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Nidal I., Air Liquide Paramedical Assistant with a patient at home
Conversation

The global health crisis that we are facing is unprecedented in terms of size and complexity. It has had a major impact on our lives, global economic activity and the organization of companies. It has also highlighted Air Liquide’s collective strength and solidarity, as well as its ability to implement and innovate. A look back at the management of this unprecedented crisis with Benoît Potier.

What are your thoughts on the Group's response to the COVID-19 pandemic?
Benoît Potier: I would like, first of all, to congratulate Air Liquide employees across all business lines and functions worldwide. Their response to the crisis demonstrated an outstanding level of professionalism, commitment and ability to adapt. Despite the uncertain environment, they worked hard to ensure the continuity of our businesses. I would like to thank, in particular, the Healthcare teams who took action in record time, to increase the production of medical oxygen and the manufacturing of respirators, as well as support the set-up of field hospitals in several countries. I would also like to thank our IT teams who were particularly mobilized to help facilitate remote working. The individual and collective commitment and solidarity seen across all entities make me very proud to manage the Air Liquide Group.

What impact do you believe this crisis has had on the Group's performance?
B. Potier: Of course, we have been impacted by this crisis. Nonetheless, our unique business model is our greatest strength to overcome it. Our business model is solid, as it is based on the diversity of our customers and our applications, our strong capacity for innovation, the existence of long-term contractual relationships and our presence at the heart of local economies. Moreover, the strategic decisions taken in recent years, which have allowed us to consolidate our positions in certain markets and regions, have made us stronger and more able to respond to this situation. We have also taken specific measures to mitigate the impact of the crisis and thus increase our resilience: improved cash and cost control, increased efficiency investments while maintaining the total amount forecast for the year, and strengthening Group liquidity with a €1 billion bond issue. These measures, coupled with our good 2019 results, provide us with a strong basis to overcome the crisis.

In the longer term, how do you see Air Liquide’s future in this new global context?
B. Potier: This crisis encourages us, more than ever, to invent the future. A new world is emerging and requires a new approach to globalization, healthcare, the environment and digitization. Air Liquide has a key role to play in these major transformational challenges. Our strong commitment to the markets of the future, our presence spread over 80 countries and our ability to innovate are undeniable to emerge from this crisis even stronger. I have faith in the Group’s future and fully believe that the proven commitment of our employees will allow us to continue our profitable, regular and responsible growth for a sustainable social model.
Thank you

... to all the Air Liquide employees mobilized since the beginning of the COVID-19 pandemic, both those in the field and those working remotely. The Healthcare teams, in particular, have been fully mobilized to provide hospitals, healthcare workers and patients at home with the essential medical gases and necessary equipment to manage the health crisis.

Read the testimonies of our employees on pages 10-11
Innovation

USING CO₂ TO PRODUCE CONCRETE WITH LOW ENVIRONMENTAL IMPACT

At the beginning of 2020, Air Liquide renewed its partnership with Solidia Technologies, a U.S. start-up that develops solutions to reduce the environmental footprint of precast concrete.

The aim of this partnership? To use CO₂ as part of the concrete manufacturing process in order to reduce its carbon footprint by 70% compared with traditional concrete.

FOR AIR LIQUIDE ▶ This collaboration positions the Group as Solidia Technologies’ preferred supplier of CO₂ and injection equipment. This development is in line with the Group’s Climate objectives. It illustrates the work that the Group is carrying out with customers and innovation ecosystems toward the development of a sustainable industry.

FOR SOLIDIA TECHNOLOGIES ▶ This partnership, which follows a pilot phase initiated in 2016, represents a springboard for developing innovative products, entering new markets and offering sustainable solutions for the global concrete market.

Finance

SUCCESSFUL NEW BOND ISSUANCE

In April 2020, Air Liquide issued €1 billion in bonds. This operation allowed refinancing its June 2020 bond maturities in advance. It will also allow to secure financing its long-term profitable growth. The success of the bond issuance, which was oversubscribed (investors demand was 18 times greater than the supply), demonstrates that the resilience of Air Liquide’s diversified business model is well understood by the markets, especially in these uncertain and troubled times.

€1 bn
IN BONDS
ACHIEVEMENTS

Energy transition
TOWARD A LOW-CARBON INDUSTRY

Air Liquide and BASF, the world-leading chemical company, signed three new long-term contracts in the basin of Antwerp, Belgium. The Group has been supplying BASF with gases for over 50 years in this major industrial basin. These new contracts are consistent with a low carbon footprint approach, in line with the Group’s Climate objectives. Indeed, Air Liquide will build and operate a new unit to supply BASF with high-purity gases, enabling a more efficient production of an important chemical component used in house insulation. Air Liquide will also purchase part of the methane generated during the BASF production process and valorize it as a feedstock in its hydrogen production plants on site. This will contribute to developing a circular economy and help reduce CO$_2$ emissions up to 15,000 tons per year on the Antwerp site.

Climate
DOUBLE “A” FOR AIR LIQUIDE

Just over a year following the announcement of its Climate objectives, Air Liquide enters the narrow circle of companies that have obtained a double “A” from the CDP. This double “A” recognizes the Group’s commitment to promote environmental protection and sustainable water management.

“

We are extremely proud to have obtained a double “A” from the CDP. This score rewards our innovative initiatives in favor of a low-carbon society. Helping solve environmental and energy transition challenges is one of the Group’s key ambitions.

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DAVID MENESES,
AIR LIQUIDE VICE PRESIDENT SUSTAINABILITY

(1) An international non-profit organization that evaluates companies on their environmental action.

Electronics
A MAJOR INVESTMENT IN THE FIELD OF SEMICONDUCTORS

Air Liquide will invest nearly €200 million in the construction of production units at the Tainan and Hsinchu Science Parks in Taiwan, two of the most advanced semiconductor production basins in the world. Forming part of a long-term agreement with a leader in electronics, this investment will allow the Group to supply ultra-high purity hydrogen and oxygen—along with nitrogen, argon and helium—to semiconductor manufacturing plants under construction at the two sites. This agreement reflects the Group’s ability to provide innovative, low-carbon solutions to its customers. For example, hydrogen will be produced from renewable energy, which will avoid approximately 20,000 tons of CO$_2$ emissions per year.
COVID-19

Mobilized during the health crisis

Protecting the health of employees, customers, patients and partners; ensuring continuity of service in essential sectors such as healthcare, energy and the food industry; responding to the health emergency by supporting unprecedented measures throughout the world to fight the COVID-19 pandemic…

Spotlight on an exceptional mobilization.
From the very beginning of what has become a global health crisis, the Group has prepared and mobilized itself across the globe, putting its continuity plans into action and implementing remote working for its teams.

Healthcare teams on the front line
The Healthcare teams quickly organized themselves in order to meet the increased demand for medical oxygen, to guarantee the supply of equipment such as respirators for hospitals and to secure the return of stabilized patients to their homes. Within a few weeks, this mobilization became essential to helping healthcare workers save lives.

Medical oxygen demand increased five-fold, sometimes even six-fold, in the most affected areas. In China, the Huaerwen site teams tripled their cylinder-filling capacity in order to secure supplies to 450 hospitals in the east of the country. All over the world, our teams have had to implement or adapt installations in record time—such as the San Maurizio de Bolzano hospital in Italy, where an oxygen tank was installed in a few days.

To meet the increased needs of hospitals in France and in response to the Government’s request, Air Liquide has partnered with Groupe PSA, Schneider Electric and Valeo to produce 10,000 respirators over 50 days, the equivalent of its usual production over three years. “We faced a truly industrial, but also human challenge”, explains Benoît Potier, Chairman and Chief Executive Officer of the Group.

Supporting hospitals also means relieving them. Working alongside medical teams, Home Healthcare entities in Europe have supported the return home of COVID-19 patients requiring oxygen therapy treatment after leaving the hospital. They have also continued to support patients suffering from chronic diseases through the use of special measures: remote video follow-ups and home visits for the most critical patients, in accordance with specific safety protocols.

The significant mobilization efforts of our employees have been recognized many times by healthcare professionals and patients alike.

Exceptional measures in an unprecedented situation
Air Liquide teams have been involved in initiatives that have emerged in China, Europe, the United States, Brazil, etc. For example, they have been working to convert certain locations (parking lots, stadiums, etc.) into field hospitals. Over four days, the Palacio Municipal...
MARCHÉS convention center in Madrid (IFEMA) was turned into Spain’s largest hospital, with 5,500 beds, over a third supplied with medical gases.

In France, Air Liquide was involved in the implementation of medicalized high-speed trains in order to relieve overcrowded hospitals in the East region. The Group also contributed to the early opening of a new intensive care unit at the Henri-Mondor AP-HP hospital(1), located in the Paris area.

Unfailing solidarity
Spontaneous acts of solidarity have increased. Across the world, employees of different Group entities have come forward to help their Healthcare colleagues. Home Healthcare entities, for their part, have provided hospitals with concentrators, respirators and hospital beds—all precious resources during this time of crisis. The Air Liquide Foundation has proactively contributed to this dynamic by supporting scientific research projects connected with the pandemic. Out in the field, it has also increased aid for local associations that are operating among the most vulnerable communities.

Ensuring the continuity of essential activities
A further challenge has been maintaining and adapting the gas supply in order to guarantee the supply chain for essential sectors such as the food industry, energy or healthcare. At its sites, Air Liquide has refocused its operations on the production of molecules that are essential to health, nutrition and mobility. This continuity of service has been recognized by many of our customers. Teams have also been mobilized in Electronics in order to ensure the supply of advanced materials required for the manufacture of semiconductors, essential for the digital infrastructures that were particularly in demand during the crisis.

In tackling these industrial and human challenges, Air Liquide is more than ever in line with its ambition to contribute to a sustainable society, with all its stakeholders.

HEALTHCARE, A LONG-STANDING COMMITMENT
For many years, Air Liquide has been a major player in home healthcare throughout the world, an expert in homecare for chronic diseases and a supplier of medical gases for hospitals. Today, the Group helps 1.7 million patients at home and 15,000 hospitals and clinics in over 35 countries.

10,000 RESPIRATORS IN 50 DAYS

I want to thank Air Liquide for all the efforts made to continue taking care of patients, despite the risks involved.

PEDRO, FATHER OF LUIS A CHILD WITH DIABETES (SPAIN)(2)

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(1) Assistance publique–Hôpitaux de Paris (Public assistance hospitals of Paris): public health institution in France.
(2) Names have been voluntarily changed to protect confidentiality.
GLOBAL MOBILIZATION IN THE FACE OF A HEALTH EMERGENCY

Faced with the COVID-19 pandemic, Air Liquide has responded in record time to the health emergency and taken on a significant challenge—both industrial and human—to ensure the continuity of its operations and services, in order to provide the very best support to healthcare workers and patients. Air Liquide has demonstrated its agility in responding to unprecedented and urgent demands.

Enhanced support for hospitals

Increased medical oxygen capacity across the world in order to meet the demand for oxygen, which has increased five-fold, sometimes even six-fold, in the most affected areas.

Provision of materials (concentrators, respirators, tanks, hospital beds, etc.) to support hospitals facing an influx of patients.

Adapted assistance for patients at home

At-home follow-ups for patients suffering from chronic diseases during lockdown have been adapted through the use of special measures: remote video follow-ups and visits for at-risk patients, in strict accordance with healthcare guidance. The teams have also supported the return home of COVID-19 patients requiring oxygen therapy treatment or those suffering from other diseases, after leaving hospital, helping to alleviate overcrowding in hospitals.

Unprecedented measures at an industrial and human level to support healthcare workers

10,000 respirators in 50 days: this is the challenge that Air Liquide has taken on, in partnership with a number of industrial manufacturers (Groupe PSA, Schneider Electric and Valeo) and around 100 small and medium-sized enterprises.

High-speed trains, buses, boats: transportation modes equipped with oxygen cylinders to evacuate patients.

Supporting the installation of field hospitals throughout the world (Brazil, Canada, China, Spain, United States, France, Italy, etc.).
Alongside healthcare workers and patients

No matter their job, the COVID-19 pandemic has changed the daily lives of all employees, particularly those at Air Liquide Healthcare. They have learned to adapt and overcome challenges in order to respond to the emergency and to provide healthcare professionals and patients with the best support. Some of them tell us their experience.

Ahmed Osman
Cryogenic Field Service Technician, Airgas, New York City, United States

“During this crisis period, we offered to take over the monitoring of medical gases so that healthcare professionals could focus on their primary task: caring for patients. We’ve also expanded our workforce in certain facilities. It was an honor to see our technicians working alongside healthcare professionals and knowing they could count on us.”

Cheng Chufu
Project Department Manager of Huaerwen Plant, Air Liquide China in Wuhan

“Between March and April, I visited over 50 hospitals to provide maintenance to oxygen installations. There were between four and seven emergencies a day — sometimes I had to manage two at the same time; while working at one hospital I had to respond to another site through video call. Dealing with all calls was essential in order to allow the hospitals to continue to treat patients. I am proud that we were and are able to keep the hospitals functioning at maximum capacity.”

“Several hospitals in Wuhan asked us to upgrade or adapt their medical oxygen supply system. For example, at the Red Cross hospital, my team upgraded their current system and also installed a new one, allowing the hospital to increase its capacity. With no more cylinders to replace, healthcare professionals had more time to treat more patients.”

TESTIMONIES
“What makes me most proud is that, despite all the changes we’ve had to face and the concerns over this crisis, we’ve never stopped working. Our work is critical. It’s one of the reasons why we kept going. I will never forget the strength to move forward that I could see in each and every colleague and the tremendous sense of collaboration between all… The teamwork has been fantastic!”

*Sébastien Francisce*
Former Home Healthcare Technician and Stock Employee, Orkyn

“Fernando Augusto Bucci
Medical Projects and Installations Specialist, Air Liquide Brazil

“We’ve risen to a major challenge: equipping thousands of hospital beds across Brazil over a short period of time and providing the necessary equipment, despite numerous suppliers being shut down. In 30 days, we set up 3,200 hospital beds for COVID-19 patients with oxygen and compressed air, using 52,000 meters of piping. Every single team member has worked hard to tackle this challenge!”

*Francesco Montresor*
Maintenance Operator, Air Liquide Italy

“Laurence Mouchel
Nurse Advisor, VitalAire, France

“As I could no longer visit my patients, I’ve had to change my working methods and offer follow-ups over the phone. This hasn’t changed the quality of the support process at all, as I access their data in a secure way. When they are worried, I take the time to reassure them and they are always grateful. In some situations I’m able to see my patients via video call, which makes me feel closer to them.”

*Faïçal Id Hamou*
National Manager of Hospital Service Advisors at Air Liquide Healthcare, France

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ON AIR

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