Renewable and Low Carbon Fuels Value Chain Alliance

DG MOVE | Unit B.4

RENEWABLE AND LOW-CARBON FUELS VALUE CHAIN ALLIANCE

European Green Deal

*Transport accounts for a quarter of the EU's greenhouse gas emissions, and still growing. To achieve climate neutrality, **a 90% reduction** in transport emissions is needed by 2050.*

'Fit for 55' Communication:

The upcoming Renewable and Low-Carbon Fuels Value Chain Alliance will boost the supply and deployment of the most promising fuels for all modes of transport

Sustainable & Smart Mobility Strategy:
Air and waterborne transport have greater decarbonisation challenges in the next decades, due to current

- *lack of market ready zero-emission technologies,*
- *long development and life cycles of aircraft and vessels,*
- *the required significant investments in refueling equipment and infrastructure, and*
- *international competition in these sectors.*

Strategy for Energy System Integration:

While direct electrification and renewable heat present the most cost-effective and energy-efficient decarbonisation options in many cases, there are a number of end-use applications where they might not be feasible or have higher costs. In such cases, a number of renewable or low-carbon fuels could be used, such as sustainable biogas, biomethane and biofuels, renewable and low-carbon hydrogen or synthetic fuels

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Demand side measures:

RefuelEU Aviation

- An obligation is placed on fuel suppliers to integrate sustainable aviation fuels to airline at all EU airports.

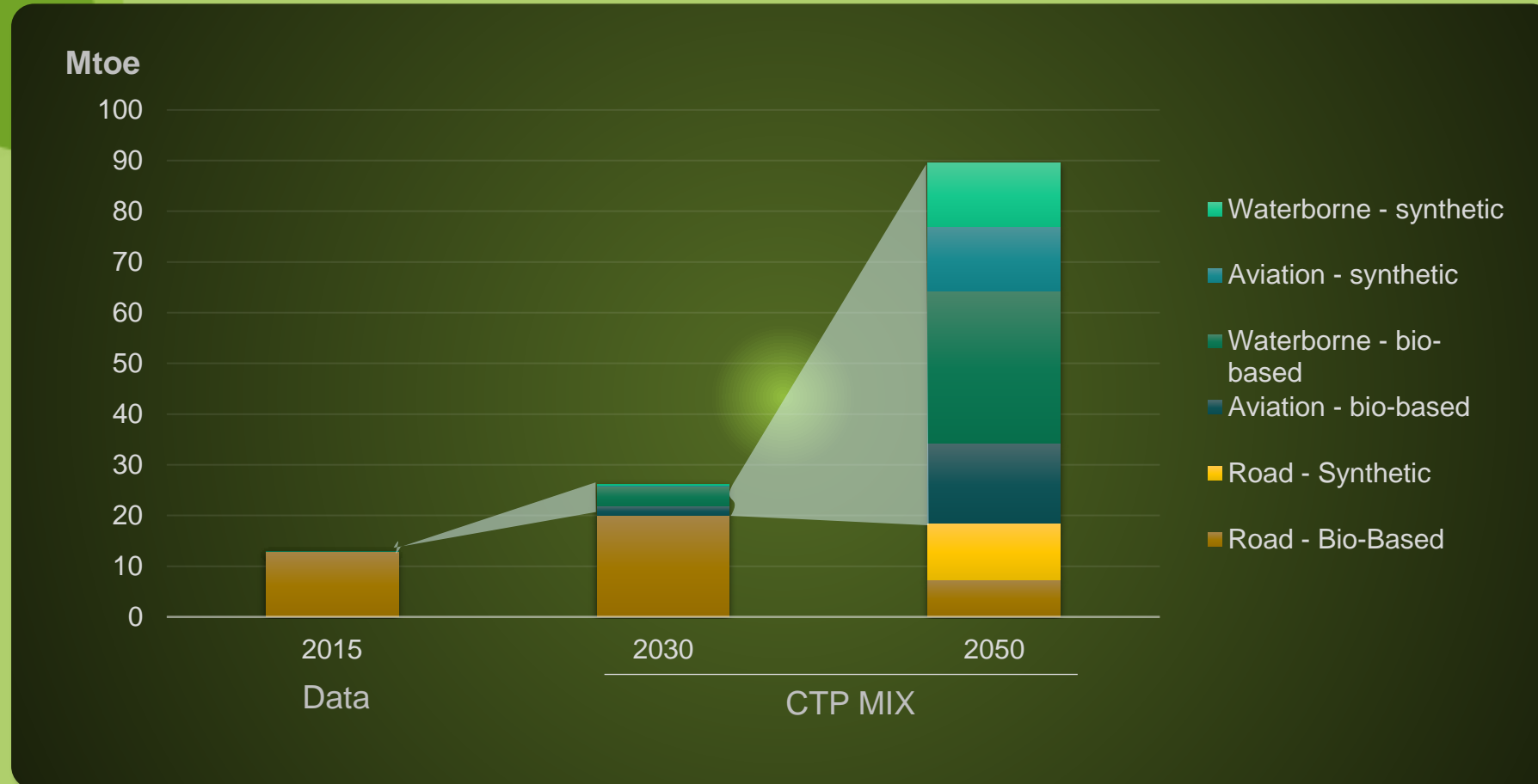- Only drop-in fuels considered (according o the text, SAFs = biofuels, advanced biofuels and RFNBOs).

Legend: ■ Of which synthetic ■ Min. Blending
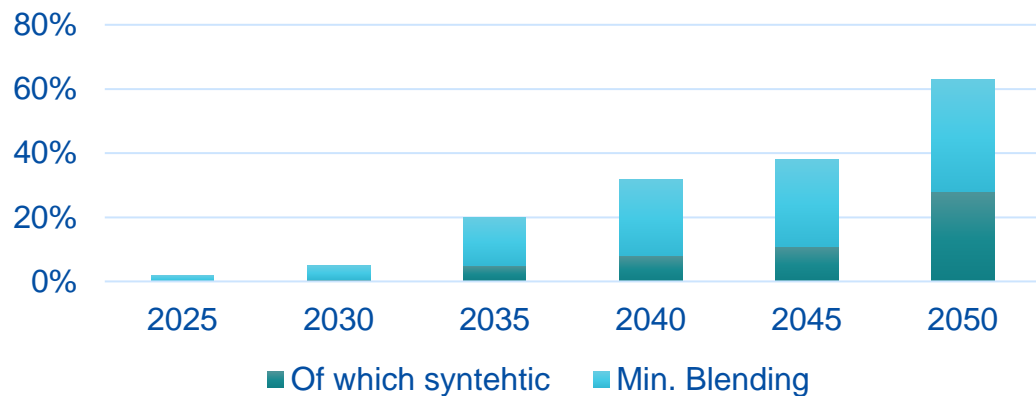
FUEL EU Maritime

- Introduction of a fuel standard, in the form of average yearly limits on GHG intensity of energy used on-board a ship (CO2eq/MJ) starting in 2025 until 2050

Legend: ■ Reduction of ship emission levels

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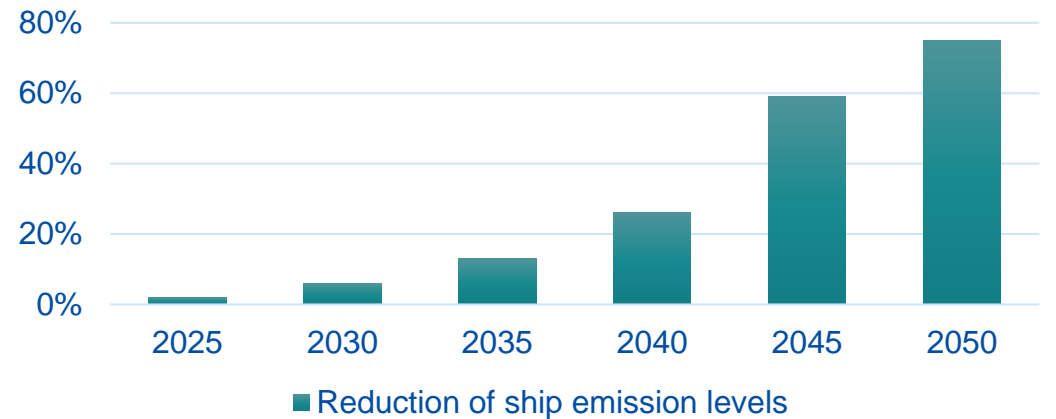
Evolution of drop-in fuels demand in road, aviation, waterborne by 2050
CTP MIX scenario

Mtoe

Legend:
- Waterborne - synthetic
- Aviation - synthetic
- Waterborne - bio-based
- Aviation - bio-based
- Road - Synthetic
- Road - Bio-Based

X-axis: 2015 (Data), 2030, 2050 (CTP MIX)

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Industrial Alliance

When?

- an urgent rationale for changing business model

- risk of being squeezed out of markets that are key to the future of EU industry / economy or strategic autonomy

- a chance to capture a promising future-proof market with the spill over effects.

For what?

support in achieving the EU policy objectives by revealing opportunities and bottlenecks.

attract private investors and discuss new business partnerships and models in an open and transparent way

How?

Commission using its convening power to bring stakeholders together to contribute to the delivery of EU policy

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Overview of existing industrial alliances

	European Battery Alliance	European Clean Hydrogen Alliance	European Raw Materials Alliance	Circular Plastics Alliance
Governance	Informal	Formal	Semi-formal	Formal
Objectives	Supporting the development of mass battery production in the EU	Develop and deploy green hydrogen at a large scale and across all hard-to-decarbonise sectors	To secure access to critical and strategic raw materials, advanced materials, and processing know-how for EU	Mobilise voluntary action by the plastics value chains to reach 10 million tonnes of recycled plastics used by 2025
Instruments	• High Level Meetings • Industry Network • Business Investment Platform	• Thematic Roundtables • High level Meetings • Hydrogen Forum • Pipeline of Projects	• Value-chain specific consultation • Investment Platform (select and priorities invesment cases)	• Uptake Pledges • Report on Investment Needs
Key Partner	None	Fuel Cells and Hydrogen Joint Undertaking	EIT RawMaterials	None

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RENEWABLE AND LOW-CARBON FUELS VALUE CHAIN ALLIANCE

General Objectives

- TACKLING THE LACK OF **AVAILABILITY** AND **AFFORDABILITY** OF RENEWABLE AND LOW-CARBON **DROP-IN** FUELS FOR **AVIATION** AND **WATERBORNE** TRANSPORT

- RAPIDLY **BOOST** PRODUCTION, STORAGE AND DISTRIBUTION CAPACITY OF THESE FUELS **WITHOUT COMPROMISING** ACCESS OF OTHER TRANSPORT SECTORS

Specific Objectives

- ✓ IDENTIFY PRODUCTION PATHWAYS OF FOCUS (*Objective 1*)
- ✓ IDENTIFY **STRONG** AND **WEAK** POINTS IN THE VALUE CHAINS (*Objective 2*)
- ✓ *FOR AVIATION*: CONTRIBUTE TO THE DESIGN OF THE PILOT PROJECT FOR THE EU SUSTAINABLE AVIATION FUELS CLEARING HOUSE
- ✓ **MAP** AVAILABLE FUNDING OPPORTUNITIES and GATHERING ARGUMENTS FOR ADDITIONAL SUPPORT MECHANISMS (*Objective 3*)
- ✓ LAUNCH A **BUSINESS INVESTMENT PLATFORM** (*Objective 4*)
- ✓ Building synergies with accross all transport modes and other alliances (*Objective 5*)

GOVERNANCE

- **GENERAL ASSEMBLY** TWO CHAMBERS (AVIATION + WATERBORNE)

- **THEMATIC ROUNDTABLES**

- **SECRETARIAT**

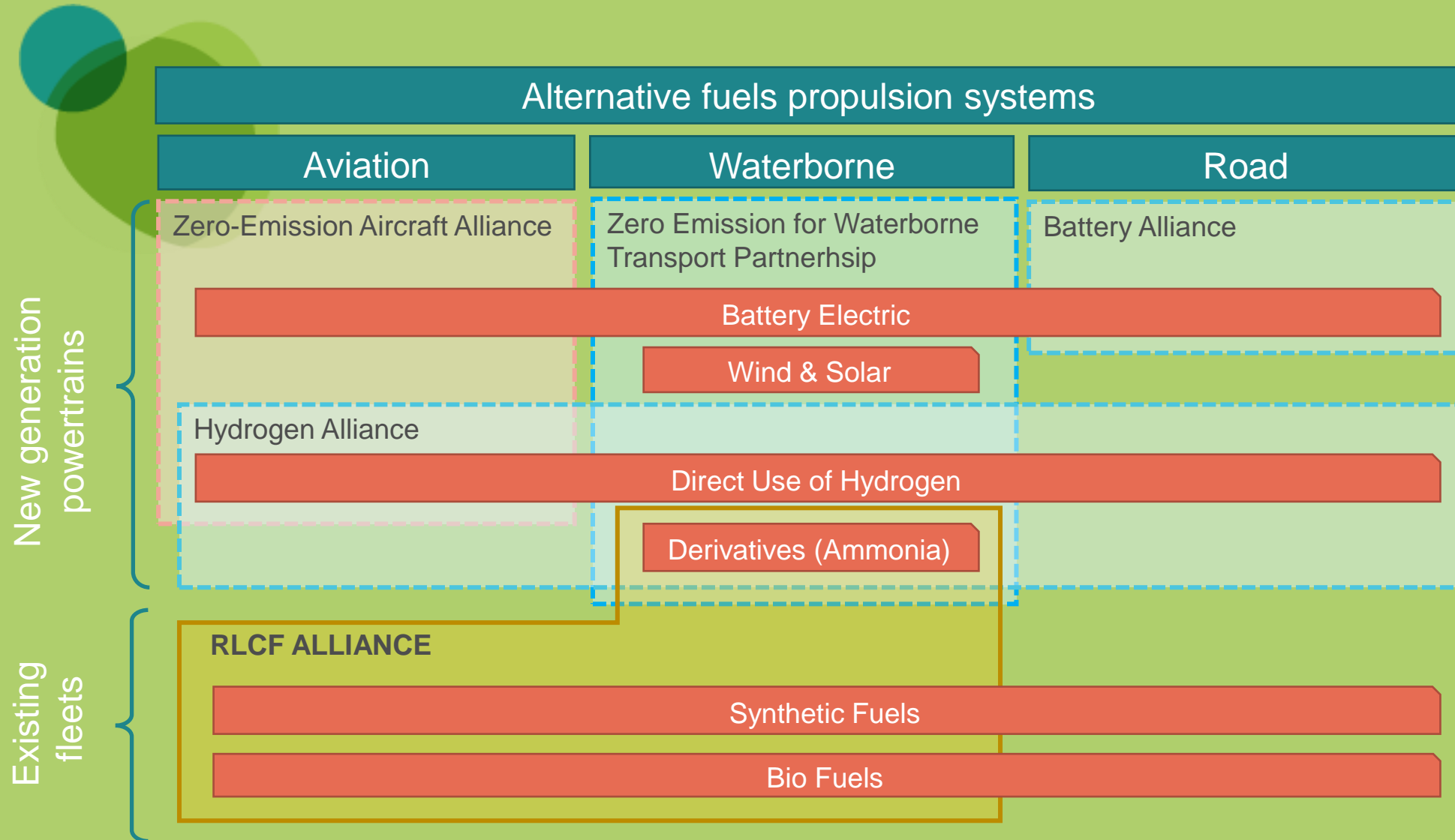- **STEERING GROUP** INCLUDING THE COMMISSION

OPENESS

Alliance will be open to:
- **any company** (regardless of ownership or location)
- EU Member States
- All stakeholder groups registered in the transparency register

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RENEWABLE AND LOW-CARBON FUELS VALUE CHAIN ALLIANCE

Objecives

Objective 1: Priority fuels and value chain assessment

- Building on the sustainable feedstock and production pathways eligible towards the decarbonisation targets put forward in FuelEU Maritime and ReFuelEU Aviation, the Alliance shall:
- leveraging on work done in other initiatives, **identify transport fuels** which are most economically and environmentally suitable (including consideration for the zero pollution ambition[2]) for scaling up;
- evaluate **strong and weak points of the value chain** (including systemic, technological, geographical and workforce related ones) and assess investment needs.

Objective 2: Enabling conditions & gap analysis

- For the purpose of accelerating market entry of new innovative fuels and associated technologies, the Alliance will
- **assess the enabling conditions**, such as those relating to demand and supply side, including local availability of feedstock, adequately trained workforce and industry knowledge base in Member States.
- It will also identify **gaps in standardisation**, safety assessments, and make sure all stakeholders in the value chains are aware of any downstream certification requirements[3]. This assessment will feed into and inform relevant policy debates.

Objective 3: Funding compass

- Identifying and **assessing existing relevant public and private financing opportunities** as well as determining the suitability of additional instruments for de-risking investments for scaling up the production and crowding in private investments (in particular in relation to cross-border projects, including possible Important Projects of Common European Interest) and drawing conclusions on their suitability
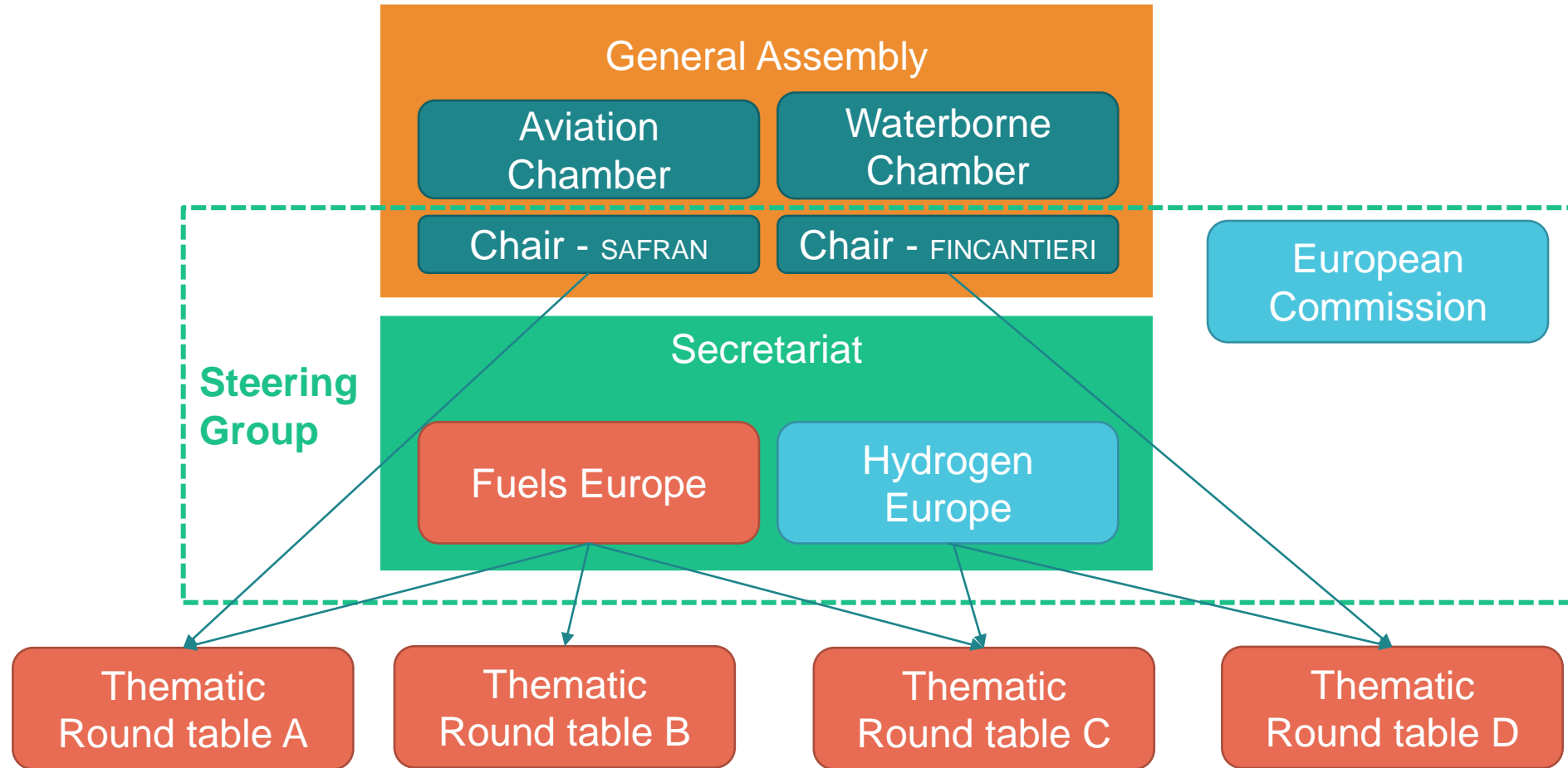
Objective 4: Investment pipeline

- **Create of a pipeline of investment projects** (including high TRL level R&D activities) based on prioritisation established under Objectives 1 and 2 and the self-assessment tools in order to increase their visibility and credibility. In the development of such pipeline, the Alliance will pay particular attention to focus on projects that are compatible with the transition to low- and zero-emission mobility. Ongoing processes to develop and subsequently deploy technologies for zero-emission vessels and aircraft shall not be negatively impacted.
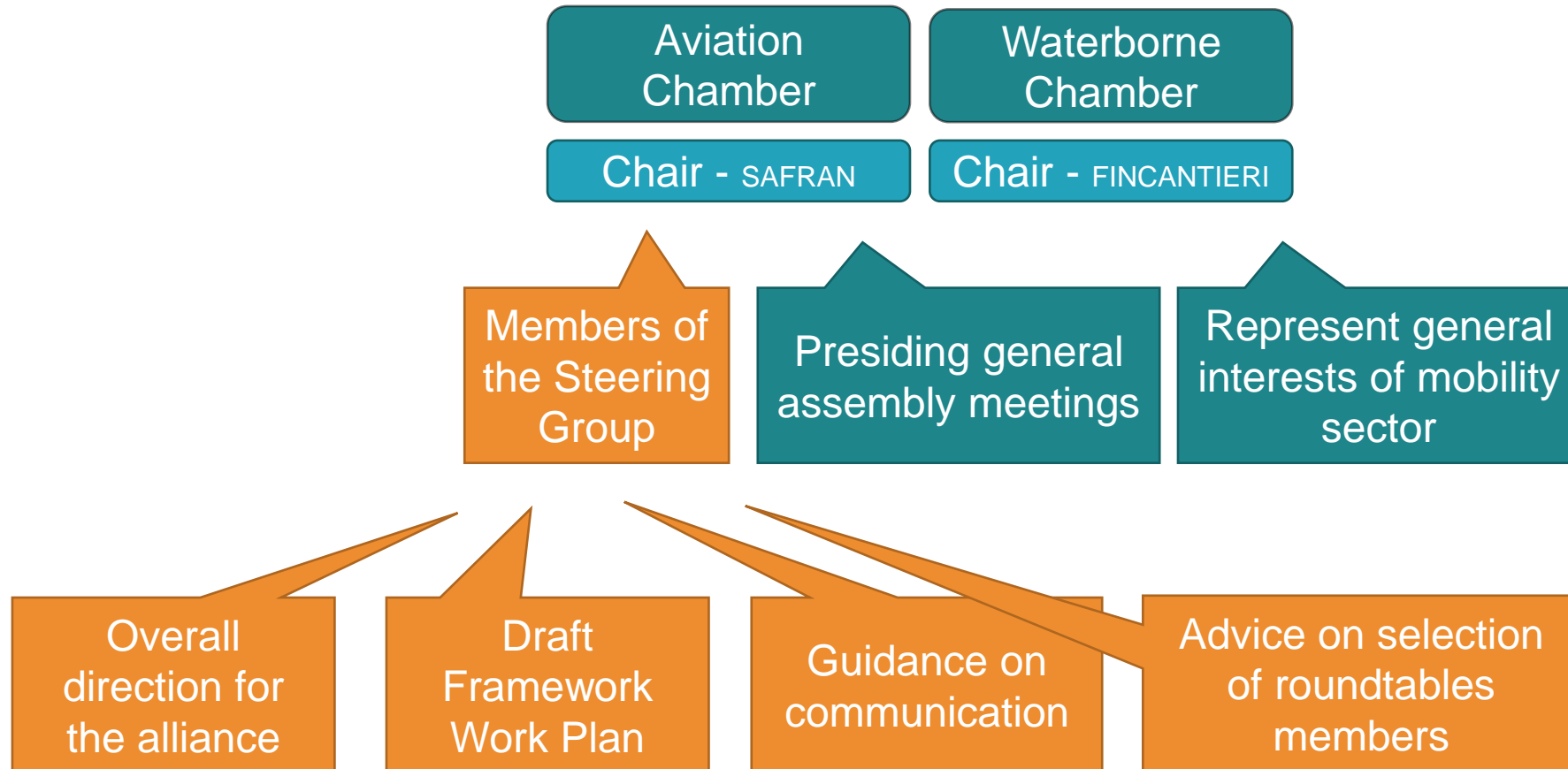
Objective 5: Synergies

Looking at creating synergies with different transport modes and ensuring availability of resources for renewable and low-carbon fuels for aviation and waterborne transport (notably in cooperating with the European Clean Hydrogen Alliance and ensuring consistency between hydrogen production capacity increases and different utilisation pathways in transport, such as for e-fuels).
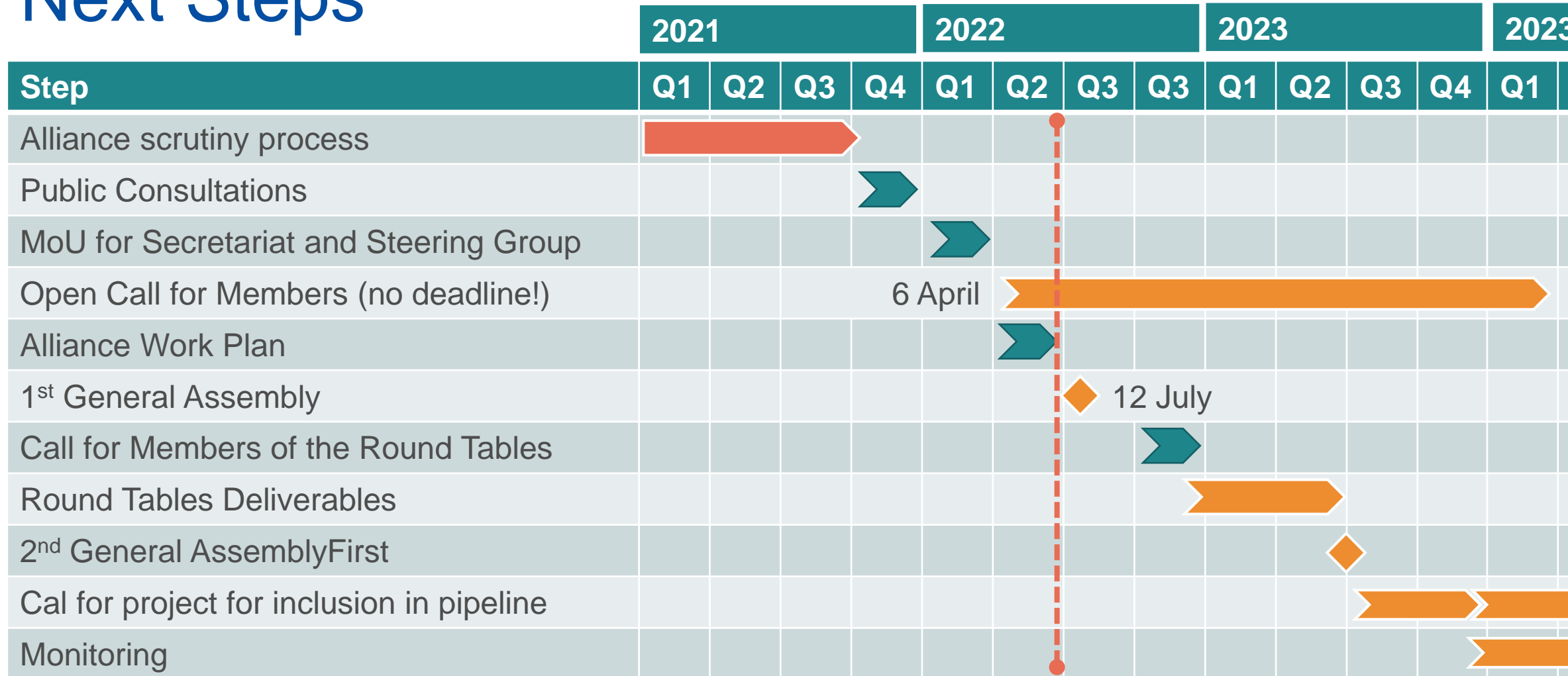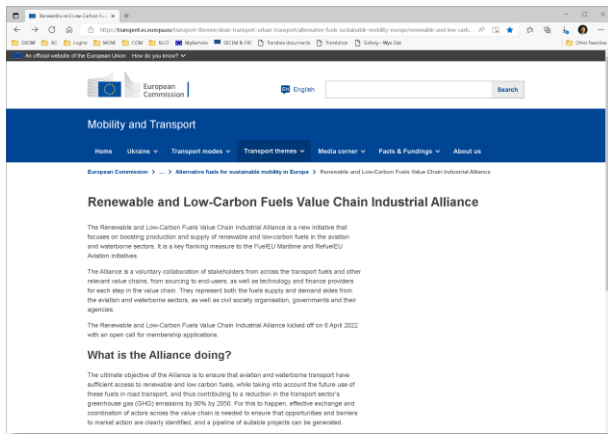
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Governance

Governance

Next Steps

Step	2021				2022				2023				2023
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q3	Q1	Q2	Q3	Q4	Q1
Alliance scrutiny process	████	███	███										
Public Consultations				►									
MoU for Secretariat and Steering Group					►								
Open Call for Members (no deadline!)					6 April	►█████████████████							
Alliance Work Plan						►							
1ˢᵗ General Assembly						◆ 12 July							
Call for Members of the Round Tables								►					
Round Tables Deliverables									████				
2ⁿᵈ General AssemblyFirst										◆			
Cal for project for inclusion in pipeline												████	███
Monitoring													███

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How to apply:

❶

Visit our website:

❷

Fill in and submit the alliance declaration

Needs agreement from authorised management level

❸
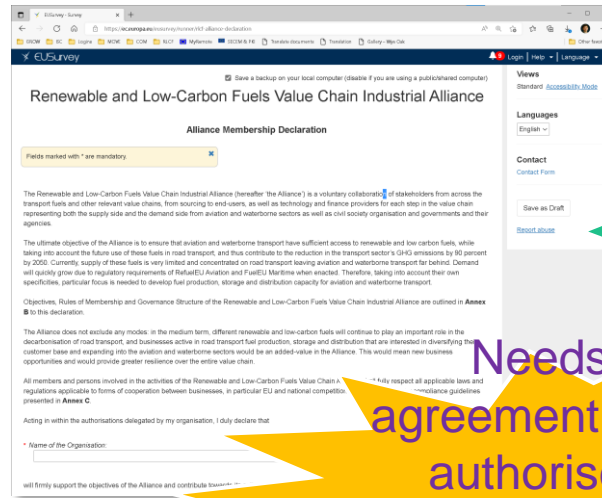
Wait for a letter of confirmation from COM

Alliance declaration includes:
1. Main commitment page
2. Annex A: Motivation
3. Annex B: Alliance TOR
4. Annex C: Competitiveness guidelines

RLCF Website:
https://transport.ec.europa.eu/transport-themes/clean-transport-urban-transport/alternative-fuels-sustainable-mobility-europe/renewable-and-low-carbon-fuels-value-chain-industrial-alliance_en

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Thank you!

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