Received funding from the French Ministry of Defence (MoD) to conduct a feasibility study.

EDA will continue providing the most mature defence energy-related projects with tailored support in their application for funding at the European or national level.

Learn more
about us

Visit our webpage
[link](#)

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European Defence
Energy Network



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Careers ▾ Procurement Portals



Home > What we do > EU Policies > Consultation Forum Sustainable Energy

CONSULTATION FORUM SUSTAINABLE ENERGY

A European Commission initiative managed by the European Defence Agency to assist the European Union Ministries of Defence to move towards green, resilient, and efficient energy models.



Home Phase I Phase II Phase III Policy & Legislation Funding Media

Latest news

All news →



News

23 NOVEMBER 2021

Consultation Forum pursues work on defence energy transition



News

16 JUNE 2021

Energy Defence Consultation Forum gains momentum



News

14 APRIL 2021

First High-Level Joint Defence and Energy Meeting

ENERGY AND ENVIRONMENT (ENE) PROGRAMME



Learn more
about us

Visit our webpage
[link](#)

SUMMARY

“...Climate change and environmental degradation exacerbate potential conflict, in light of their impact on desertification, land degradation, and water and food scarcity...”

(European Union Global Strategy-2016)

The Energy and Environment Working Group (EnE WG) was formed at the direction of the EDA Steering Board (SB) held on 26 Jun 2014. Building on previous work conducted under EDA's Military Green initiative, it was formed to take account of the transverse and complex nature of energy and environmental factors in the Defence sector and to offer a structured approach to all aspects of related issues that affect the EDA participating Member States (pMS). The EnE WG is an extrovert scheme, seeking synergies and cooperating with other entities or fora of similar concerns (CF-SEDSS, DEFNET, NATO EP WG, etc).

Aim

The EnE WG supports the participating Member States (pMS)'s collective journey towards increasing the resilience of MoDs, Armed Forces and Defence technological and industrial sector to existing and emerging vulnerabilities resulting from strategic considerations concerning energy security and dependence on fossil fuels, resources security of supply, water security, and environmental change.

Mission

The EnE WG provides capability aware and strategically informed advice on Energy and Environmental factors affecting the Armed Forces of Europe, delivering tangible benefits in accordance with pMS guidance.

Since
June 2014

Participating Countries
19 + Switzerland

RELATED CONTENT

Consultation Forum for Sustainable Energy in the Defence and Security Sector (CF SEDSS III)

Third Defence Energy Management course launched

Phase 1 of Smart Blue Water Camps research completed

Defence Energy Data 2016 & 2017 Factsheet

Defence Energy And Environment Projects

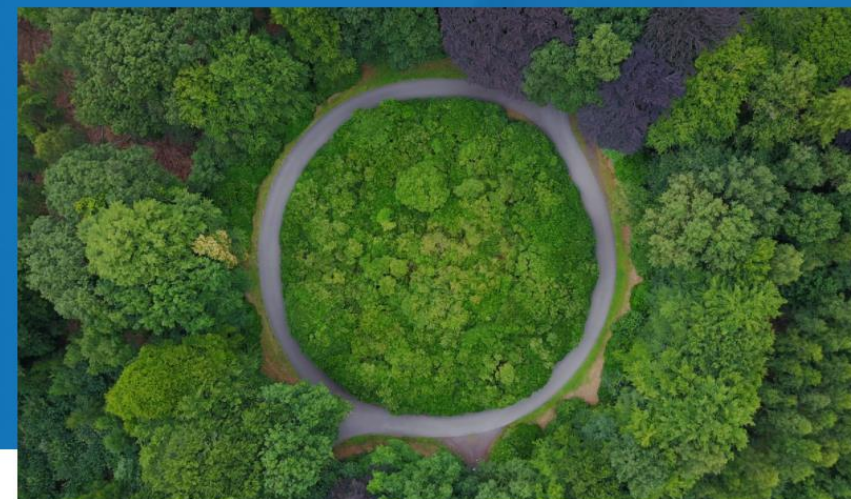
Learn more about us

Visit our webpage

eda.europa.eu/ifceed

INCUBATION FORUM FOR CIRCULAR ECONOMY IN EUROPEAN DEFENCE (IF CEED)

EDA manages IF CEED to apply the EU Green Deal's Circular Economy approach to European defence, by engaging a cooperative community: e.g. EU Ministries of Defence, industry, institutes, research centres, financial institutions, academia, pertinent public bodies at national and international level.



Latest



Press release

27 JANUARY 2022

EDA's New Forum for Circular Economy in European Defence Underway



Tool

24 NOVEMBER 2021

Search funding at European level for Circular Economy in Defence



Publications

01 DEC 2020

European Defence Matters, Magazine issue 20, IF CEED Excerpt

"Climate neutrality is no longer a question of choice, it is beyond doubt a necessity."

Charles Michel, European Council President, July 2020

The EU is ready to play its part to respect and protect our environment and the lives of future generations.

Are you ready to join the effort?



SUSTAINABLE ENERGY FOR SUSTAINED DEFENCE

Thank you for your
attention