

ELN ROADMAP

Roadmap and milestones ahead for the European Lightweighting Network





sweden 2023.eU

ELN EUROPEAN LIGHTWEIGHTING NETWORK



Boel Wadman, Sweden



Werner Loscheider, Germany



Alexander Pogany, Austria



Amaya Igartua, Spain



Carine Petit, Belgium

Birth of the ELN

NOVEMBER 2020

The German Federal Ministry of Economic Affairs and Climate Action initiates the

1st ELN conference during the German Presidency of the European Council.

Appr. 15 EU member states participated.



The Austrian Federal Ministry of Climate, Environment, Energy, Mobility, Innovation and Technology hosts the **2nd ELN conference** in Vienna. Strong political support for the event, shows the importance of lightweight in Austria.







Germany invites ministers from the governments of Sweden, Austria and the Netherlands to the *Lightweighting Summit* at Hannover Messe. Sweden's Minister for Foreign Trade, Anna Hallberg, attended.





- Over 75 delegates
- 9 European countries represented

ELN Vision, strategic goals & activities



Establishing a Lighweighting Hub in Brussels

A Brussels located constant representation of Lightweighting organizations facilitates the access to the EC and the cooperation with other relevant stakeholder groups

ACTIVITIES

- Aligning work of existing transnational networks such as the cooperation agreement between ELA and ELCA network
- Stakeholder event "No Green Deal without Lightweight Technology", Brussels





Medium term



Long term



A European Lightweighting Strategy provides a long-term vision for lightweighting and serves as input to policy decision on a strategical level. The joint research agenda is our cornerstone.



Developing a European Lightweighting Strategy

- Builds on national processes and results
- Germany and Sweden are frontrunners in developing the strategical approach
- Close cooperation with networks such as ELA and ELCA is necessary

ACTIVITIES

- Advanced Materials
 Initiative (AMI 2030)
 Collaboration
- Developing and aligning national Lightweighting goals

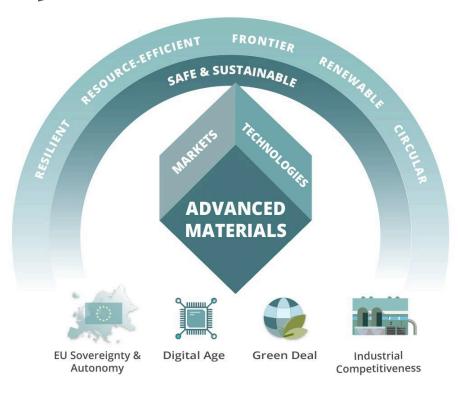






European Strategic Agenda for Advanced Materials

Cross-cutting needs in advanced materials for maximum impact



- **RESILIENT MATERIALS** (low/no CRM containing)
- RESOURCE-EFFICIENT MATERIALS (low embodied resource / low resource use in operation)
- ☐ CIRCULAR MATERIALS (bio-degradable / recyclable)
- RENEWABLE MATERIALS (non-fossil sourced / biosourced)
- FRONTIER MATERIALS (novel functionality / customized materials / future applications / ...)

Co-creating a joint Research Agenda

"Lightweight for a Sustainable Future, a common vision for European and national activities"

ACTIVITIES

• Establishing joint calls to fund bi- or multilateral projects in lightweight technologies via dedicated Eureka lightweighting call and ERA.NET call topic with lightweighting focus





Long term



Lightweighting Satellite Accounting standard

What is the economic impact of lightweighting on employment, innovation, and gross national product?

ACTIVITIES

- The creation of a "Lightweighting Satellite Accounting Standard" to make the impact tangible
- Examples Austria and envisioned in Germany





12

Arranging delegation visits

Fostering and enabling networking, cooperation and knowledge-sharing between companies and R&D institutes

ACTIVITIES

 Arranging delegation visits connecting research institutions, industrial partners and public authorities between the partner countries such as SE, DE, AT, NL, CH, ES





13

Promoting Lightweighting and the ELN network

Promoting the potential of lightweighting to contribute to international sustainability goals, the European Green Deal

ACTIVITIES

Organizing ELN conferences:

ELN1 in Germany

ELN2 in Austria

ELN3 in Sweden

ELN4 in Belgium (TBC)

ELN5 in Spain (TBC)

 Promotion at international workshops and conferences such as the Lightweighting Summit at Hannover Fair, EuroNano Forum or UN Global Compact Leaders Summit



Short term



Medium term



Long term



Promoting competences and knowledge transfer

Bringing partners together to enhance knowledge and technology transfer - cross-sector, cross-borders and cross-material

ACTIVITIES

- Networking such Swedish PhD program visit to Austria
- Improving knowledge transfer research to industry such as the Lightweighting-Atlas
- Considering the submission of a COST Actions (https://www.cost.eu/)





Thank you





The Advanced Materials 2030 Initiative ambition

Advanced Materials, a source of prosperity for the EU society

Main challenges, failures, gaps,...

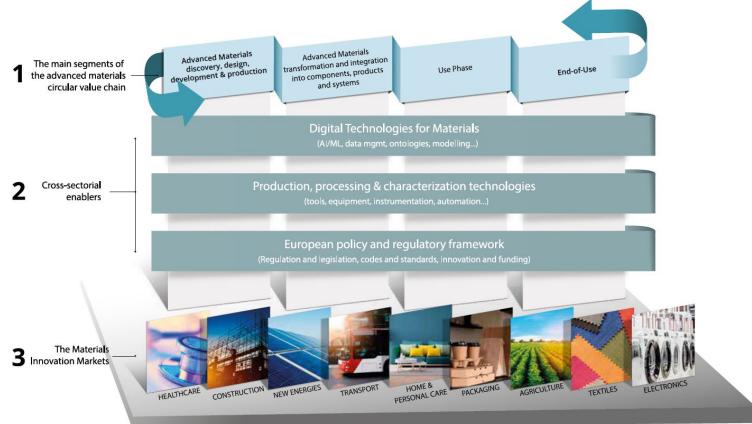
The need of developing increasingly complex advanced materials at an ever-faster pace

A fragmented landscape of the stakeholders, competences, resources and initiatives EU leadership at risk in AdMat innovation and industrial competitiveness challenged in strategic markets Lack of resilience and sustainability of AdMat value chains

A multi-sectoral accelerator for the design, development and uptake of sustainable advanced materials towards a circular economy



European Strategic Agenda for Advanced Materials Areas of Intervention structured around 3 key dimensions



AMI2030 Platform

Connecting all AdMats stakeholders and initiatives



for accelerating the design, development and uptake of sustainable advanced materials towards a circular economy

R&I Funding landscape

