



RENEWABLE AND LOW-CARBON FUELS VALUE CHAIN INDUSTRIAL ALLIANCE

1ST RLCF ALLIANCE WORKSHOP

29TH MARCH 2023

09:00 - 17:15

**BREY AUDITORIUM
AVENUE D'AUDERGHEM 45,
1000 BRUSSELS, BELGIUM
AND VIA WEBEX**

HIGHLIGHTS` REPORT

AGENDA

09:00 - 09:15: Welcome and agenda setting and overview on latest developments of the RLCF Alliance

by Herald **RUIJTERS**, Director for Investment, Innovative & Sustainable Transport ad DG MOVE, European Commission

09:15 - 10:15: RT1 session , moderated

by RT1 Chair Tobias **Block** (eFuel Alliance)– RT1 Vice-Chair Renato **De Filippo** (Eni)

- Issues at stake and work plan moderated by Chair
- Debate with Members

10:15 -10:30: Featured project showcasing – area: feedstock sourcing / fuel production: “Generation and processing of biofeedstocks in Africa (Kenya, Congo), relations with the host country, impact on local populations, logistics, export to Europe and processing in Venice and Gela’s Biorefineries” by Eni

10:30 – 10:45: Coffee break

10:45 - 11:45: RT2 session,

moderated by RT2 Chair Antoine Laborde (Air-France) - RT2 Vice-Chair Christoph Weber (P2X Europe GmbH)

- Issues at stake and work plan moderated by Chair
- Debate with Members

11:45 - 12:00: Featured project showcasing – area: aviation fuels uptake - “The SkyNRG Amsterdam e-fuel project” by SkyNRG

12:00 - 13:00: RT3 session,
moderated by RT3 Chair Alexander Feindt (MAN Energy Solutions) – RT3 Vice-Chair Farid Trad (CMA-CGM)

- Issues at stake and work plan moderated by Chair

- Debate with Members

13:00 – 13:15: Featured project showcasing – area: maritime fuels uptake: “Developing a portfolio of different biofuels that can be used on board our ships with minor modification to the engines and fuel treatment systems” by GoodFuels & Carnival Maritime

13:15 – 14:15: Networking Lunch

14:15 - 14:30: Intervention
by Adina **Vălean**, European Commissioner for Transport

14:30 - 15:00: Strengthening of the RLCF Alliance
by RLCF Alliance High Level Steering Group Members

- Luis **Cabra**, President of FuelsEurope & Deputy CEO Repsol
- Davide **Cucino**, Vice President European Union Affairs. FINCANTIERI
- Eric **Dalbiès**, Senior Executive Vice President R&T and Innovation, Safran
- Jorgo **Chatzimarkakis**, CEO of Hydrogen Europe

15:00 - 15:15: Coffee break

15:15 – 16:30: RT4 session,
moderated by Chair Riccardo **Dutto**, Intesa Sanpaolo Group - Vice-Chair Nicola **Lattanzi**, IMT School for Advanced Studies Lucca

- Issues at stake and work plan moderated by Chair
- Debate with Members

16:30 – 17:10: Pipeline of Projects: the way forward by European Commission

17:10 – 17:15: Wrap-up by European Commission

HIGHLIGHTS REPORT

European Commission Director of Directorate B – Investment, Innovative & Sustainable Transport in DG Mobility and Transport Mr Herald Ruijters opened the Workshop, welcoming in-person and remote attendees. He stressed the pivotal role of transport in the transition to climate neutrality and how the work of the alliance is extremely important to make this transition happen. He underlined that the alliance is the link between political framework and industry and is working as a facilitator, making it clear to investors that a stable regulatory framework is under discussion for the next decade and that the whole sector needs to be involved.

RTI SESSION

RTI Chair Tobias Block & RTI Vice-Chair Renato De Filippo opened the session dedicated to Roundtable 1 on the “Availability of feedstocks, synergies among sectors and the just transition” by greeting the participants and presenting the usual formalities. Afterwards, they briefed the members on the background and context of the RLCF Alliance, retracing the main steps done, and summarising the ongoing exercises, obstacles and challenges encountered. As a follow-up to the collection of Literature Contributions shared by Members, they stressed that different studies are showing that a sustainable supply potential of biofuels and RFNBOs exist to meet the EU demand in the coming years. They referred to the US Inflation Reduction Act as an incentivizing package for biofuels and hydrogen, since it is already generating a relocation of RLCFs investments to the US from other countries. They concluded by underlining the importance to have a stable regulatory landscape and sufficient incentivising schemes in order to balance international

competitors’ capacity to attract investments from the EU.

Mr Federico Maria Grati, Eni Spa Head of Agroenergy Services, presented Eni distinguishing model for Agri-feedstock vertical integration in African Countries. He stressed ENI’s commitment to the



decarbonization strategy by 2050, giving as concrete examples Venice and Gela (fully converted biorefineries). He deepened the current strategy on the procurement of raw materials, highlighting the need to have enabling regulatory conditions.

A debate with the members followed.

RT2 SESSION

European Commission Team Leader of the Unit Aviation Policy (MOVE/EI) Ms Ewa Oney presented the core aspects of the ReFuelEU Aviation Regulation proposal. **RT2 Chair Antoine Laborde & RT2 Vice-Chair Christoph Weber** opened the session dedicated to **Roundtable 2 on “Production Pathways and Value Chain – Aviation”**. They greeted the participants and presented the usual formalities, then they briefed the members on the background and context of their Roundtable, retracing the main steps done, and summarising the ongoing exercises, obstacles and challenges encountered. The Co-Chairs then mentioned the work in progress within the RT2’s Working Groups, specifying that: Working Group 1 on “Documentation / common source of knowledge” already created a preliminary database of existing Sustainable Aviation Fuels Reports and Studies, and invited other members to complement and to provide feedback; Members of Working Group 2 on “SAF Objectives and scenarios” are drafting an Excel file based on public data to forecast total fuel consumption within Europe and the amount of SAF needed, per type of SAF. They will elaborate few scenarios and a first SAF trajectory to be validated, and identified the possibility to do a survey to all the RLCF Alliance members to gather relevant information in support of considered hypothesis. Members of Working Group 3 “SAF Pathways” presented the critical topics for SAF pathways including identification of current barriers for production while Working Group 4 “SAF projects” presented the challenges of identifying and classifying a SAF project. Members of Working Group 5 on “EASA Clearing House & SAF Quality” are reflecting on how to ensure financial support for fuel qualification related activities and on what can be done to de-risk investments while supporting fuel producers to ensure fuel quality.

They concluded stressing the importance to focus on fuel quality in fuel supply chain, blending facilities and strategies and on the identifications of barriers preventing to move forward.

Subsequently, **Misha Valk, SkyNRG Head of Capacity Development Europe**, provided the participants with a presentation on the “Synkero e-fuel project”, which is scheduled for completion in 2027, and thanks to an e-SAF plant in the Port of Amsterdam will produce 50,000 tonnes of SAF annually. He explained that its location in the Port of Amsterdam is strategic, since it will allow to take advantage of an existing kerosene pipeline to Schiphol airport, meaning it can be easily transported and used by airlines across this airport.

A debate with the members followed.

RT3 SESSION

European Commission Head of Unit Maritime Transport and Logistics (DG MOVE) Ms Annika Kroon, head of the European Commission team supporting co-legislators throughout the negotiation of FuelEU Maritime, presented the core aspects of the preliminary agreement on the initiative, stressing that this new EU regulation will set up a fuel standard for ships to steer the EU maritime sector towards an uptake in use of renewable and low-carbon fuels and decarbonisation in shipping.

Next, RT3 Chair Alexander Feindt & RT3 Vice-Chair Farid Trad opened the session dedicated to Roundtable 3 on “Production Pathways and Value Chain – Waterborne”. They greeted the participants and presented the usual formalities, having briefed the members on the background and context of their Roundtable,



retracing the main steps done, and summarising the ongoing exercises, obstacles and challenges encountered. They reported that in order to effectively implement the Work Programme, RT3 Chair created workstreams to discuss marine demand estimation, supply chain needs/gaps, certification of fuels/shore-power electricity, development of commercial pipeline, contract templates, and regulatory framework. Looking forward, they informed members of the ongoing collection of inputs to establish a typology of projects to be used for classification in the database, also instrumental to identify criteria for inclusion of projects in a pipeline.

Christoph Schladör, Vice-President Decarbonisation Carnival Maritime GmbH (Costa Group), presented the cooperation with Goodfuels, who have supplied ships with FAME in 2022 and reported lessons learned from the trials and future plans, stressing they are developing a portfolio of different biofuels that can be used with minor modification to the engines and fuel treatment systems.

A debate with the members followed.

HIGH LEVEL SESSION

European Commissioner for Transport Adina Vălean opened the afternoon's session, emphasizing the work behind the doors of the Alliance, welcoming the more than 200 members who are already part of it. She stressed that the ramping up and industrialization of these fuels will be possible thanks to legislation and it should translate into a lowering of prices. She underlined that mobility should stay affordable for people and businesses, and the activities of the alliance should be aimed at understanding what the sectoral needs for this purpose are.



RLCF Alliance High Level Steering Group Members representatives Mr Luis Cabra, President of FuelsEurope & Deputy CEO Repsol, Davide Cucino, Vice President European Union Affairs FINCANTIERI, Eric Dalbiès, Senior Executive Vice President R&T and Innovation, Safran and Jorgo Chatzimarkakis, CEO of Hydrogen Europe welcomed the European Commissioner's intervention and addressed to her briefly summarizing the work in progress within the Alliance, emphasizing its specific and general objectives for the first year, referring to the political framework, to the needs of the respective sectors and the importance of creating synergies.

RT4 SESSION

Next, RT4 Chair Riccardo Dutto & RT4 Vice-Chair Nicola Lattanzi opened the session dedicated to Roundtable 4 on "Financing", summarising the ongoing exercises, obstacles and challenges encountered to ensure bankability of renewable and low carbon fuels projects for investors. They underlined the engagement of other key stakeholders to

address bankability issues, within the European institutions or with private actors, and presented their thinking on double auction mechanisms platform for e-fuels. They mentioned the first deliverable of the Roundtable, which is the vertical business model for offtake agreement across the value chain and presented the objectives of the second main deliverable of the RT4, the Funding Guide of the Alliance, responding to the need to aggregate all information on financing instruments made available by public institutions at European and domestic level.

A debate with the members followed.

PIPELINE OF PROJECTS: THE WAY FORWARD

To conclude, the European Commission made a short presentation on the state of play of discussions regarding the pipeline of projects of the Alliance. Starting with the discussion on the definition of the RLCF project pipeline, the EC unfolded the topic into three categories, namely objectives, constraints, and way forward. As for the objectives, the EC recalled the importance to identify gaps in the value chain, facilitate investment decisions and vertical business matchmaking with possible investors, whereas the main constraints, are the issue of confidentiality of information and the absence of public financing. On the way forward, some preliminary criteria to create a database for the project pipeline, as well as the intention to have members-only sessions and dedicated matchmaking sessions were outlined.

ANNEX

List of Members

- A.P. Møller - Mærsk A/S
- ACI EUROPE (Airports Council International)
- ACT group
- Aena SME S.A.
- AerCap Ireland Ltd.
- Aeroporti di Roma Spa
- Aerospace and Defence Industries Association of Europe (ASD)
- Air and Space Academy
- Air France-KLM
- Air Liquide
- AIRBUS
- aireg - Aviation Initiative for Renewable Energy in Germany e.V.
- Airlines International Representation in Europe
- Airport Regions Council
- APETRO – Energia em Evolução
- Argent Energy NL
- Asociación Española de Operadores de Productos Petrolíferos - AOP
- ASSARMATORI SHIPOWNERS ASSOCIATION
- Associação de Bioenergia Avançada (ABA)
- Assonave
- ATR
- Auris BioEnergy Inc.
- Autorités françaises
- Ballard Power Systems Europe
- Bioledger Ltd.
- BNP Paribas
- Boeing International Corporation
- BP plc
- bse Methanol GmbH
- BTG Biomass Technology Group BV
- Bureau Veritas Marine & Offshore
- Carbon Engineering
- Cargolux Airlines International S. A.
- CENA (Centre of Competence for Climate, Environment and Noise Protection in Aviation) as part of Hessen Trade & Invest GmbH
- CEPSA
- CETENA SPA
- Chantiers de l'Atlantique
- CIMAC e.V.
- Clariant
- Clean Air Task Force (CATF)
- CLIA Europe
- CO2 Value Europe
- Coalition for the energies of Tomorrow in Transport and Supply Chain
- Concawe
- Corncern Achema Group
- Costa Group
- Crédit Agricole Corporate and Investment Bank
- Cyprus Shipping Chamber
- Damen Research Development & Innovation BV
- Danish Shipping
- Danish Technological Institute
- Danske Maritime
- DASSAULT AVIATION
- Deutsche Post DHL Group
- Deutsches Zentrum für Luft - und Raumfahrt (German Aerospace Center)
- Dirección General de la Marina Mercante
- easyJet Europe Airline GmbH
- EBB - European Biodiesel Board
- Ecospray Technologies s.r.l.
- ECSA - European Community Shipowners' Association
- EDL Anlagenbau Gesellschaft mbH
- eFuel Alliance

- Electricité de France (EDF)
- Elyse Energy
- en2x - Wirtschaftsverband Fuels und Energie e. V.
- Enagás S.A.
- ENERGIA
- Enerkem inc.
- ENGIE
- Eni S.p.A.
- Ente Nazionale per l'Aviazione Civile
- Environmental Defense Fund Europe
- ePURE - European renewable ethanol
- ETIP Bioenergy
- EU IWT Platform
- EUROCONTROL
- Eurofuel
- Eurogas
- European Association of Internal Combustion Engine and Alternative Powertrain Manufacturers (EUROMOT)
- European Bank for Reconstruction and Development
- European Barge Union
- European Biogas Association
- European Boating Industry
- European Business Aviation Association - EBAA
- European Cockpit Association
- European Confederation of Fuel Distributors (ECFD)
- European Dredging Association (EuDA)
- European Energy A/S
- European Onshore Power Supply Association
- European Regions Airline Association Ltd. (ERA)
- European Sea Ports Organisation (ESPO)
- European Union Aviation Safety Agency
- EWABA
- Exolum Corporation S.A. (Exolum)
- ExxonMobil Petroleum & Chemical BV
- Fertilizers Europe
- FETSA Federation of European Tank Storage Associations
- Fincantieri S.p.A
- FinCo Fuel Group
- Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.
- French ministry of defense
- FuelsEurope
- GE Aviation
- General Aviation Manufacturers Association (GAMA)
- GICAN, Groupement des Industriels de la Constructions et des Activités Navales
- Goldman Sachs
- GoodFuels
- GoodFuels B.V.
- Green Enesys Deutschland GmbH
- Greenergy Fuels Ltd
- Greenergy Fuels Ltd
- Groupe ADP
- HELLENIQ Energy
- Hycamite TCD Technologies Ltd
- Hydrogen Europe
- Hydrogenious LOHC Technologies GmbH
- IBERIA LAE SA Operadora Unipersona
- IFP Energies nouvelles
- Impact on sustainable aviation e.Ve.
- IMT School for Advanced Studies Lucca
- Indian Register of Shipping
- IndustriAll European Trade Union
- Industrie De Nora Spa
- INERATEC GmbH
- Infinium Operations, LLC
- Inter IKEA Group
- International Air Transport Association (IATA)
- International Association of Classification Societies Ltd. (IACS)
- International Chamber of Shipping
- Intesa Sanpaolo
- KHIMOD
- Kuwait Petroleum International Aviation Company Limited

- Kuwait Petroleum Research and Technology (Q8Research)
- LanzaJet
- LanzaTech UK Ltd
- Leonardo S.p.A.
- Liquid Gas Europe
- Liquid Wind
- Lloyd's Register Group Limited
- LUXAIR
- Mabanaft GmbH & Co.KG
- Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping
- MAN Energy Solutions
- Meridiam
- MEROCO, a.s.
- Meyer Werft GmbH & Co. KG
- Mittelstandsverband abfallbasierter Kraftstoffe e.V. (MVaK)
- MOL Group
- MSC Mediterranean Shipping Company S.A.
- MTU Aero Engines
- NAVANTIA, S.A, S.M.E
- Neste
- Nextchem Spa
- Nexxoil GmbH
- NISA Nordic Initiative for Sustainable Aviation
- Nordic Electrofuel AS
- Norsk e-Fuel AS
- OCIMF
- Orano
- P2X-Europe GmbH & Co. KG
- PKN Orlen SA
- Politecnico di Torino
- Polskie Linie Lotnicze LOT S.A.
- Port Network Authority of the Eastern Adriatic Sea
- port of amsterdam NV
- Port of Antwerp - Bruges
- Port of Barcelona
- Power to X Hub
- Preem AB
- Proman AG
- QUATRA
- REPSOL
- Rolls-Royce
- Royal Belgian Shipowners Association
- Royal Caribbean Group
- RSB - Roundtable on Sustainable Biomaterials Association
- SAFRAN
- Sasol
- SEA Europe
- SEA\LNG Limited
- SERVICIOS Y ESTUDIOS PARA LA NAVEGACION AEREA Y LA SEGURIDAD AERONAUTICA SME MP SA (SENASA)
- Shell
- SkyNRG
- Sotacarbo - Società Tecnologie Avanzate Low Carbon S.p.A.
- SOWAER
- Stichting Projecten Binnenvaart - Expertise & Innovation Centre inland Barging (EICB)
- The Methanol Institute
- Topsoe A/S
- TotalEnergies S.E.
- Turkish Shipbuilders' Association
- U.S. Grains Council
- Ufip Energies et Mobilités
- ULPower Aero Engines NV
- Union of Greek Shipowners
- Unione Energie per la Mobilità - unem
- Uniper SE
- UPEI, Europe's Independent Suppliers Association
- UPM Biofuels
- VDMA Power-to-X for Applications
- Velocys PLC
- Verband Deutscher Reeder e.V. / German Shipowners' Association
- Verband für Schiffbau und Meerestechnik e.V. (VSM)
- Viridi RE
- voestalpine

- Wizz Air Innovation Ltd.
- World Economic Forum's Clean Skies for Tomorrow Coalition
- World Shipping Council
- Yara