At a Glance gives Total an opportunity to concisely showcase the purpose that drives us: supplying energy that is more affordable, more reliable, cleaner and accessible to as many people as possible.

Above all, it’s a story about people, and about the efforts made by our employees — alongside our customers, partners and all our stakeholders — to meet the needs of a growing population. Heating, lighting and transportation are just some of the daily necessities made possible by the energy we produce.

As we finalize this issue of At a Glance, the COVID-19 pandemic has turned 2020 into a year of the unexpected. The global health crisis has claimed thousands of lives and mobilized all available resources, effectively bringing the global economy to a grinding halt. Magnified by the decision made by certain producing countries to increase their production, the impact has caused oil prices to plummet. And yet, in the midst of these health and economic crises, there is another major crisis we must not forget — climate change.

That’s why Total shares the ambition of getting to net-zero emissions by 2050, together with society, for its global business across its production and energy products used by its customers.

To achieve this ambition, we’ve identified four strategic avenues: integrated expansion across the natural gas value chain, strong growth in low-carbon electricity, encouraging more economical use of oil, and developing businesses that contribute to carbon neutrality, such as carbon capture and storage solutions and natural carbon sinks.

Aware of our role in society, we also work with our host communities to make a positive contribution to their development that goes beyond our operations. Through Total Foundation, our global citizenship program, we take action in four priority areas: youth inclusion and education, road safety, forests and climate, and cultural dialogue and heritage.

Today, more than ever, we must tap into the values and resources that define who we are, individually and collectively, to achieve our ambition of becoming the responsible energy major.

Patrick Pouyanné, Chairman and Chief Executive Officer
Our Ambition: Become the Responsible Energy Major

Our goal is to meet growing global energy demand, while transitioning toward a lower-carbon energy mix and making our operations increasingly environmentally responsible. That’s why Total shares the ambition to get to net-zero emissions by 2050 together with society, for our global business across our production and energy products used by our customers.

Meeting growing energy demand while shifting toward a lower-carbon energy mix

More natural gas, the lowest-carbon fossil fuel.

- Breakdown of our gas and oil production

Rapidly increasing renewable (wind, solar, hydro) power generation capacity.

- Renewable energy generation, in gigawatts (GW)

In 2019

- $1 billion invested in R&D, of which 40% in low-carbon

Each year

- $1.5 - 2 billion invested in low-carbon electricity

Getting to net-zero emissions by 2050

- Our objective: reduce our greenhouse gas emissions (GHG).
- Reduce the carbon intensity of the products sold to our customers worldwide by 60% between now and 2050.
Energy that is more affordable, more reliable and cleaner

Total produces the energy that is essential for such basic daily needs as transportation, heating and lighting.
A Broad Energy Company

To meet the climate challenge, Total is shifting to an increasingly decarbonized energy mix. For our operations, that means ramping up our development of renewable energies and increasing the portion of natural gas — the lowest-carbon fossil fuel.

The Age of Low-Carbon Electricity

Rapid growth in low-carbon electricity, generated from natural gas or renewable energy sources such as solar, wind and hydropower, will help reduce global CO₂ emissions. By investing $1.5-2 billion annually in low-carbon electricity, Total is actively supporting this growth.

Today, Total’s gross low-carbon power generation capacity is around 7 gigawatts (GW), of which more than 3 GW came from renewable energy sources in 2019. In the first quarter of 2020, 6 GW of new capacity was announced, in Qatar, India, Spain and France. The faster pace of deployment reflects our 2025 target of 25 GW of gross installed power generation capacity from renewable sources worldwide.

Total is building a large-scale solar power plant in Qatar. With its 2 million bifacial solar panels, installed over an area of 1,000 hectares, the Al Kharsaah Solar Park will produce 800 megawatts (MW) of power from as early as 2022. In India, Total has expanded its partnership with Adani Group, India’s largest privately-owned energy conglomerate, by acquiring 50% of a 2 GW solar power portfolio.

Another source of renewable energy is wind power. After the acquisition of French company Vents d’Oc in 2019, our Total Quadran affiliate acquired Global Wind Power France, which has a portfolio of onshore wind projects that represent more than 1,000 MW in total, including 250 MW scheduled to come on stream by 2025. The acquisition adds to our 1,300 MW of existing gross wind power generation capacity worldwide.

Natural Gas: A Key Partner to Renewables

A cornerstone of our strategy and a key component in our energy mix, natural gas now accounts for more than half of Total’s oil and gas production. Emitting only half as much greenhouse gas in power generation as coal, natural gas is the lowest-carbon fossil fuel and its flexibility makes it a key partner for renewables, which are seasonal and intermittent by nature.

In the North Sea, production started up in 2019 at the Total-operated Culzean field, which is made up of two reservoirs located more than 4,000 meters below sea level. The largest gas project developed in the United Kingdom in the past 25 years, Culzean could meet 5% of the country’s gas demand.

By acquiring the Mozambique LNG project in 2019, Total has consolidated its position as the world number two in LNG, with access to 1.84 billion cubic meters of recoverable natural gas resources. Almost 90% of production is already sold, to buyers in Asia and Europe, and some of the gas produced will be fed into the domestic market to help fuel the country’s economic development.

Alternative Exploration Methods

To make exploration safer and more environmentally responsible, Total is turning to new technologies. The METIS project, for example, is based on the idea of exploring difficult-to-access areas by air. Drones are used to drop wireless seismic sensors known as DARTs®, which then send the data collected in real-time to a distant processing center. Validated during a first pilot in Papua New Guinea, METIS is now being used in the deserts of Abu Dhabi.

Reducing Emissions from Our Operations

To speed up the deployment of low-carbon solutions for all our operations and infrastructure, Total has created the CO₂ Fighters Squad. Thanks to Total-developed solutions and detailed knowledge of our operations, the team is driving the implementation of projects across the organization to help us achieve our global ambition of net-zero emissions from our operations by 2050.
Lower-Carbon Products

Our goal for 2050 is to reduce the average carbon intensity of the Total energy products used by our customers worldwide by at least 60%. To achieve this, we’re adapting our industrial base and developing a new, more environmentally responsible product offering, which will also give rise to new practices.

Total Ecosolutions Turns Ten

Awarded to Total products and services that deliver a full lifecycle environmental performance that is better than the market standard, the Total Ecosolutions label has avoided the emission of 12 million tons of CO₂ over the past ten years.

Recycled Plastics with Synova

Thanks to the acquisition of Synova, Total will double its capacity to produce high-performance recycled polypropylene for the automotive industry by 2021. By helping to make vehicles lighter, plastics enhance energy efficiency and reduce CO₂ emissions. Producing them from recycled materials, in line with a circular economy approach, also enables us to improve the management of end-of-life plastics.

More Efficient Batteries with Saft

As an electric energy storage solution, batteries are fundamental to the success of electric mobility and represent around 30-40% of an electric vehicle’s value. In 2020, our Saft affiliate, a world leader in advanced-technology batteries for industry, launched a joint project with automaker PSA to develop a production chain for electric vehicle batteries that will deliver the highest level of performance, in terms of range, charging time and battery life.

Increasingly Biobased Fuels and Plastics

Total converts energy into intermediate and finished products that meet customers’ needs. Our low-carbon solutions enable us to use fewer fossil fuels and more renewable and recyclable materials to manufacture the products we sell.

These solutions include sustainable biofuels, which can reduce carbon emissions by at least 50% versus their fossil equivalents. In 2019, Total started up production at the La Mède biorefinery in France. Designed to process all types of oil, the biorefinery will produce 500,000 tons of premium biofuel HVO from vegetables oils, such as rapeseed, palm and sunflower, and from treated waste and residues – animal fats, cooking oil and fatty acid distillates. One of Europe’s largest biorefineries, La Mède will also be able to supply biofuel to the aviation industry. More than 100,000 tons of biojet fuel will ultimately be produced at La Mède each year to help decarbonize air transportation.

Another key milestone was the start-up of our bioplastics plant in Thailand, which produces 75,000 metric tons of polylactic acid (PLA) a year. Made from GMO-free sugar cane and industrially compostable, this polymer is capable of competing with the polymers traditionally used in such areas as packaging production.

Innovative Electric Vehicle Fluids

The fourth-largest lubricant retailer in the world, Total supports new transportation solutions by creating products that are tailored specifically to their needs. Developed by our R&D teams, Total Quartz EV Fluid and Total Rubia EV Fluid were the first fluid ranges on the market to meet the cooling and lubrication requirements of hybrids and electric vehicles.
Whether in connected megacities, isolated rural areas, shipping ports, airports or industrial zones, Total makes its products available to business customers and consumers worldwide.
Shifting Our Offering Toward Electricity

As a contributor to electric mobility and a supplier of gas and power, Total enables businesses and consumers to meet their transportation and lighting needs while limiting their environmental footprint.

150,000 charging points for electric vehicles in Europe by 2025

15% share of the consumer gas and power market in France and Belgium by 2025

An Expanding, Evolving Network

Every day, more than 8 million customers stop at our 15,000 service stations worldwide. With a broad range of solutions and services that include car wash facilities, stores and fast food outlets, our service stations are more than just a place to fill up the tank. With the opening of Total-branded stations in Mexico, Brazil and soon Saudi Arabia and India, our retail network continues to expand into new markets.

To support the energy transition and meet the changing needs of our business customers and consumers, our products and services are also evolving. This is the case, for example, with electric mobility, which is transforming our distribution model. With the advent of electric vehicles, we created Total EV Charge, a charging network operator that offers a comprehensive charging point installation and management package and a portfolio of related mobility services to support customers throughout their journey — whether they’re at home or at work, at one of our service stations or on a public road.

In 2019, Total was awarded the largest public electric vehicle charging contract in Europe. Under the new contract, Total could install and operate up to 20,000 new public EV charging points across the Netherlands. The EV charging network will be powered by 100% renewable electricity supplied by Total Netherlands.

Putting Our Gas & Power Solutions in the Home

From production to marketing, Total is integrated across the entire gas and power value chain in Europe and aims to reach 10 million customers by 2025. Having supplied gas to business customers for several decades, Total has now extended the scope of its offering to include low-carbon electricity in several European countries and consumers in France and Belgium. With our Total Direct Énergie and Lampris brands, our target for 2025 is a 15% share of the consumer gas and power market in these two countries. Our goal is to meet growing demand while offering less costly energy solutions, as well as services that also generate cost savings.

Solar Solutions to Drive Development

Even today, close to one billion people worldwide lack the means to light their homes after dark. Total Access To Energy Solutions is tasked with developing responsible energy solutions and making them available to as many people as possible. Celebrating its tenth anniversary in 2020, the program has already enabled the distribution of 3.5 million solar lamps and kits in 40 countries with limited access to energy. These solutions tangibly improve the day-to-day personal and professional lives of more than 15 million people in isolated, off-grid areas, by enabling them to work, cook, study and get around.

More Than 1,000 Stations Already Solarized

Total’s objective is to install solar panels at 5,000 service stations in 57 countries, driving a reduction in their CO₂ emissions of more than 50,000 metric tons per year. At the same time, we are also carrying out projects to solarize our industrial and commercial sites. The projects identified to date will generate more than 200 MW, equivalent to the amount of electricity used by a city with 200,000 people.
Developing Across the Low-Carbon Electricity Value Chain

Worldwide, demand for electricity is growing twice as fast as primary energy demand and is expected to increase by 50% between 2015 and 2040, with growth driven by China and India. From power generation to power storage and sale to end customers, Total is developing solutions to meet this challenge.

We’re strengthening our low-carbon electricity production capacity worldwide

7 GW of production capacity in 2019, of which:

- 4 GW from natural gas
- 3 GW from renewable energy sources

2025 target 25 GW

We’re developing storage solutions

Offsetting the variability of renewable energies

We’re deploying electric vehicle charging points and the associated services

A service station every 150 km in Western Europe equipped with high-power charging points by 2022

In Europe, we’re supplying gas and power to a growing number of business customers and consumers

We’re developing storage solutions

In Europe, we’re supplying gas and power to a growing number of business customers and consumers

Companies, municipalities

Supply

Consumers

From power generation to power storage and sale to end customers, Total is developing solutions to meet this challenge.

In Europe, we’re supplying gas and power to a growing number of business customers and consumers

We’re deploying electric vehicle charging points and the associated services

Supporting electric mobility by developing more efficient batteries

As well as cleaner, more reliable access-to-energy solutions for the most isolated communities

3.5 million solar lamps and kits have been distributed in 40 countries, improving the lives of more than 15 million people

2025 target 25 million people impacted by 2025

2025 target 4 million customers

2025 target 1.1 million sites

2018 2019 2020

Number of charging points

150,000

16,000

11,500

23,000

100,000
We want to reduce all our logistics-related emissions to zero by 2050. Alternative engines and fuels and low-carbon energies are fundamental components for achieving this objective. Thanks to Total’s recognized expertise in the energy industry, we’ll be able to more effectively leverage innovative solutions to reduce our CO₂ emissions and our energy use.

Tim Scharwath, Member of the Management Board, Deutsche Post DHL Group.

Whether at Sea or in the Air

In line with the International Maritime Organization’s strategy to reduce the shipping industry’s environmental footprint, Total is helping its customers adapt their fleets. One of the solutions available to ship owners is the use of liquefied natural gas (LNG), which enables them to reduce their CO₂ emissions. This alternative fuel has notably been chosen by CMA CGM, a leading global shipping company that has contracted Total to supply LNG bunker to its new container ships.

One of the main suppliers of aviation fuels and biofuels, Total offers innovative solutions to boost performance in the aviation industry. Saft batteries, for example, are used in two-thirds of the world’s aircraft today to start the engines and supply backup power in the event of a failure. Hutchinson is also popular with aircraft manufacturers because its innovative materials meet their insulation and sealing needs, while also minimizing aircraft weight.

Generating Solar Power Locally

Thanks to Total Solar Distributed Generation, our industrial and commercial customers can generate their own renewable electricity by installing photovoltaic panels on their building rooftops, parking lots or available land — a solution we’re also implementing at our own sites. Our lubricant blending plant in Singapore, for example, has been fitted with some 3,000 photovoltaic panels, which will generate 35% of the site’s energy needs and avoid the emission of more than 500 tons of CO₂ per year.

Energy Efficiency Solutions

For the past ten years, our GreenFlex affiliate has been helping more than 750 customers in Europe improve their energy and environmental performance. Our teams develop sustainable solutions that combine consulting, operational support, financing and data intelligence to achieve tangible, measurable outcomes.

Developing Carbon Sinks

To help decarbonize industries that generate high levels of CO₂ emissions, Total is determined to develop carbon capture, utilization and storage (CCUS) technologies. We therefore invest 10% of our R&D budget, or $100 million dollars a year, in creating carbon sinks. Total is participating, for example, in the Northern Lights project in Norway, alongside Shell and Equinor. The project’s aim is to develop a full-scale commercial CCUS model that includes carbon capture at industrial sites, transportation by ship and pipeline and offshore storage in a North Sea reservoir located 3,000 meters below the seabed.

Natural carbon sinks are another effective way of capturing CO₂. That’s why we’ve set up a new business line known as Nature-Based Solutions, with the aim of creating sustainable carbon storage capacity of 5 million metric tons per year by 2030. We intend to achieve this goal by developing sustainable, regenerative forestry and agriculture solutions that will sequester or avoid carbon emissions, while generating positive social, economic and environmental impacts for local communities.
In all our host regions, we support our neighboring communities and contribute to local development.

An ongoing commitment to our host communities
Community Outreach and Youth Support

Total Foundation supports communities and young people through real-world projects in four priority areas: youth inclusion and education, road safety, forests and climate, and cultural heritage and dialogue.

€125 million over five years (2018-2022)
Corporate foundation budget

1. In 2019, Total laid the cornerstone for an innovative training campus near Paris known as L’Industreet. Specifically designed for young people aged 18 to 25 who are looking for a career path and don’t necessarily have any qualifications, L’Industreet will train 400 students each year in the industrial trades of the future, starting in 2021.

Supporting young people also means giving them opportunities to express their opinions and ideas. That’s why we funded the 2nd World Youth Assembly for Road Safety, which brought together 200 young people from around the world during the Global Ministerial Conference on Road Safety. The Assembly strives to promote safer mobility by giving a voice to those aged 15 to 29, the main victims of road accidents worldwide.

In 2019, Total Foundation pledged to donate €1 million over four years to support the development of the African Road Safety Observatory, which aims to improve the collection, analysis and sharing of data on road accidents in Africa.

A sponsor of France’s Fondation du Patrimoine for 14 years, Total has a long-standing commitment to preserving the world’s cultural heritage. In 2019, the Group made a one-off donation of €100 million to help rebuild Notre-Dame de Paris cathedral, an iconic monument located in the country of the company’s historic roots.

2. Employee Volunteering with Action!

Total encourages its employees to volunteer their time and skills to help others. Through our Action! program, employees can donate up to three days of their working time per year to support public interest initiatives.

Patrick Pouyanné laying the cornerstone for L’Industreet in France.

“Otchiva is committed to the preservation and sustainable use of mangroves. With other volunteers, we’ve helped to replant more than 10,000 mangrove trees. It makes me happy to know that we’ve done something that helps nature, supports biodiversity and is ultimately good for us and for our future.”

Irina Almeida, Total employee in Angola and volunteer with NGO Otchiva as part of Action!

“Denis Pascal, Total employee in France and volunteer with nonprofit La Cravate Solidaire as part of Action!

3. Our Contribution to the COVID-19 Emergency Response

In France, Total has provided hospitals and nursing homes with €50 million worth of gasoline vouchers to make travel easier for healthcare employees. It has also donated €5 million to help hospitals and healthcare organizations working on the frontline and to support the research being conducted by the Institut Pasteur.

Elsewhere in the world, our teams have taken action locally to help combat the health and economic crisis. Examples include donations of fuel and lubricants, discounts on gas and power, the production of protective equipment and support for local nonprofit organizations.
Being a responsible corporate citizen means enabling employees to contribute to Total’s ambition while also developing their potential.

The teams helping to meet current and future energy needs
Diverse, Dedicated Teams

Total is more than 100,000 people worldwide working together to develop better energy. With a workforce that covers more than 160 nationalities and 720 professions, we firmly believe that diversity is one of our key strengths. And we are fully committed to attracting and developing all the skills and expertise necessary to secure our future.

Our Five Values:
- Safety
- Respect for Each Other
- Pioneer Spirit
- Stand Together
- Performance-Minded

After 18 months of training, I was hired by Total as a security systems engineer for the Egina project. It was the first time I’d worked on a project of that size. It taught me a lot and helped me grow, both personally and professionally.

Ogochukwu Oguchienti

As our businesses evolve, so do our human resources needs. To continue to innovate and shape the energy industry of tomorrow, hiring new talent is essential.

Launched in 2020, our Digital Factory in Paris will bring together up to 300 women and men — developers, data scientists and other experts — to imagine the customized digital solutions necessary for the development of Total’s businesses. Digital technology is set to drive progress in numerous areas, from enhancing production operations and reducing their environmental footprint to developing new energy solutions and new services for our customers.

In the field, we place particular importance on hiring local talent for our operations to promote the transfer of skills. A good example is the Egina project in Nigeria, for which we built our biggest ever floating production, storage and offloading (FPSO) vessel. More than half of the people involved in building the project infrastructure were Nigerian and close to 77% of the hours worked on the project were spent at the shipyard in Lagos.

For me, the most urgent issue today is climate change. We need to act now. Being a Total employee means working in an environment where young people are encouraged to express their opinions and ideas to drive progress in this area.

Ana Rita de Medeiros, Business Developer, Total Solar DG

If you’d like to help meet one of the major challenges facing the world today — reconciling efforts to combat the climate crisis with the needs of a growing population that has every right to want access to affordable energy — then yes, you’ll find meaningful work at Total.

Namita Shah, President, People & Social Responsibility

In some parts of the world, people simply don’t have access to clean energy. At Total, we ensure that even the most remote communities have what they need to make day-to-day life better.

Le Minh Tien, Operations Engineer, Totalgaz Vietnam

Working at Total: A Chance to Be a Game Changer

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At Total, we share the vision of a responsible energy future. Our job is to produce the energy the world needs, and to do it sustainably.
Total is a broad energy company that produces and markets fuels, natural gas and low-carbon electricity. Our 100,000 employees are committed to better energy that is more affordable, more reliable, cleaner and accessible to as many people as possible. Active in more than 130 countries, our ambition is to become the responsible energy major.