

**Thursday  
June 8**

# Strategic Outlook

*The European Lightweighting Network and  
Lightweighting as an enabler for the European  
Green Deal.*

**Cecilia Ramberg**  
Director of LIGHTer  
Sweden



# LIGHTer

## - A Swedish Strategic Innovation Programme

Since 2013

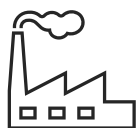
With support from

VINNOVA

Swedish Energy Agency

FORMAS

Strategic innovation programmes



Cross-sectoral industry needs



Political ambitions



Skilled people & advanced technologies



SME support

Networks

International cooperation

Academic funding

R&D projects

**Innovation themes**  
- what we focus on

**Innovation mechanisms**  
- how we work

**Lightweight needs**  
- huge potential in many industries



Lightweight solutions that provide:

- Aviation
- Automotive
- Maritime
- Infrastructure
- Construction
- Industrial processing
- Energy
- Health
- Agriculture
- Forestry



**Lightweight Agenda's mission:**

Through lightweight innovation, we develop technical solutions, business models and strategic forms of collaboration to achieve sustainable development. With the UN's sustainable development goals as our point of departure and with climate challenges in focus, we pursue end-to-end solutions that reduce climate impact and enable circular material flows, circular processes for product development and production, and circular use patterns. By 2040, we will have sustainable value circles in several Swedish industrial areas of strength.

2040

# Parallel national activities

## **GERMANY**

Leichtbau BW

## **AUSTRIA**

Austrian Advanced Lightweight Technology

ONE EUROPEAN NETWORK  
Work together for a European  
Lightweighting Network (ELN) on a  
European political and strategic  
level

# European Lightweighting Network (ELN)

WHY A EUROPEAN LIGHTWEIGHTING NETWORK?

# Meeting global sustainability goals



# ELN Members

## CURRENT MEMBERS

Germany, Austria, Sweden, Spain, Belgium & Luxembourg

## PARTICIPANTS AT ELN

Switzerland, Poland, Netherlands & Slovakia

## WHO CAN JOIN?

- Representatives from nationally relevant lightweight actors
- Government representatives

## ENGAGEMENT

- Be active in the working group
- Participate in ELN 4 in Belgium 2024

**With the 3rd ELN Conference we  
hope to expand our network, and  
find a common path towards a  
European Lightweight Strategy**



# Why is lightweight an enabler to reach global sustainability goals?

# Environmental scan for LIGHTer

- Visualise trends
- Understand tendencies
- Describe emerging processes
- Prioritizations and decisions
- Discuss challenges and opportunities

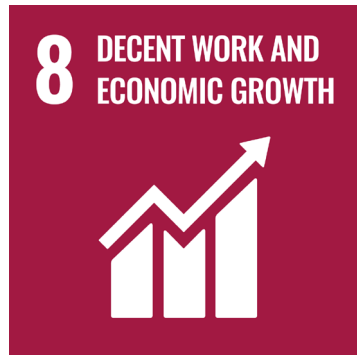




# Methods

- Research and readings
- Interviews
- Workshops and conferences
- Surveys
- Analyses

# Lightweight contributes to the UN Sustainability Goals



**7** AFFORDABLE AND  
CLEAN ENERGY



**8** DECENT WORK AND  
ECONOMIC GROWTH



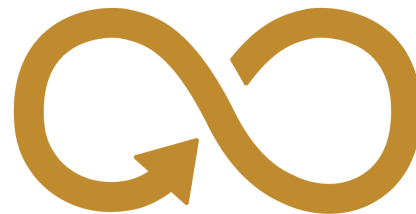
**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



**11** SUSTAINABLE CITIES  
AND COMMUNITIES



**12** RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



**13** CLIMATE  
ACTION



# Use cases of lightweight enablers for the European Green Deal

# Lightweight enables sustainable road mobility



Structural batteries



Recycled cars

# Lightweight enables sustainable maritime mobility

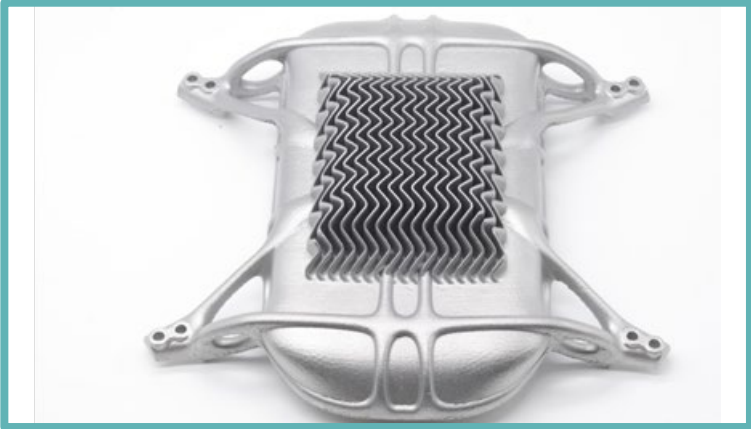




# Lightweight enables sustainable air mobility

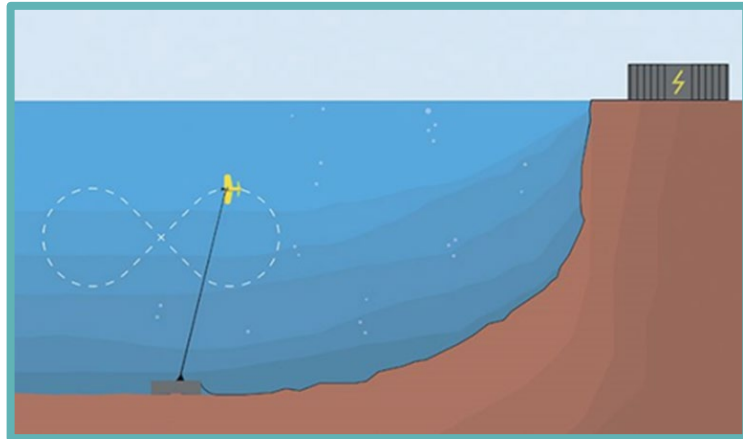


Fossil-free aviation



Ultra-light drones

# Lightweight enables renewable energy production



Ocean energy potential



Wind turbines

# Lightweight enables space exploration





## Economic benefits of lightweight

- Important to many industrial sectors in Europe – directly and indirectly
- Jobs and added value can be attributed to lightweight construction in i.e Austria
- More about this with Dr. Anna Kleissner

# European lightweight initiatives

# European Networks

## INDUSTRIAL R&D NETWORKS



## STRATEGIC & POLITICAL NETWORK



## OTHER INITIATIVES

# Advanced Materials Initiative 2030

- A European initiative to reach sustainable development through the use of advanced materials
- ELN and AMI 2030 are cooperating to show how we can develop sustainable materials and develop lighter products using advanced materials





## Become an active member!

- Documentation from Stockholm in domestic discussions
- Create a national ELN contact point to join the ELN working group
- Participation at the 4th ELN Conference in Belgium 2024





# ELN working group



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Austria



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Cecilia Ramberg  
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Thank you

**Cecilia Ramberg**  
Director of LIGHTer  
Sweden

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