



PRESS RELEASE

July 5th, 2021

The Coalition for the Energy of the Future launches the feasibility study of its first major project and welcomes three new members

- **Launch of the feasibility study of the first French project of BioLNG production within a large maritime port.**
- **Air Liquide, Kuehne+Nagel Group and Rolls-Royce join the Coalition.**
- **Tangible progresses and launch of new projects.**

Launched in late 2019, the Coalition for the Energy of the Future aims at accelerating the development of future energies and technologies to sustain new green mobility models and reduce the impact of transport and logistics on climate change.

Launch of the feasibility study of the first French project of BioLNG production within a large maritime port

On the occasion of its second CEO meeting of 2021, the Coalition for the Energy of the Future announces the launch of the feasibility study of the first French project of BioLNG production within a large maritime port. Developed by three of its members, this project will enable to advance the production and use of BioLNG for maritime transportation.

Made possible by the Coalition's work, this project will allow the transformation of household waste from the Métropole Aix-Marseille-Provence into liquefied biomethane (BioLNG) within the Port of Marseille Fos. This BioLNG will then be used to advance green mobility from the port, notably for the CMA CGM Group's LNG-powered vessels.

This major project represents a virtuous example of circular economy and will benefit from existing infrastructures at the Port of Marseille Fos: EveRé's (a household waste treatment center) methanation units, Elengy's (a subsidiary of ENGIE) LNG terminals for stocking and delivery, TotalEnergies' bunkering ship and CMA CGM's LNG vessels.

BioLNG combined with CMA CGM vessels' dual fuel engines will allow the reduction of at least 67% greenhouse gas emissions on a well-to-wake basis (entire value chain) and by 88% on a tank-to-wake basis (at ship level).

Air Liquide, Kuehne+Nagel Group and Rolls-Royce join the Coalition for the Energy of the Future

Already 14-member strong, the Coalition welcomes today the entry of three global companies recognized worldwide for their involvement into the emergence of technological innovations:

- Air Liquide, a world leader in gases, technologies and services for Industry and Health,
- Kuehne+Nagel Group, one of the world's leading logistics companies,
- Rolls-Royce, a leading engineering company focused on world-class power and propulsion systems.

They join Airbus, AWS, Bureau Veritas, Carrefour, Cluster Maritime Français, CMA CGM Group, Crédit Agricole CIB, ENGIE, Faurecia, Michelin, PSA International, Schneider Electric, TotalEnergies and Wärtsilä in the Coalition.

Together, they will bring the Coalition additional resources and talents to take up the challenge of tomorrow's sustainable transport and logistics.

Benoît Potier, President and CEO of Air Liquide group, said: *"In line with Air Liquide's commitment in favour of the energy transition, we are pleased to join the Energy of the Future coalition and the 17 major international companies that make it up. We are convinced of the benefits of a collective dynamic. In order to accelerate the energy transition*



of transport and the entire supply chain, we have to work together to provide concrete solutions and develop synergies. It is indeed by acting today and collectively, to prepare for the future and develop new models of sustainable mobility, that we can have a positive impact on tomorrow's society."

Otto Schacht, Member of the Management Board of Kuehne + Nagel International AG, responsible for Sea Logistics, said: "As a pioneer in sustainable logistics, we are pleased to join the Coalition for the Energies of the Future in Transport and Supply Chain. We are convinced that a collaborative, cross-industry approach will help to achieve the UN climate goals. Together, we strive to offer innovations for CO₂-neutral transport solutions, such as the new BioLNG project. As the world's leading logistics service provider connecting suppliers and customers, Kuehne+Nagel offers concrete sustainable actions for customers through our Net Zero Carbon programme."

Adam Morton - Head of Environmental Technology, Rolls-Royce plc. said, "We are pleased to join the coalition at a time when there is so much focus across industries to accelerate decarbonisation and drive the development of technologies that will support sustainable growth in the transport and logistics sectors. The coalition's aims and objectives complement Rolls-Royce's ambitions and targets recently published in our Net Zero pathway. We believe that collaboration is essential if we are to achieve the transition to net zero carbon and it is through the power of working together that we will succeed."

With these additional members, the Coalition continues to rally major global industry leaders from different sectors and pursues its ambition to accelerate the development of energies and technologies sustaining new, lower-carbon models to reach carbon-neutral objectives in transport and logistics.

Progresses and development of new projects

Since the beginning of 2021, the Coalition's working groups have made progress on several of the projects being developed:

- Tests and certification, as part of Carrefour's projects *Cathyope* and *H2Haul*, of the **first hydrogen 44 tons heavy truck** in the South of France and collection of non-binding intentions to convert, as a first phase, at least 100 Diesel trucks to green hydrogen trucks in Europe, to decarbonise heavy-duty transportation in the European Union across its entire value chain: green hydrogen production, hydrogen refuelling infrastructure and end-users.
- Engineering studies to be launched on **dedicated biofuel for shipping based on pyrolysis**, with first quantities to be produced by 2022 and industrialized as from 2023.
- Development of an **ecocalculator demonstrator** certifying door-to-door CO₂ impact on any given transportation routing as well as proposing low-emission alternatives with different levels of data details to allow shippers to precisely measure their carbon footprint.
- Publication in April 2021 of a **common manifest on renewable gases** to accelerate the energy transition. It is aimed at unveiling the potential of renewable gases in the energy transition and of the development of biomethane production across Europe.
- Technical studies on the **energy balance and electrification rate across transportation route** including terminals in Marseille and Singapore, to be followed by cost-benefit analysis on identified potential conversion areas. The studies have unveiled that by connecting vessel at quay we could save 5% of the total energy consumption on an Asia to Europe route, representing a potential saving of 50 tons of CO₂ per vessel call in average.

In addition, the Coalition is launching new projects to accelerate the development of new energies:

- the production and testing of **e-methane** for the shipping industry,
- the **warehouse of the future** and supply chain of tomorrow, and the new green model between warehouses and distribution centers,
- new **biofuels** for aviation.



- A study to create the digital twin of a “green multimodal hub” to synchronize and pilot the production and the distribution of green energies.

An international coalition with a clear pathway towards carbon neutrality

Launched in late 2019 during the French Maritime Economy Conference (*Assises de l’Economie de la Mer*), and supported by French President Emmanuel Macron, the Coalition for the Energy of the Future aims at accelerating the development of future energies and technologies to sustain new green mobility models to reduce the climate impact of transport and logistics.

To achieve genuine technological breakthroughs with tangible results by 2030, the Coalition’s three main goals are:

- To unlock a more extensive portfolio of clean energy sources;
- To decrease the energy consumption per kilometer-equivalent of goods mobility;
- To reduce the proportion of emissions linked to transport and logistics.

About Airbus

Airbus pioneers sustainable aerospace for a safe and united world. The Company constantly innovates to provide the most efficient and technologically-advanced solutions in aerospace, defence, and connected services. In commercial aircraft, Airbus offers the most modern and fuel-efficient airliners. Airbus Defence and Space is a European leader in defence and security and one of the world's leading space businesses. Airbus Helicopters provides the most efficient civil and military rotorcraft solutions worldwide.

Press Contact:

Matthieu Duvelleroy, +33629431564, matthieu.duvelleroy@airbus.com

About Air Liquide

A world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 78 countries with approximately 64,500 employees and serves more than 3.8 million customers and patients. Oxygen, nitrogen and hydrogen are essential small molecules for life, matter and energy. They embody Air Liquide’s scientific territory and have been at the core of the company’s activities since its creation in 1902.

Air Liquide’s ambition is to be a leader in its industry, deliver long term performance and contribute to sustainability - with a strong commitment to climate change and energy transition at the heart of its strategy. The company’s customer-centric transformation strategy aims at profitable, regular and responsible growth over the long term. It relies on operational excellence, selective investments, open innovation and a network organization implemented by the Group worldwide. Through the commitment and inventiveness of its people, Air Liquide leverages energy and environment transition, changes in healthcare and digitization, and delivers greater value to all its stakeholders.

Air Liquide’s revenue amounted to more than 20 billion euros in 2020. Air Liquide is listed on the Euronext Paris stock exchange (compartment A) and belongs to the CAC 40, EURO STOXX 50 and FTSE4Good indexes.

Media contact: media@airliquide.com

About Amazon Web Services

For almost 15 years, Amazon Web Services has been the world’s most comprehensive and broadly adopted cloud platform. AWS has been continually expanding its services to support virtually any cloud workload, and it now has more than 200 fully featured services for compute, storage, databases, networking, analytics, machine learning and artificial intelligence (AI), Internet of Things (IoT), mobile, security, hybrid, virtual and augmented reality (VR and AR), media, and application development, deployment, and management from 77 Availability Zones (AZs) within 24 geographic regions, with announced plans for 18 more Availability Zones and six more AWS Regions in Australia, India, Indonesia, Japan, Spain, and Switzerland. Millions of customers—including the fastest-growing startups, largest enterprises, and leading government agencies—trust AWS to power their infrastructure, become more agile, and lower costs.

To learn more about AWS, visit aws.amazon.com.

About Bureau Veritas

Bureau Veritas is a world leader in laboratory testing, inspection and certification services. Created in 1828, the Group has more than 75,000 employees located in more than 1,500 offices and laboratories around the globe. Bureau Veritas helps its clients improve their performance by offering services and innovative solutions in order to ensure that their assets, products, infrastructure and processes meet standards and regulations in terms of quality, health and safety, environmental protection and social responsibility.

Bureau Veritas is listed on Euronext Paris and belongs to the Next 20 index.

Compartment A, ISIN code FR 0006174348, stock symbol: BVI.

For more information, visit www.bureauveritas.com, and follow us on Twitter (@bureauveritas) and LinkedIn.

About Carrefour Group

With a multi-format network of some 12,300 stores in more than 30 countries, the Carrefour Group is one of the world's leading food retailers. Carrefour welcomes 105 million customers throughout the world and recorded revenue of €80.7 billion in 2019. It has more than 320,000 employees who help to make Carrefour the world leader in the food transition for everyone, providing everybody with access to high-quality, affordable food every day, in all locations.

For more information, visit www.carrefour.com, or find us on Twitter (@GroupeCarrefour) and LinkedIn (Carrefour).

About CMA CGM

The CMA CGM Group, a world leader in shipping and logistics headed up by Rodolphe Saadé, serves over 420 ports on 5 continents around the world. The Group’s fleet of 561 ships carried close to 21 million TEU (Twenty-foot Equivalent Unit) containers in 2020. With its CEVA Logistics subsidiary, a world-class logistics



provider carrying 400,000 tons of air freight and 2.8 million tons of overland freight every year, and CMA CGM Air Cargo, the CMA CGM Group is constantly innovating to offer its customers end-to-end services delivering performance gains through ground-breaking shipping, overland, air freight and logistics solutions. The CMA CGM Group is committed to leading the energy transition in shipping and has pioneered the use of alternative fuels. In addition, it has set itself the goal of being carbon-neutral by 2050. This program of continuous improvement has yielded concrete results and reduced the Group's total CO₂ emissions by 4% in 2020.

Via the CMA CGM Foundation, the Group reaches out to thousands of children every year with initiatives championing education for all and equal opportunities. The CMA CGM Foundation also responds to humanitarian crises with emergency relief by harnessing the Group's shipping and logistics expertise to carry humanitarian supplies to wherever they are needed around the world.

With a network of over 400 offices and 750 warehouses in 160 countries, the Group employs more than 110,000 staff members worldwide, 2,400 of whom are based in Marseille where it has its registered office.

cmacgm-group.com

Press Contact

media@cma-cgm.com

Follow the CMA CGM Group on:



About Cluster Maritime Français

Since 2006, the French Maritime Cluster has been promoting France's maritime economy and supporting its key players.

The CMF consists of 430 members including shipowners, shipbuilding, marine equipments, ship maintenance, repair and conversion, ports, fishing operators, manufacturers, marine competitiveness clusters, the French Navy, marine and oceanographic research, water sports, yachting, education, shipping bankers, brokers, insurers, classification service providers, etc.

The French Maritime Cluster created the « Maritime Eco-Energy Transition – MEET 2050 » Coalition in December 2019 with the French President in partnership with the Ministry of the Seas and ADEME, Companies Research Centers and Federations. This Coalition aims to define the « 0 emission ships&ports Program » to design the future energy models and the financing solutions of this pathway. For that the Coalition has created a first digital platform for information and decision making and is developing a R&D Center to foster the development and the deployment of key technologies.

For more information, please find English presentation: <https://urlz.fr/q2q3>

About Crédit Agricole Corporate and Investment Bank (Crédit Agricole CIB)

Crédit Agricole CIB is the corporate and investment banking arm of Credit Agricole Group, the 12th largest banking group worldwide in terms of tier 1 capital (The Banker, July 2020). Nearly 8,400 employees across Europe, the Americas, Asia-Pacific, the Middle East and Africa support the Bank's clients, meeting their financial needs throughout the world. Crédit Agricole CIB offers its large corporate and institutional clients a range of products and services in capital markets activities, investment banking, structured finance, commercial banking and international trade. The Bank is a pioneer in the area of climate finance, and is currently a market leader in this segment with a complete offer for all its clients.

For many years Crédit Agricole CIB has been committed to sustainable development. The Bank was the first French bank to sign the Equator Principles in 2003. It has also been a pioneer in Green Bond markets with the arrangement of public transactions from 2012 for a wide array of issuers (supranational banks, corporates, local authorities, banks) and was one of the co-drafter of Green Bond Principles and of the Social Bond Guidance. Relying on the expertise of a dedicated sustainable banking team and on the strong support of all bankers, Crédit Agricole CIB is one of the most active banks in the Green bonds market.

For more information, please visit www.ca-cib.com

For more information, please visit: www.ca-cib.fr

About ENGIE

Our group is a global reference in low-carbon energy and services. Together with our 170,000 employees, our customers, partners and stakeholders, we are committed to accelerate the transition towards a carbon-neutral world, through reduced energy consumption and more environmentally-friendly solutions. Inspired by our purpose ("raison d'être"), we reconcile economic performance with a positive impact on people and the planet, building on our key businesses (gas, renewable energy, services) to offer competitive solutions to our customers.

Turnover in 2020: 55.8 billion Euros. The Group is listed on the Paris and Brussels stock exchanges (ENGI) and is represented in the main financial indices (CAC 40, DJ Euro Stoxx 50, Euronext 100, FTSE Eurotop 100, MSCI Europe) and non-financial indices (DJSI World, DJSI Europe, Euronext Vigeo Eiris - Eurozone 120/ Europe 120/ France 20, MSCI EMU ESG, MSCI Europe ESG, Euro Stoxx 50 ESG, Stoxx Europe 600 ESG, and Stoxx Global 1800 ESG).

About Faurecia

Founded in 1997, Faurecia has grown to become a major player in the global automotive industry. With almost 300 sites including 30 R&D centers and 115,500 employees in 37 countries, Faurecia is a global leader in its four areas of business: seating, interiors, Clarion Electronics and clean mobility. Faurecia has focused its technology strategy on providing solutions for the cockpit of the future and sustainable mobility. In 2019, the Group achieved total turnover of €17.8 billion. Faurecia is listed on the Euronext Paris stock exchange.

For more information, please visit: www.faurecia.com

About Kuehne+Nagel

With 72,500 employees at 1,400 locations in over 100 countries, the Kuehne+Nagel Group is one of the world's leading logistics companies. Its strong market position lies in sea logistics, air logistics, road logistics and contract logistics, with a clear focus on integrated logistics solutions.

For more information, visit www.kuehne-nagel.com

About Michelin

Michelin, the leading mobility company, is dedicated to enhancing its clients' mobility, sustainably; designing and distributing the most suitable tires, services and solutions for its clients' needs; providing digital services, maps and guides to help enrich trips and travels and make them unique experiences; and developing high-technology materials that serve a variety of industries. Headquartered in Clermont-Ferrand, France, Michelin is present in 170 countries, has 123,600 employees and operates 71 tire production facilities which together produced around 170 million tires in 2020.

www.michelin.com



About PSA International

PSA International (PSA) is a leading port group and trusted partner to cargo stakeholders. With flagship operations in Singapore and Antwerp, PSA's global network encompasses over 50 locations in 26 countries around the world. The Group's portfolio comprises 60 deepsea, rail and inland terminals, as well as affiliated businesses in distriparks, warehouses and marine services. Drawing on the deep expertise and experience from a diverse global team, PSA actively collaborates with its customers and partners to deliver world-class port services alongside, develop innovative cargo solutions and co-create an Internet of Logistics. As the partner of choice in the global supply chain, PSA is "The World's Port of Call".

Visit us at www.globalpsa.com.

About Rolls-Royce

Rolls-Royce pioneers the power that matters to connect, power and protect society. We have pledged to achieve net zero greenhouse gas emissions in our operations by 2030 [excluding product testing] and joined the UN Race to Zero campaign in 2020, affirming our ambition to play a fundamental role in enabling the sectors in which we operate achieve net zero carbon by 2050.

Rolls-Royce has customers in more than 150 countries, comprising more than 400 airlines and leasing customers, 160 armed forces and navies, and more than 5,000 power and nuclear customers.

Annual underlying revenue was £11.76 billion in 2020 and we invested £1.25 billion on research and development. We also support a global network of 28 University Technology Centres, which position Rolls-Royce engineers at the forefront of scientific research.

About Schneider Electric

At Schneider, we believe access to energy and digital is a basic human right. We empower all to make the most of their energy and resources, ensuring Life Is On everywhere, for everyone, at every moment.

We provide energy and automation digital solutions for efficiency and sustainability. We combine world-leading energy technologies, real-time automation, software and services into integrated solutions for Homes, Buildings, Data Centers, Infrastructure and Industries.

We are committed to unleash the infinite possibilities of an open, global, innovative community that is passionate about our Meaningful Purpose, Inclusive and Empowered values.

www.se.com

Découvrez Life is On

Suivez-nous sur :



About Wärtsilä

Wärtsilä is a global leader in smart technologies and complete lifecycle solutions for the marine and energy markets. By emphasising sustainable innovation, total efficiency and data analytics, Wärtsilä maximises the environmental and economic performance of the vessels and power plants of its customers. In 2020, Wärtsilä's net sales totalled EUR 4.6 billion with approximately 18,000 employees. The company has operations in over 200 locations in more than 70 countries around the world. Wärtsilä is listed on Nasdaq Helsinki.

www.wartsila.com

About TotalEnergies

TotalEnergies is a broad energy company that produces and markets energies on a global scale: natural gas and green gases, renewables and electricity. Our 105,000 employees are committed to energy that is ever more affordable, clean, reliable and accessible to as many people as possible. Active in more than 130 countries, TotalEnergies puts sustainable development in all its dimensions at the heart of its projects and operations to contribute to the well-being of people.

Media contact: +33 1 47 44 46 99 | presse@totalenergies.com | @TotalEnergiesPR

Investors : +44 (0)207 719 7962 | ir@totalenergies.com

Cautionary Note

This press release, from which no legal consequences may be drawn, is for information purposes only. The entities in which TotalEnergies SE directly or indirectly owns investments are separate legal entities. TotalEnergies SE has no liability for their acts or omissions. In this document, the terms "TotalEnergies", "TotalEnergies Company" and "Company" are sometimes used for convenience. Likewise, the words "we", "us" and "our" may also be used to refer to subsidiaries in general or to those who work for them. This document may contain forward-looking information and statements that are based on a number of economic data and assumptions made in a given economic, competitive and regulatory environment. They may prove to be inaccurate in the future and are subject to a number of risk factors. Neither TotalEnergies SE nor any of its subsidiaries assumes any obligation to update publicly any forward-looking information or statement, objectives or trends contained in this document whether as a result of new information, future events or otherwise.