

Accelerator Challenge:

Breakthrough innovations for future mobility

Backing visionary entrepreneurs

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Background:



- ➔ The European Union has charted a path to climate neutrality by 2050 with an ambition to reduce net greenhouse gas emissions by at **least 55% by 2030, compared to 1990 levels.**



<https://roomdiseno.com/descarbonizacion-feria-de-la-construccion-batimat/>



Background II:



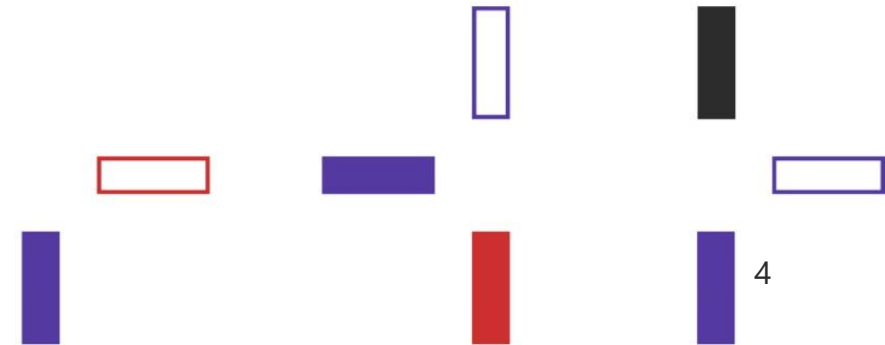
- ➔ The transport sector, including road transport, aviation, waterborne and rail, has however been steadily increasing its emissions at an average **yearly rate of 1.7% since 1990**. The resulting emissions are also one of the main contributors to environmental and health problems.
- ➔ **EC has developed 'The Sustainable and Smart Mobility Strategy' which includes an action plan to deliver on a 90% cut in mobility emissions by 2050**, delivered by a smart, competitive, safe, accessible, and affordable transport system.



Scope:



To meet the objectives, this Challenge focuses on supporting companies developing cost-effective and scalable deep tech breakthroughs that will help **deliver reductions in mobility-related emissions in its many facets, from the manufacture of vehicles to their use.**





Specific objectives:



➔ **Breakthroughs in the design, manufacture, assembly and operation** of road vehicles, waterborne vessels, aircraft, or rail contributing significantly to reduce their environmental footprint;

[\(2\) Utilizing Simulation to Enhance Vessel Design | LinkedIn](#)



Artwork shows what airplanes could look like in the 2035 time frame.
(NASA / Boeing Illustration)



<https://topcarsmodels.com/linear-actuators-are-used-in-car-manufacturing/>



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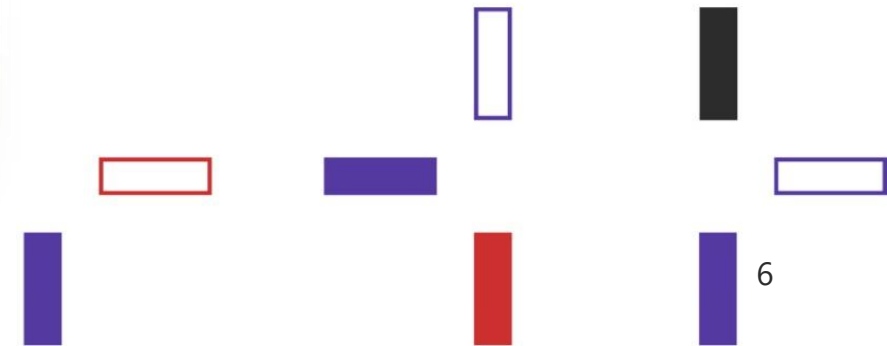
Specific objectives II :



- ➔ **Disruptive technologies** contributing to increase operational efficiencies and reductions in greenhouse gas emissions, secondary and other **harmful emissions and noise** for Heavy Duty road vehicles, waterborne vessels, aircraft or rail, multimodal transport and/or their related infrastructure;



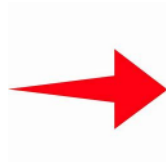
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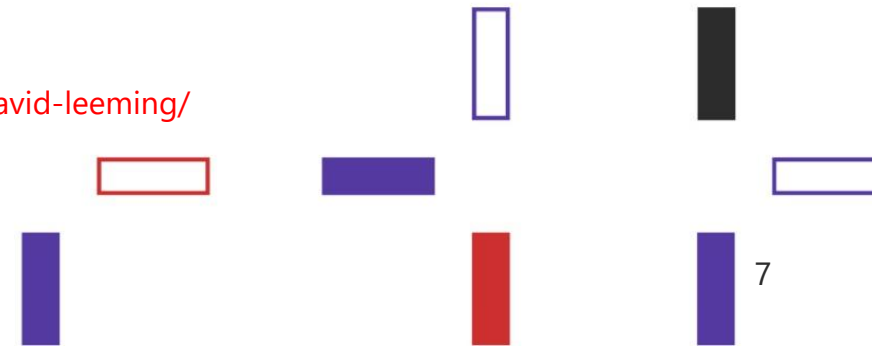
Specific objectives III:



 **Sustainable fuels** for hard-to-abate sectors such as aviation and maritime, including retrofitting solutions;



<https://www.linkedin.com/pulse/net-zero-week-our-thoughts-hvo-renewable-diesel-david-leeming/>

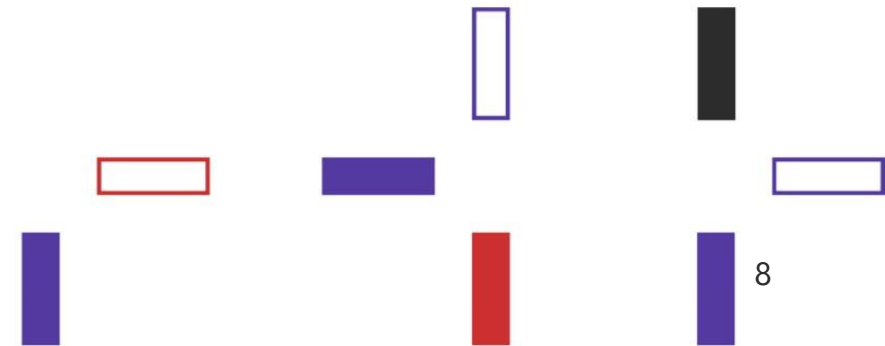




Specific objectives IV:



Breakthroughs in the development and integration of digital tools ranging from sensors to the application of AI enhancing autonomous transport solutions and more sustainable energy use on land, water or in the air, improve the connectivity and efficiency of vehicles and the transport system including capacity management, and smart and bi-directional charging functionalities.





Expected outcomes and impacts:



- ➔ To increase the **competitiveness and economic autonomy or security** of European companies across the mobility value chain;
- ➔ To support **the scaling up of technologies that materially reduce mobility-related emissions**, including a quantification on how they reduce emissions or increase efficiency of transport, or provide more affordable or inclusive mobility
- ➔ **To deliver improvements** in accessibility, safety, security, connectivity, flexibility and efficiency of the transport system including new mobility services and models;
- ➔ To develop new **skills and create jobs in the EU.**



Thank you!

<https://eic.ec.europa.eu>

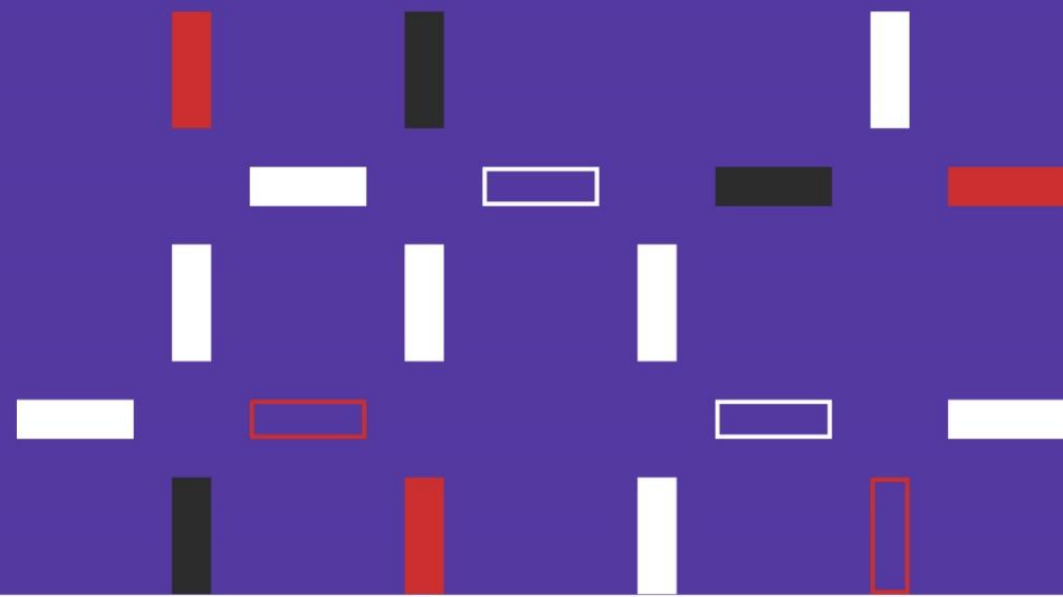
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Key links:

- [Breakthrough innovations for future mobility](#)
- [Info Day recording](#)
- [Challenge promotional video](#)
- Cut-off date(s): 12 March 2025; 1 October 2025
- Indicative budget: € 50 Million
- [EIC Work Programme 2025 Challenge link, at page 93](#)