TotalEnergies in China 2022

Placing the sustainable development at the heart of our business

TotalEnergies

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Foreword of TotalEnergies China Country Chair

In May 2021, TotalEnergies unveiled a new name and visual identity. This is more than just a simple name change in relation to the reshaping of the energy market worldwide, driven by the climate challenge, technological trends, and societal expectations. Our transformation reflects the Company's strong commitment to providing energy with fewer emissions and our ambition of reaching carbon neutrality by 2050, together with society.

To this aim, TotalEnergies is transforming from a traditional oil and gas company into a multi-energy company that produces and markets energies on a worldwide scale, including renewables and electricity, natural gas and green gasses, oil and biofuels.

In **electricity**, the Company aims to accelerate our investments and developing an integrated model spanning from production to sales. By 2030, we target 15% of our total sales to come from electricity, primarily from renewable sources. To this aim we will lift gross installed capacity to 100GW (gigawatts) and rank among the top five suppliers of renewable electricity worldwide.

As the fossil energy with the lowest emission, **natural gas** is an ally of the energy transition. We aim at strengthening our position as the world's second largest private player in **liquefied natural gas (LNG)** while further growing in renewable gases such as biogas and low-carbon hydrogen to decarbonize mobility and our industrial base. Our objective by 2030 is to reach 50% of our sales from gas, which means doubling our sales of LNG and reach 5% of total sales from biomass and hydrogen.

In **oil**, TotalEnergies focuses on the most economically resilient projects, emphasizing value over volume, while adapting our refining capacities and sales to changing demand and increasing our production of renewable fuels. We aim for oil to account for 30% of our total sales by 2030, which means reducing our sales of petroleum products by at least 30%.

With China unveiling its target of reaching carbon

neutrality by 2060, we find our transformation strategy perfectly in line with the needs of the country, which sets the ground for the success in China. As the country continues further along the road of energy transition, TotalEnergies' businesses in China and with China are also changing from the traditional scope of energy development and marketing to encompass the entire industry value chain, powered by our common vision of working together to create a sustainable energy future.

As one of the major suppliers to China's natural gas demand, despite the impact of the Covid-19 pandemic, TotalEnergies saw its operations in the South Sulige field continue growing in 2021, with the site that has now produced a cumulative wellhead total of over 20 billion cubic meters.

In liquified natural gas, every year TotalEnergies supplies more than 5 Mt of LNG to the Chinese market, the largest LNG market globally. To further expand our presence in the local value chain and to tackle China's growing demand of LNG, we signed an agreement with Shenergy Group for the creation of a Joint Venture in 2021, to which TotalEnergies will supply 1.4 Mt of LNG per year. The Joint Venture is also charged with the task of furthering the Company's LNG marketing activities in China.

TotalEnergies is not only in China. We are also with China on a global scale. Following the huge collaborative success with China National Petroleum Corporation (CNPC) in Yamal LNG, we have partnered with China National Offshore Oil Corporation (CNOOC), as well as some local partners, for the Lake Albert Resources Development project, which has reached a final agreement in 2021. The agreement sets in motion the development project that shall lead to the first oil export by early 2025.

The renewable energy sector is a key focus area for TotalEnergies in China. The Company is participating in the entire value chain in photovoltaic (PV) through our affiliates and partners. We have teamed up with Envision to form a Joint Venture with the ambition of becoming one of China's largest service providers for the distributed solar sector. The Joint Venture also has developed and built more than 400MW of distributed PV projects, helping more than 100 leading I&C customers worldwide to achieve low-carbon transformation via comprehensive green energy solutions.

In offshore wind, the Offshore Wind Team China was set up with the objective of bringing the Company's vast expertise in the offshore and deep-sea operations to the Chinese market and actively expand our presence along the industry value chain.

In energy storage, our subsidiary Saft opened a manufacturing hub for energy storage solutions (ESS) in Zhuhai in 2020 to enhance its ability to serve the global ESS market and to support the transition to renewable energy. Saft is also in partnership with Tianneng for the production of lithium-ion cells, providing energy storage solutions for mobilities in China and worldwide.

In addition, we are also actively pursuing the promotion of projects in biofuels, bioplastics, as well as hydrogen energy to support China's progressive shift toward renewables. As for the last, the Company has established an independent hydrogen energy division and, together with local partners, has actively explored opportunities within the local market. Moreover, TotalEnergies has also actively participated in the construction of the unified power market regarding green power sales, to promote green power trading, and established a long-term low-carbon partnership with green power purchasers.

We aim to further support the expansion of sustainable mobility in China. In 2020, TotalEnergies inaugurated its first standalone electric vehicle (EV) charging station in Wuhan in a significant move to become a major player in the

EV market across China within the coming years. In 2021, TotalEnergies established a Joint Venture with China Three Gorges Corporation (CTG), to develop co-branded public fast charging hubs and dedicated B2B charging stations. The JV plans of installing and operating more than 11,000 high power charge points by 2025.

Furthermore, the Company has expanded its service station network in China: as of June 2022, the total number of service stations operated by our Company in China has risen to 361. By cooperating with tech giants such as Alibaba, we are working to equip our network of stations with advanced digital services to provide more flexible, accessible and effective solutions to local consumers.

China has gained pivotal recognition in emerging energy technologies as an innovation powerhouse. We hope to enable innovative projects in the country while providing services to the world. In 2022, TotalEnergies continued its participation in the Chinese-Europe Emissions-Reducing Solutions (CHEERS), where the Company works with prestigious universities, research centers, and leading equipment manufacturers on developing large-scale, low-cost, and high-efficiency carbon capture, utilization and storage (CCUS) technology.

TotalEnergies has always viewed itself as an integral part of its host regions. In China, we want to do more than our economic contribution to help the country thrive. For over 40 years since entering China, we have never stopped upholding our broader responsibilities for safety, education, and public health. After the outbreak of Covid19, TotalEnergies swiftly implemented ad hoc policies to reduce the risk of contagion while ensuring the continuation of operations at its facilities, guaranteeing employees' safety and supporting frontline efforts to fight the pandemic. The Company has also donated RMB 2 million to China Charity Federation to purchase medical supplies in the Hubei Province.

As China goes forward on the journey of energy transition, at TotalEnergies we are ready to walk side by side with the country, strengthening our partnerships with local players to realize our common ambition of a carbon-neutral future.

02

TotalEnergies places **sustainable development** at the heart of its business

1

Our ambitions

TotalEnergies is transforming into a multi-energy company with the ambition to become a major player in the energy transition. Our Company is committed to reach carbon neutrality by 2050 to contribute to the planet's sustainable development, together with society, amid the climate challenge.

In 2021, TotalEnergies announced its transformation with a new name and visual identity reflecting the Company's commitment to being a broad producer and provider of new energies that are ever more affordable, reliable, and clean.

"Energy is life. We all need it and it's a source of progress. This choice to change our name stems from a deeply-held conviction that everyone on the planet has the right to have access to energy – reliable, affordable energy that is a source of economic and social development. At the same time, people expect a clear and responsible commitment from businesses to preserve the climate for future generations. Our Company is transforming to provide tangible, sustainable solutions to the dual challenge of more energies, less emissions," declared Patrick Pouyanné, Chairman and Chief Executive Officer of TotalEnergies.

2021 marked a significant year in our path to net zero 2050 as it is the first year of deployment of our transformation strategy in becoming a multi-energy company and a key player in energy transition. Major progresses were achieved in 2021, including:

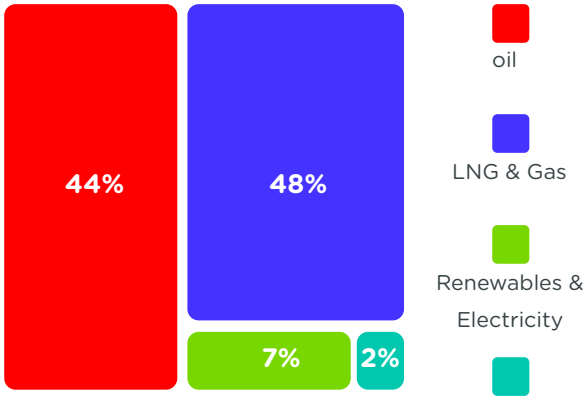
- **TotalEnergies** accelerated its development in renewables and electricity with more than 10 GW of gross installed capacity for renewable electricity generation and more than six million electricity customers at the end of 2021. Investments in renewables and electricity accounted for 25% of total investments, exceeding the initial target of 20% planned a year prior.
- **TotalEnergies'** LNG sales increased by 10% to reach 42 million tons, 99% of which went to countries with a net zero pledge.
- **TotalEnergies** took decisive action in 2021 to lower its Scopes 1, 2, and 3 greenhouse gas emissions. The Company reduced the share of petroleum products in its sales mix to 44% (from 65% in 2015), lowering the greenhouse gas emissions related to petroleum products used by its customers (Scope 3) by 19%.
- **TotalEnergies** also achieved a very significant 20% decrease in emissions from its operated facilities (Scopes 1 and 2) and a 14% reduction in the carbon footprint of the products sold in Europe, both compared to 2015.

As a result, the energy that TotalEnergies delivers to its clients today carries a carbon intensity lifecycle reduced by more than 10% compared to 2015.

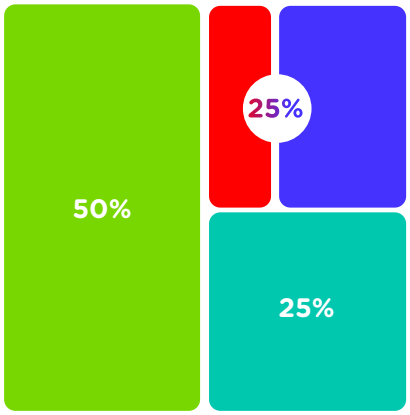
Following the successes of 2021, TotalEnergies is expanding its ambitions, and, for the first time, we describe our 2050 vision of a net zero TotalEnergies, together with society. Renewable electricity will account for half of its production; new decarbonized molecules from biomass (biofuels and biogas) or from renewable electricity (hydrogen and e-fuels) will represent a quarter; and hydro- carbons (oil and gas) the remaining quarter, with around 100Mt CO_2 equivalent of their residual emissions (Scope 3) fully captured, recycled, or offset.

This vision is based on measurable objectives to reduce our greenhouse gas emissions in the short (2025), medium (2030) and long (2050) term,

2021
Energy mix



2050
Energy mix



covering our industrial operations (Scope 1+2) and the emissions generated by our customers' use of our energy products (Scope 3). We affirm our ambitious target of a more than 30% reduction in greenhouse gas emissions related to sales of petroleum products (Scope 3 Oil) by 2030 compared to 2015.

In addition, the Company has laid down a path to zero methane with targets of progressive reduction of methane emissions (including a 50% reduction from 2020 levels by 2025 and 80% from 2020 levels by 2030) and set the objective of less than 0.1 million cubic meters per day for routine gas flaring at our operated assets by 2025, before eliminating flaring completely by 2030.

A clear and disciplined investment policy has been put in place to back our ambitions. In the 2022-2025 period, TotalEnergies will dedicate half of the investments to the growth of energies supply (30% for decarbonized energy development, including 25% for renewables and electricity and 5% for new decarbonized molecules [biofuels, biogas, H2, e-fuels], and 20% for further development in gas [mainly LNG] and energy of the transition to replace coal in electricity production) while the other half will go for the maintenance and adaption of existing capacities of the Company's worldwide upstream and downstream oil and gas facilities (30% for maintenance and 20% dedicated to new low-cost, low-emission fields and exploration to fight against the natural decline of the fields and maintain oil production).

We firmly believe this strategy will provide an edge for our Company and create long term benefit for the society.

Note:

Scope 1: direct emissions from sites (distinguishing between operated scope and equity share)
Scope 2: indirect emissions related to purchased energy consumption of operated sites
Scope 3: other indirect emissions. TotalEnergies reports only category 11 of Scope 3 (use of products sold), which is the most significant

Our ambition

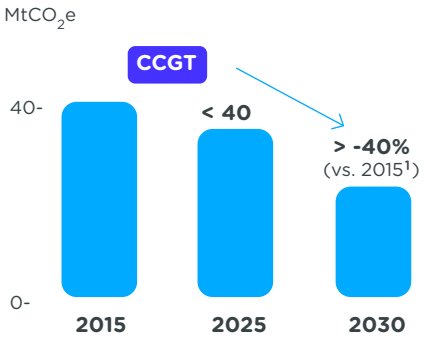
NET ZERO BY 2050, TOGETHER WITH SOCIETY
in line with the objectives of the Paris Agreement

Scope 1+2 - Net Zero by 2050 | Scope 3 - Net Zero 2050, together with society

OUR OBECTIVES FOR 2030

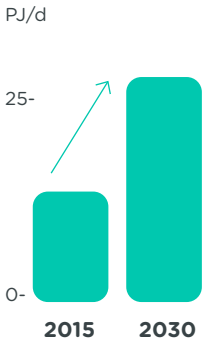
REDUCE OUR EMISSIONS

Scope 1+2 operated

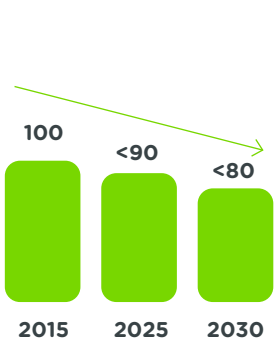


PRODUCE MORE ENERGY FOR OUR CUSTOMERS WHILE REDUCING OUR PRODUCTS CARBON FOOTPRINT

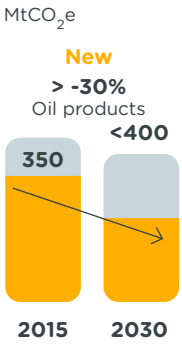
Energy production



Carbon intensity[2]



Scope 3[3]



OUR LEVERS

REDUCE SCOPE 1+2

IMPROVE THE EFFICIENCY OF OUR CAPABILITIES

- Achieve zero routine flaring by 2030 and less than 0.1 Mm^3/d by 2025
- Invest in emissions-reduction projects (400 projects identified, $400 million over 2018-2025 in Downstream)
- Decarbonize our electricity purchases in Europe and the United States (Scope 2) by 2025

TOWARDS ZERO METHANE EMISSION

- Reduce emissions by 80% from 2020 levels by 2030.
- Maintain methane intensitiy of operated gas installations bellow 0.1%

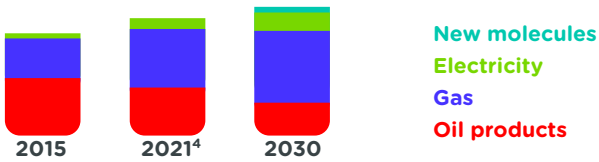
CAPTURE AND STORE CARBON FROM OUR FACILITIES

- Develop a CCS capacity of more than 10 Mt/y by 2030[5]

OFFSET RESIDUAL EMISSIONS

- Invest $100 million a year to develop natural carbon sink capacity of more than 5 Mt/y by 2030

DEVELOP A MULTY-ENERGY OFFER



ELECTRICITY

- Rank among the Top 5 producers of renewable electricity
- Achieve the same customer recognition in electric mobility tomorrow as we have in fuel retailing tooday

NATURAL GAS

- Cement our position among the Top 3 in low carbon LNG
- Set the standard for decarbonizing the gas value chains

OIL PRODUCTS

- Focus on projects with low emissions and low technical costs
- Set the standard for decarbonizing the oil value chains

NEW MOLECULES

- Develop production of biofuels and biogas
- Become a major player in the production of clean H
- Become a producer of e-fuels

REDUCE SCOPE 3 EMISSIONS, TOGETHER WITH SOCIETY

- Guide our customers towards lower-carbon energies
- Promote a circular economy approach in the use of biomass and plastics
- Develop a carbon storage offer for our customers with capacity exceeding 10 Mt/year by 2030[5]
- Forge partnerships with our top 1000 suppliers to reduce emissions from our purchasing

1. Including carbon skills.
2. Average net carbon intensity of energy products.
3. Indirect GHG emissions related to the use by customers of energy products sold.
4. Excluding the impact of Covid-19.
5. Overall capacity that includes storage for our facilities as well as the storage offer for our customers.

2

SDGs

Sustainable development is at the core of TotalEnergies' strategy, projects, and operations to contribute to people's well-being as the Company strives to be an exemplar of the United Nations' Sustainable Development Goals. Guided by its responsible business model and Code of Conduct, TotalEnergies leverages the **principles of action** and applies them to its operations globally:

- **Safety** is a TotalEnergies' value. Safety, operational excellence, and sustainable development go hand in hand.
- **Respect for each other** is another TotalEnergies value and respect for human rights is a cornerstone of its Code of Conduct.
- **Zero Tolerance** is the rule in the fight against corruption and fraud.
- **Transparency** is the rule in engagement with society, whatever the subject.

As a member of the UN Global Compact, TotalEnergies has fully committed itself to the United Nations Sustainable Development Goals (SDG) since 2016. TotalEnergies has always ensured that it makes and drives positive change for communities in its host territories. More broadly, the Company has always thought about how it creates value for its employees, suppliers, customers, partners, states, and civil society.

For four years in a row since 2018, the UN Global Compact has consistently recognized TotalEnergies as a LEAD participant.

TotalEnergies established an Energy Compact in September 2021 to follow the UN Energy Initiative. The TotalEnergies Energy Compact announced the concrete measures the Company will be implementing to promote the SDG 7 of access to clean and affordable energy for all by 2030. By then, TotalEnergies will have installed 100 GW of renewable energy globally, and an estimated 33 GW will be placed in emerging or developing countries to cater to the sustainable energy needs and demands of around 40 million people.

By the end of 2022, TotalEnergies will have trained all its employees about the UN SDGs through a participatory approach that aims to involve and solicit feedback and insights from them to establish a sustainable development barometer that the Company will publish in 2023.

3

Transforming to reinvent energy

In affirming its ambition to be a world-class player in the energy transition and to get to net zero by 2050, together with society, TotalEnergies has committed to profoundly transforming its production and sales while continuing to meet energy the needs of a growing population.

The Company is developing a wide range of energies in an integrated approach (from production to distribution to the end user) in order to decarbonize its energy offering and generate a competitive advantage that will create long-term value for its shareholders and stakeholders and secure its future.

Power and renewables: integrating the value chain from production to sales

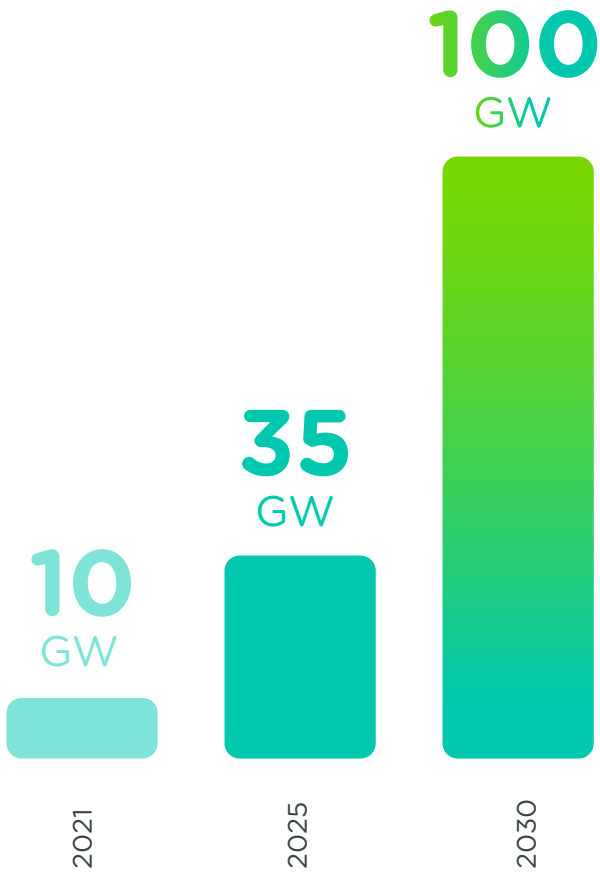
TotalEnergies wants to become one of the top five worldwide producers of renewable electricity (wind and solar). The Company has invested more than $10 billion in five years, with an average of $2 billion per year in photovoltaic electricity and offshore wind. In 2021, TotalEnergies raised over $3 billion of its investments in electricity and renewables, which accounted for a quarter of its net investments. By 2030, the Company intends to finance investments of more than $60 billion in renewable power generation capacity. The Company makes profitable investments in projects with a return of over 10% in regulated and deregulated markets throughout the entire electricity value chain. As a result, the EBITDA of the Power & Renewables business exceeded $1 billion in 2021.

In the past four years, the Company's gross installed capacity for renewable power has grown from 0.7 GW in 2017 to over 10 GW in 2021. The Company's objective is to have 35 GW of gross capacity in 2025, based on projects that have been identified or are in development, and a further 100 GW in 2030. It also aims to increase electricity production from 21 TWh in 2021 to 120 TWh in 2030.

With a broad international footprint that has become a competitive advantage for identifying and developing profitable renewable projects, TotalEnergies created a Renewable Explorers network in 2021 in some 60 host countries.

TotalEnergies has been building a portfolio of flexible power generation using combined-cycle gas turbine (CCGT) plants since 2015. With a capacity of 4 GW by the end of 2021, these plants complement the development of renewables by supporting the grid during periods of peak demand or when there is inadequate sunshine or wind. The CCGT units target decarbonization, either by changing from gas to biomethane or hydrogen or by sequestering their emissions through carbon capture and storage (CCS).

TotalEnergies
GROSS INSTALLED CAPACITY FOR RENEWABLE POWER



TotalEnergies' solar portfolio expanded rapidly

TotalEnergies' solar portfolio expanded rapidly in 2020 and again in 2021, notably in India and the United States. This growth will continue, as solar energy accounts for three-quarters of the 35 GW the Company wants to develop by 2025.

Continued scaling up in offshore wind

Offshore wind offers high utilization rates with significant development potential and better acceptability than onshore wind, particularly in Europe. TotalEnergies sees strong growth potential in offshore wind energy, especially since it can leverage its teams' expertise in managing and operating offshore megaprojects. The offshore wind portfolio's total capacity exceeds 10 GW, of which two-thirds fixed-bottom and one-third floating.

Launch in 2021 of several stationary electricity storage projects to support renewables

Electricity storage solutions are necessary to offset the intermittence of solar and wind projects, make the most of daily volatility in the electricity markets and ensure grid stability. In this segment, TotalEnergies benefits from the technological expertise of Saft, which also aims to make the most of this fast-growing market.

Petroleum products: adapting to demand

Demand for petroleum products is expected to stagnate and then decline between now and 2030 thanks to technological progress and evolving uses. By 2050, demand will have dropped significantly. Petroleum products will have to meet increasingly stringent requirements on limiting the emissions related to their extraction and use.

TotalEnergies is reducing the share of petroleum products in its sales mix, from 65% in 2015 to 44% in 2021 (excluding the impact of Covid-19), and a targeted 30% in 2030. The production will peak during this decade before declining, at around 1.4 Mb/d in 2030. Investments remain necessary to satisfy demand, given the natural decline in field output.

TotalEnergies prioritizes oil projects with low technical costs (those below $20/b) and a low breakeven point (typically below $30/b). New projects are assessed by how they contribute to the average carbon intensity in their Upstream portfolio category, and all approved projects must help reduce this intensity.

New hydrocarbon developments are limited to the least emitting fields. For example, TotalEnergies exited Venezuela in 2021, as heavy oil production in the Orinoco Belt failed to meet its greenhouse gas emissions objectives. In September of the same year, the Company signed major multi-energy agreements in Iraq to construct a new gas network and treatment units, a large-scale seawater treatment unit, and a 1 GW photovoltaic power plant. Meanwhile, the Tilenga and EACOP projects in Uganda got the green light after having a low technical cost of $11 per barrel and achieving 13 kg of CO_2 emissions per barrel, which is significantly lower than the current portfolio of 18 kg CO_2 per barrel. At the end of 2021, TotalEnergies broadened its presence in Brazil's low-cost and low-emission offshore reserves of Atapu and Sépia fields. In addition, the Company respects exclusion zones and follows good environmental practices. It will leave out exploration for oil in the Arctic Sea ice and will not approve any capacity increases in Canada's oil sands.

Natural gas, fueling the transition

For TotalEnergies, natural gas is a key transition fuel. It plays a major role in power generation thanks to its flexibility and capacity for responding to the strong growth in demand fueled by the electrification of uses.

As more and more utilities become powered by electricity worldwide, natural gas is a prime energy resource that TotalEnergies considers an essential transition fuel. Flexible and able to respond to the strong growth in demand due to electrification, natural gas generates power that is half as less polluting than coal. When used as a substitute, natural gas makes it possible to achieve substantial reductions, as what the United States and the United Kingdom have been doing.

However, all the participants in the value chain – businesses and states – must work together for gas to play this role exactly and to fight methane emissions. This was underlined at the COP 26 meeting in Glasgow with the commitment from 105 states to reduce methane emissions by 30% by 2030. TotalEnergies' new objective is to reduce methane emissions by 80% by 2030.

Main strengths

• A widely available and well-redistributed resource worldwide, thanks to LNG.

• An immediate and straightforward solution for decarbonizing electricity and industry, especially in high energy consuming sectors like steel and cement manufacturing.

• An ideal partner for renewables, which are intermittent and seasonal.

• A core component of numerous coal-consuming countries' roadmaps for getting to net zero.

• A source for massively developing blue hydrogen with carbon capture and storage (CCS) technologies.

TotalEnergies' strategy

• Increase the share of natural gas in the sales mix to 50% by 2030;

• Strengthen the Company's position among the Top 3 in LNG.

• Cover the entire gas value chain, from production and trading to gas-fired power plants and retailing;

• Reduce the gas value chain's emissions and eliminate methane emissions;

• Work with local partners to promote the shift to natural gas.

What backs up our view?

Carbon neutrality commitments of numerous countries are based on the development of natural gas as a replacement for coal. Liquefied natural gas (LNG) has seen strong growth since 2015, particularly in Asia (8% a year), Latin America (4% a year), and Europe (14% a year), and this direction supports these ambitions.

The higher demand for gas in 2021 created substantial price pressures following difficulties in electricity production, notably from renewables because of erratic weather. As a result, several countries returned to coal to generate electricity, which has negatively and heavily impacted their emission rates and raised issues about the sustainability and realization of emission targets. TotalEnergies aims to mitigate this issue with an effective strategy of investing in and developing the gas value chain.

Ranking among the top three worldwide in low carbon LNG by 2030

Global demand for LNG, a readily transportable and efficient resource, has seen strong growth, rising annually by 9% between 2015 and 2021. TotalEnergies is the world's third-largest LNG company, with a stable global market share of 10%. Selling 42 Mt of LNG in 2021, the Company also saw 99% of its LNG sales going to countries committed to carbon neutrality. TotalEnergies aims to expand the amount to 50 Mt per year by 2025 as it develops several large-scale projects to support this growth: Energia Costa Azul (ECA LNG) in Mexico, a seventh LNG train in Nigeria, a fourth train at Cameron LNG in the United States, Mozambique LNG, Papua LNG, and Arctic LNG 2 in Russia. In addition, the Company signed agreements to supply up to 3 Mt of LNG per year in India with partner Adani and up to 1.4 Mt per year in China via a contract with Shenergy Group.

Reducing the emissions intensity of TotalEnergies LNG value chain

In reducing emissions across the LNG chain, the priority is on methane. TotalEnergies is also working on improving liquefaction plant performance, notably in Qatar, the United States, and Russia, with energy efficiency projects, electrification using renewable solar and wind energy, and native carbon capture and storage. Lastly, TotalEnergies is renewing its fleet of LNG carriers with new vessels with reduced CO_2 emissions of 40% on average than older ships.

50 million tons per year

our LNG sales volume by 2025

Promoting circular management of resources

Within the next decade, TotalEnergies pledges to double the circularity of its businesses and continues contributing to the circular economy at different points in the value chain, through purchasing, sales, and production and waste management. In 2022, TotalEnergies joined the Platform for Accelerating the Circular Economy (PACE), an initiative that aims to galvanize the transition to a more circular economy. Launched by the World Economic Forum, PACE is now hosted by the World Resources Institute. The Company is also a founding member of the Alliance to End Plastic Waste.

Biofuels

Biofuels are a tool element in the decarbonization of liquid fuels. Following European standards, biofuels emit over half as less CO_2e as their fossil fuel equivalents. The current biofuel production capacity of TotalEnergies stands at 500 kt per year, primarily at the La Mède refinery in France. The Company aims to increase that amount to 2 Mt by 2025 and 5 Mt by 2030 through sustainable production

New generation biofuels

Over 90% of the biofuels in the market today are first-generation fuels made from virgin vegetable oils or sugar. TotalEnergies invests in advanced biofuel projects based on animal fat or used oils, thereby limiting the competition for and impact on arable land. These advanced biofuels will add to the range of first-generation biofuels. The Company invests in R&D into so-called second- and third-generation biofuels based on micro-algae amid numerous technological challenges.

Biogas

Biogas is a renewable fuel consisting primarily of methane and is produced from the anaerobic digestion of organic waste. This resource has a crucial role in promoting and developing a circular economy, reducing greenhouse gas emissions, and decarbonizing gas products. It is also compatible with existing transportation and storage infrastructure. Starting in 2025, TotalEnergies aims to produce 2 TWh of biomethane per year and increase it further to over 5 TWh per year globally by 2030.

Hydrogen

Hydrogen is an energy carrier between primary energy source and final application that does not generate any CO_2 during its lifecycle if produced in a decarbonized process. Growing generation of decarbonized electricity is creating opportunities to produce green hydrogen via electrolysis of water using decarbonized electricity. In addition, the development of carbon storage is paving the way for the development of blue hydrogen using natural gas.

TotalEnergies aims to pioneer mass production of clean and low-carbon hydrogen fuel as soon as the market takes off. The Company is working with its suppliers and partners to decarbonize all the

hydrogen used in its European refineries by 2030, representing a reduction of 3 Mt of CO_2 emissions per year, in line with the objectives of the EU to install over 40 GW of electrolyzes powered by renewable electricity to produce 10 Mt of renewable hydrogen a year by 2030.

E-fuels

The production of e-fuels from renewable hydrogen and captured CO_2 is a promising avenue for decarbonizing transportation. The pace at which these e-fuels scale up will depend on the development of green hydrogen. Besides being low carbon themselves, they offer the advantage of recycling CO_2. E-fuels are one of the solutions for getting to net zero via carbon capture and utilization technologies.

TotalEnergies is staking out a position in this market, notably to help decarbonize the aviation industry with sustainable aviation fuel. In early 2022, TotalEnergies joined a Masdar and Siemens initiative in the United Arab Emirates to build a pilot unit for producing green hydrogen that will be used to convert CO_2 into sustainable aviation fuel.

Bioplastics and recycled plastics

TotalEnergies produced 60,000 tons of recycled plastics and bioplastics in 2021. It aims to produce 30% recycled and biopolymers by 2030, or 1Mt.

The circular economy for plastics is based on:

Mechanical recycling

or the processing of materials from selective sorting and collection centers. As the most mature technology in the market, mechanical recycling has catered to the needs of the automobile manufacturing and construction industries. TotalEnergies' Synova affiliate is involved in this part of the value chain. Synova has a production capacity of 45 kt at the end of 2021 and aims to increase it to 100 kt by 2025.

Advanced recycling

or the processing of waste that cannot be recycled mechanically. Advanced recycling serves other markets, such as food-grade plastic recycling. TotalEnergies currently produces polymers from advanced recycling at the Antwerp complex using TACoil produced by partner Plastic Energy, with which the Company has built a production unit at Grandpuits. TotalEnergies is also partnering with Honeywell to promote advanced recycling of plastics in Europe and the United States.

Bioplastics

The Company provides customers with biopolymers made from biofeedstocks based on vegetable oils or used cooking oils processed at the La Mède biorefinery (and soon Grandpuits), as well as polylactic acid (PLA), a fully recyclable and compostable bioplastic based on starch or sugar produced by its joint venture with Corbion at the PLA plant in Rayong, Thailand and future unit at Grandpuits in France.

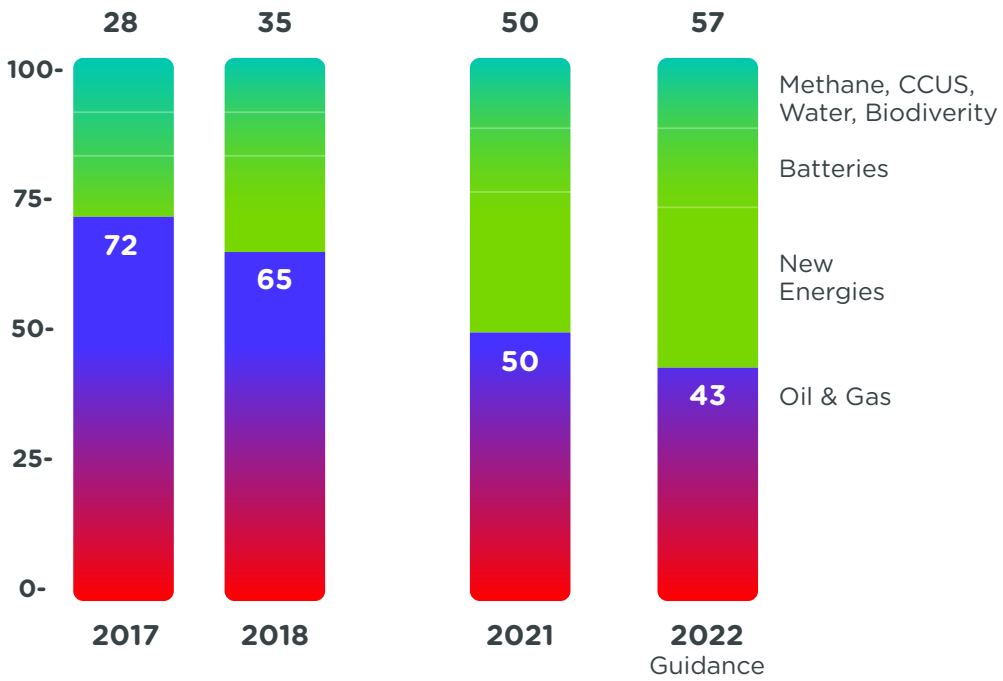
R&D at the forefront of our transformation

In addition to deploying current technologies that can further the energy transition, a worldwide innovation drive is needed to achieve the global objective of carbon neutrality.

Each year TotalEnergies devotes over $1 billion to R&D and mobilizes more than 4,000 employees. Backed by its transformation strategy, the Company has substantially re-oriented its R&D since 2021. Today, more than 50% of its R&D focuses on newenergies (renewables, biomass, batteries, etc.) and to reducing its environmental footprint (methane, CCUS, water, biodiversity, etc.), compared to less than 30% five years ago. This move towards new energies points to the Company's future.

To accelerate this transformation in its R&D, TotalEnergies forges partnerships with industrial firms and academic researchers. The Company also invests in digital and artificial intelligence (AI) expertise to develop internal solutions for accelerating its energy transition and that of its customers.

BUDGET EVOLUTION in %



OneTech : bringing our multi-energy technical skills together in one place

In September 2021, 3,400 engineers, scientists and technicians were brought together in a new segment to enhance the Company's innovation capacity and ability to design and lead large integrated industrial projects by leveraging the teams' operational excellence. OneTech is home to all of headquarters' technical skills, all energies combined.

CCU : using CO_2 to make aviation fuel

TotalEnergies is developing pilot units near its Leuna refinery in Germany to make molecules that can be converted into sustainable aviation fuel using green hydrogen and captured CO_2. The CO_2 will be captured in the refinery's emissions, and the hydrogen will be produced by a 1 MWe high temperature electrolyzer (more efficient than a low-temperature electrolyzer). The hydrogen reacts with the CO_2 to produce methanol, a synthetic fuel. The Company anticipates an energy efficiency gain of around 30% across the pilot unit's production chain.

Sustainable mobility: Together with our customers

As of 2018, the transportation industry generated approximately 17% of greenhouse gas emissions globally. TotalEnergies believes that there is no one-size-fits-all answer to achieving green and sustainable mobility in the future; instead, it calls for an array of complementary solutions.

Road transportation

Compared to other transit forms, road transportation offers a broader range of solutions for decarbonization. The strategy of TotalEnergies is to establish operations in four major, new types of road mobility:

1. Winning recognition as a significant force in electric mobility

Accounting for 9% of total vehicle sales in 2021, electric vehicles (EVs) offer a future-oriented solution as their driving range increases. TotalEnergies acts on two critical links in the value chain to spur the adoption of EVs by its customers:

Deploying charging infrastructure

- 150,000 charge points worldwide by 2025.

- 300 service stations on motorways and major roads and 600 urban service stations with high power chargers (HPC) by 2030 to support e-mobility travel in Europe. This works out to one HPC every 150 km for optimal coverage on long-distance trips.

- TotalEnergies is transforming and adapting its presence in cities by developing an e-mobility network in Europe and Asia.

Producing affordable, high-performance batteries

- Producing a capacity of 5 GWh by 2023 in China with Tianneng Saft Energy (Saft 40% and Tianneng 60%)

- Automotive Cells Company (ACC) is set to emerge as a global player in developing and manufacturing automotive batteries in 2023. As a joint venture founded by TotalEnergies and Stellantis in 2020, ACC will produce batteries that will power nearly one million EVs a year, or 10% of the European market, becoming a significant investment contributing to the development of EVs in the continent. With Saft, TotalEnergies is giving the new company the benefit of its expertise in R&D as well. Mercedes-Benz joined ACC in September 2021.

2. Expanding the distribution of fuels

Sustainable biofuels can reduce the CO_2 emissions of internal combustion vehicles, which still account for more than 98% of the land vehicles on the road worldwide at the year-end of 2021. Government policies, particularly in Europe, that promote carbon neutrality boost demand for these renewable products. TotalEnergies has become part of that change, especially since it already distributed 3 Mt of sustainable biofuels worldwide in 2021. The Company aims to sell a further 7 to 8 Mt in 2025.

3. Supporting our customers' energy transition thanks to NGV

Natural gas vehicle fuel (NGV), marketed in the form of compressed natural gas (CNG) or LNG, provides a transitional pathway for reducing CO_2 emissions. This fuel is now available at 600 service stations in the TotalEnergies global network. The incorporation of biogas, if there is enough available production, may make it possible to decarbonize

NGV, CNG and LNG in the future. In February 2021, TotalEnergies inaugurated France's largest NGV and bio-NGV service station in Gennevilliers.

4. Promoting low-carbon solutions for trucks

Truck manufacturers are developing EVs for daily journeys of less than 500 km and working on very high-power batteries that can extend a truck's driving range. TotalEnergies supports that process by expanding its network of high-power charge points, intending to place a charging station every 150 kilometers throughout Western Europe and make charging solutions available to trucking professionals directly at their home sites. Several truck manufacturers are also looking at hydrogen as an attractive alternative for longer trips. With this in mind, TotalEnergies entered into a partnership with Daimler Trucks in 2021, dedicated to hydrogen infrastructure for trucks in France, Germany, and Benelux.

Shipping

TotalEnergies is working with major shipping companies on defining fuels appropriate for their decarbonization roadmaps as the maritime industry accounts for 90% of all goods transportation and 3% of global carbon emissions. Heavy fuel oil remains the most common ship propulsion fuel, although using LNG, a transition fuel, looks promising as it can lower CO_2 emissions by 20%. Using decarbonized liquid fuels (such as e-fuel or biofuels) and hydrogen or ammonia will even reduce those emissions still further in the medium term.

Aviation

Sustainable aviation fuels (SAFs) can substantially reduce CO_2 emissions from air transportation. They include biofuel produced from waste and residues sourced from the circular economy (animal fats, used cooking oil, etc.) and synthetic e-jet fuel for aviation. These biofuels can already be used as a drop-in fuel with standard jet fuel up to 50%, without modifying existing logistics infrastructure in aircraft or engines. TotalEnergies is developing SAFs and is involved in many initiatives to produce and market SAFs in partnership with aviation companies. With the start-up of production at La Mède in 2021 and Normandy in 2022, TotalEnergies is in a position to meet demand from its customers and the requirements of French legislation, which calls for aircraft companies to use at least 1% biojet fuel effective January 1, 2022.

03

TotalEnergies in **China**

In 2016, China ratified the Paris Agreement on limiting global warming to 2 °C by mid-XXI century. In September 2020, China restated its pledge to net-zero carbon emission and declared the country's commitment to reach carbon neutrality by 2060. Meeting this target will require a shift in the country's energy mix, moving away from coal and increasing the share of natural gas and renewable sources. TotalEnergies, as a multi-energy company active in China for more than 40 years, is ready to accompany the country in its journey to net-zero carbon emission.

Being the world's largest energy consumer and one of the fastest-growing economies globally, China is faced with the challenge of decarbonizing the domestic energy system while guaranteeing a stable energy supply to support further economic growth.

To achieve the objective of reducing carbon intensity by more than 65% by 2030 (compare to 2005 level), China is acting to increase the share of natural gas and renewable sources in the total energy consumption.

China, being the world's largest importer of natural gas, is expecting natural gas to reach 15% of the nation's primary energy consumption by 2030 from 8% in 2019, on account of governmental support for the production from both conventional and unconventional sources and international cooperation in this sector.

Electricity is currently the single largest source of China's CO_2 emission. The transformation of electricity sector is a key pathway in the country's effort towards a low-carbon future. China's investments in renewable energies are rising as the country continues to be the global leader in additions of new wind and solar PV capacity: additional 124GW of combined wind and solar energy in 2021 alone. In 2021, China announces the "14th Five Year Plan", in favor of the stable and sustainable development of power production from renewables, especially of wind power and solar power. The announcement reveals China's target to double wind power and solar power while expecting renewable power production to weight 33% of the country's total power production by 2025.

TotalEnergies, being the first international energy company entering China immediately after reform and opening, has grown together with its local partners to extend its operations along the entire energy value chain in the country and abroad. As we aim for carbon neutrality and becoming a multi-energy company, our objectives perfectly aligned with China's transition trajectory toward a cleaner energy system, setting the ground for a long-term partnership.

1

Exploration and Production

Being active in Exploration and Production of oil and gas in over 50 countries worldwide, TotalEnergies puts our expertise to work in delivering affordable and reliable energy sources, further satisfying growing energy demand in tandem with our objectives of sustainability and accessibility. Accordingly, while oil still stands as the world's most accessible energy source, natural gas has seen the largest increase in production in our energy portfolio as it responds to our carbon neutrality ambitions and to those of our partner countries, China above all.

TotalEnergies is one of the first international companies entering China's oil and gas exploration market. We have been working in and with China to build a mutual trusting, close, and productive partnership since the 80s of the last century. Building upon shared vision and effective work, we have facilitated the roll-out of projects both onshore and offshore.

Offshore, we have had presence in the Beibu Gulf, Bohai Bay, and the South China Sea. Onshore, we have rolled out a series of projects in the Tarim Basin and the Ordos Basin.

With our 30-year Production-Sharing Contract (PSC) signed in 2006 with China National Petroleum Corporation, we evaluate, develop, and produce tight gas in South Sulige, achieving a success milestone in 2020 by reaching the initial target plateau of 3 billion cubic meters per year. The field has now produced a cumulative wellhead total of over 20 billion cubic meters, supplied to Beijing, Xi'an, and Yinchuan markets.

TotalEnergies is not limited to China only – we are also in step with China on a global level. In Kazakhstan, Nigeria, Uganda, United Arab Emirates, Iraq, Brazil and Russia, TotalEnergies has close collaborations with Chinese partners in a variety of projects – including the Yamal LNG.

First launched in 2013, Yamal LNG sees TotalEnergies' partnership with CNPC and Novatek to leverage the immense onshore gas resources of the Yamal Peninsula. This project, being the world's largest of this kind, will supply 16.5 Mt of LNG per year at full capacity, a large share of which will be directed to China. In July 2018, the first LNG carrier

The South Sulige site has reached a total cumulative wellhead of over

20 billion cubic meters

dispatched by Yamal LNG to China made a successful delivery to CNPC at Rudong Port, Jiangsu Province, opening a new chapter of natural gas supply to the Chinese market from the Yamal plant.

Apart from the Yamal LNG, the Lake Albert Resources Development project has reached a final agreement in 2021. With partnership between TotalEnergies, CNOOC, Uganda National Oil Company (UNOC), and Tanzania Petroleum Development Corporation (TPDC), this agreement encompasses Tilenga and Kingfisher upstream oil projects in Uganda and the construction of the East African Crude Oil Pipeline (EACOP) in Uganda and Tanzania. First oil export is planned in early 2025.

INTERNATIONAL PROCUREMENT OFFICE (IPO)

Since the establishment in Shanghai in 2009, TotalEnergies's International Procurement Office (IPO) began to support all oversea projects and branches during the sourcing, qualification & contract execution phases. Under the pressure of global Covid-19 pandemic, our IPO successfully manage to continue guaranteeing the safety of employees and offering stable support to our stakeholders within the larger scope of rapidly changing local regulation.

In 2020, we also saw the implementation of the Environmental Roadmap initiated in 2019 with mainly four pillars: support to renewable energy activities, supplier's risk management, supplier's strategy, and carbon neutrality.

2

Gas, Renewables, and Power

At TotalEnergies, climate concerns nowadays are crucial and integral factors to our strategic decisions. The Gas, Renewables & Power (GRP) segment is prompting the Company's ambition in low-carbon businesses by expanding in downstream gas and renewable energies along with energy efficiency businesses.

By 2030, China has a goal is to increase the gas share from 8% in 2018 to 15% of total energy. As for renewables, the country has already become the world's largest producer and consumer through its leading position in solar, wind, hydropower, electric vehicles, and batteries.

TotalEnergies is committed to walk side by side with China and to partner with local players at both domestic and global level to seize the opportunities arising from the country's energy transition toward a carbon neutral energy system.

First shipment of carbon neutral LNG from TotalEnergies to CNOOC in September 2020

Natural gas

As a multi-energy company and the second largest non-state provider of LNG, TotalEnergies has made natural gas, the least pollutant of all fossil fuels, a corner-stone of its strategy to meet growing global demand for energy while helping to mitigate climate change.

This is in line with the Company's climate strategy of increasing the share of natural gas in our portfolio, leveraging its availability and affordability as well as its flexibility as a complementary energy source to renewables. For this objective, our investments are directed to further reinforce our position in the whole value chain all the way from production and liquefaction to shipping and trading, as well as regasification and storage. The particular focus on LNG allows us to target a portfolio of 50 Mt per year in 2025.

Due to its low-carbon potential and flexibility, LNG is finding broader application in the Chinese market, where the energy demand of a growing economy needs to be weighed against increasingly pressing environmental concerns. Although at a lower rate compared to previous years due to the continuation of Covid-19, China's demand of gas maintained upward momentum in 2021. The country's LNG imports at the end of the year have hit 79 million tons (18.3% y-o-y), surpassing those of Japan and making China the world's largest LNG importer.

TotalEnergies is one of the main suppliers to the Chinese market. In 2008, TotalEnergies signed a SPA with CNOOC for the delivery of 1Mt of LNG per year. In October 2018, this SPA was amended by the partners to increase the contract volume of LNG from 1 Mt to 1.5 Mt per year and extended the term of the contract from 15 years to 20 years. In 2018 TotalEnergies signed a long-term SPA with ENN to deliver LNG to its Zhoushan terminal and in 2019 with Guanghui Energy for 0.7 Mt per year to be delivered to its Qidong terminal.

In August 2020, TotalEnergies and CNOOC completed the first transaction for the Shanghai Petroleum and Natural Gas Exchange online platform for international LNG trade, setting the starting point in the digitalization of China's international LNG trade and reinforcing our push towards digital solutions to provide better and more flexible LNG products and services for the strong market demand in China.

In 2020, TotalEnergies delivered its first carbon neutral LNG shipment to CNOOC. The shipment, which was delivered on September 29th at the Dapeng terminal in China, reinforces the cooperation between TotalEnergies and its long-standing partner CNOOC, representing a step forward towards carbon neutrality.

In 2021 TotalEnergies partners with Shenergy Group, the leading energy player in Shanghai, to expand in different segment of the value chain. Through the Joint Venture, TotalEnergies will supply up to 1.4 Mt per annum of LNG to customers in Shanghai throughout the neighboring Yangtze River Delta regions, thus serving the main LNG markets in China. In addition, TotalEnergies will supply LNG to Shanghai Gas, the natural gas subsidiary of Shenergy Group for the distribution business.

As China proceeds with reforming its mid-stream natural gas infrastructure, one of the goals is to open the market and ensure fair access to all third parties, a shift that will bring more abundant opportunities to downstream players in natural gas. On top of actively pursuing LNG import projects and contracts with China, TotalEnergies also has plans to be more involved in the downstream market to support the development of the gas market in China.

Renewables

Renewable energies are critical to TotalEnergies' pledge to reach net-zero carbon emission by 2050. The Company will continue to expand this business to reach 35 GW of gross production capacity from renewable sources by 2025, and then 100 GW by 2030 with the objective of being among the world's top 5 producers of electricity from renewable energies. With more than 10 GW of gross installed capacity for renewable electricity generation and more than six million electricity customers at the end of 2021, this development is accelerating in the Company.

Solar

In China, solar PV represents an important focus for TotalEnergies. The company has established Maxeon Solar Technologies with Tianjin Zhonghuan Semiconductor through a Joint Venture to design, produce, and sell high-efficiency solar modules under the brand SunPower in more than 100 countries.

Established in 2019, TEESS, a 50/50 joint venture company between TotalEnergies and Envision for solar distributed generation for industrial and commercial customers in China, has developed, invested, and constructed more than 400 MW distributed PV projects. TEESS has reached in 2021 the first drawdowns for cross-border financing projects (US$ 80M) from multiple foreign banks. This transaction is the first non-recourse project financing in China's new energy field, and the first green loan in China's I&C distributed photovoltaic sector.

Wind

According to the 2021 IEA report, the capacity of global offshore wind power will be doubled by 2026. China's Governmental departments, such as the National Development and Reform Commission (NDRC), have announced the "14th-Five Year Renewable Energy Developmental plan" in 2022. According to this announcement, provincial projects of offshore wind are required to initiate, to further optimize coastal offshore wind arrangement and to promote Chinese development on offshore wind projects.

TotalEnergies is a very active player in offshore wind worldwide and is deeply engaged with the Chinese offshore wind development. The company intends to utilize its accumulated experiences in the wind power industry to achieve in China mutual development through partnerships, thus further contributing to the development of the Chinese offshore wind sector.

TotalEnergies' offshore wind portfolio's total capacity exceeds

10GW

of which two-thirds fixed-bottom and one-third floating

Energy storage

High energy storage capacity will support the integration of renewable energy during the energy transition and fight against climate change. Renewable energy is intermittent in nature which requires energy storage solution (ESS) to ensure a stable and flexible power supply, as well as the balance of grid network.

In 2016 TotalEnergies acquired Saft, a leading global provider of advanced technology battery solutions, which has been providing products and services for land, sea, air and space for over one century.

Already in 2006, Saft opened a new manufacturing base in Free Trade Zone, Zhuhai. The facility, which expanded to a total footprint of 12,000 square meters after moving to the current site in 2016, has seen a steady increase in production and sales over the years. Today, the plant boasts a production capacity of 65 million primary lithium batteries and 30 million AH rail batteries per year.

In 2019, Saft has established its third manufacturing hub for ESS in Zhuhai. This enhances the company's capacity to serve the global ESS market and support the transition to renewable energy. The current capacity of this hub is 1.2 GWh per year and is expected to expand to 2.4 GWh per year by the end of 2022.

In April 2019, Saft signed an agreement with China's Tianneng Group to create Tianneng Saft Energy Co (TSE), a JV that will develop, manufacture, and sell advanced lithium batteries, modules and battery packs for electric bicycles, electric vehicles, and energy storage solutions for the Chinese and global markets.

Rail transportation and aviation are two other areas in which Saft experienced rapid expansion.

In the rail market, Saft completed a contract to supply MSX battery systems for the new metro trains built for the Changzhou Rail Transit Line 1 project in 2018. It also won a contract by the Chengdu Metro to supply onboard battery systems for different metro lines in the city.

In the aviation industry, Saft is widely recognized as a primary battery supplier in China. Its batteries were selected to equip the MA700 advanced turboprop regional aircraft of AVIC XAC Commercial Aircraft, a subsidiary of Aviation Industry Corporation of China (AVIC), to power the aircraft's maiden flight in 2020. This new contract will further confirm Saft's leadership in battery supply for the Asian aerospace market.

Green power sales

TotalEnergies has also actively participated in the construction of the unified power market regarding green power sales, to promote green power trading, provide customized services, and establish a long-term low-carbon partnership with green power purchasers. In Europe and North America, TotalEnergies has reached strategic cooperation with Air Liquide, Microsoft, and Amazon and implemented relevant projects.

New decarbonized molecules

TotalEnergies dedicates to develop, design, build and operate biogas. Supported by our voluntarist strategy in gas mobility (LNG and CNG), our objective is to invest in biomethane production plants development and operation, in partnership with local and global players. The overall target of biogas production is 2 TWh/y by 2025 and 6 TWh in 2030. The Company's assets produce 10% of French biomethane volume, making it a leading player on the French market. We have also set up a 50/50 JV with Clean Energy in the US with integrated strategy, combined with renewable gas production, bio-CNG & bio-LNG distribution, and developing biogas production at dairy farms.

In terms of biofuels, TotalEnergies plans to make investments for over EUR 500 million transforming the Grandpuits refinery in France into a zero-crude platform for biofuels and bioplastics. The platform is mainly used to produce SAF for the aviation industry and can process 400,000 tons of raw material per year to produce up to 170,000 tons of SAF, 120,000 tons of renewable diesel, and 550,000 tons of sustainable naphtha. These products will be sold to the domestic market helping to promote a low-carbon and sustainable development of the aviation industry.

As for hydrogen energy, TotalEnergies has established an independent hydrogen energy division and, together with local partners, has actively explored opportunities within the local market. In June 2022, TotalEnergies announced its acquisition of 25% shares of Adani New Industries (ANIL). Together, with an investment of USD 50 billion, TotalEnergies and Adani will build the world's largest green hydrogen production system in India aimed at producing 1 million tons of green hydrogen annually by 2030.

3

Refining and Chemicals

TotalEnergies is a global leader in petrochemical production, with the refining and chemical segments being one of key value driver for our company. We work hard to deliver our customers clean and low-carbon polymers products to fulfil our drive for a carbon-neutral future and the commitment to satisfy the needs of our customers around the world, especially in China.

Polymers

China's burgeoning economic growth has fueled constant evolutions in its consumer market. As a global leader in petrochemical production, TotalEnergies has always strived to deliver Chinese consumers high-value-added polyethylene and polypropylene that boost performance and guarantee competitive advantages.

We tackle the needs of the rubber, adhesive, and sealants markets with functional additives via the manufacturing and supply capability of our affiliate Cray Valley. TotalEnergies Corbion, another vital subsidiary of ours, manufactures and markets PLA polymers, a biobased and biodegradable polymer with lower carbon footprint compared to its traditional counterparts.

TotalEnergies offers recycle friendly mono-material packaging solutions with the high-performance polymer products, enable converters to provide the sustainable package to wide brand owners and end-use consumers. TotalEnergies is developing solutions for post-consumer recycled (PCR) polymer incorporated solutions for packaging, automotive and construction segments.

The use of the biodegradable PLA polymers is just another example of TotalEnergies's stance for the adoption of low-carbon solutions. Our commitment to a greener future is also embodied by our participation in the creation of the Alliance to End Plastic Waste (AEPW), an initiative to improve the management, recovery, recycling and reduction of plastic waste that see the participation of global manufacturers of chemicals and plastics as well as consumer goods companies, retailers and waste management companies.

Specialty chemicals

By leveraging the expertise of our specialty chemical subsidiary Hutchinson, TotalEnergies has reached a leading global position in areas such as vibration control, fluid management and sealing technologies. Our solutions help make mobility safer, increase comfort levels as well as enhance energy efficiency in markets such as automotive and trucks, aerospace, defense, energy, rail and industry.

Since it took its first steps in the Chinese market in 1998, Hutchinson has continuously expanded its operation to own, as of today, six production sites in the country - Suzhou, Wuhan, Chongqing, Shenyang and Ma'anshan – with a combined work-force of more than 2,700 employees, which puts the company at the highest ranks of the industry.

Thanks to its production standards, Hutchinson has earned recognition from premium automotive brands, in China and abroad, with whom we have launched full-scale partnerships. In 2020, we have signed an agreement with Evergrande Auto for the supply of static sealing solutions for their new EE4 platform, which includes four of their new EV models.

In the railway sector, Hutchinson Suzhou has developed and delivered new secondary sus-pensions for the trains on the Guangzhou Metro Line 18 and Line 22, which meet the EN 45545-2 standard.

With outstanding performance, Hutchinson was awarded annual best partner by BBAC and HAIER Group for its reliable products, as well as the strong sense of responsibility of all staff in pursuit of excellent service.

4

Marketing and Services

Our Marketing and Services (MS) division's ambition is to offer our customers, professionals, and individuals a wide range of high-performance, innovative multi-energy offers and services focused on energy efficiency. Its 31,000 employees are present in 109 countries, and its products and services are sold in 150 countries. Every day, more than 8 million customers are served through our network of over 14,000 service stations located in 62 countries worldwide, making our MS division a major player in the transport energy transition.

As TotalEnergies undertakes the transition toward new energies, the MS division unveils a new roadmap to guide it through the end of 2025, thus becoming an opportunity for the Company to reflect its values as marketers. Guided by TotalEnergies' ambition of reaching carbon neutrality by 2050 and its core value of safety, the Marketing and Services Branch places sustainability at the heart of the Company's strategy and the customer at the center of its priorities. The Branch moves forward through four levers: **providing new energies for transition, designing innovative solutions for customers, developing teams and delivering performance.**

Digitalization

China has a world-leading environment for digital innovation and a fertile ground for making it a reality. To continuously creating value to our customers in China, TotalEnergies has embraced a digitalization push in line with the country's formidable digital transformation.

In 2020, TotalEnergies MS China has signed a Memorandum of Understanding (MoU) with Chinese tech giant Alibaba Group (Alibaba) to utilize the Alibaba Business Operation System (ABOS) and leverage Alibaba's leading digital technology, providing digital infrastructure (including Cloud computing) and support for TotalEnergies' service stations, as well as lubricants and special fluids to businesses in China.

In 2021, with the assist of Alibaba's big data analysis and data governance capabilities, MS China launched the Data Middle End project (phase I). Benefiting from this project, MS China began to explore in the fields of data asset management, data visualization and business intelligence. On top of that, MS China adopted the function of customer dynamic labels of Alibaba and JD to launch precision promotion activities for e-commerce consumers. The e-commerce business of lubricants and additives on Tmall and JD platforms increased over 30% year-on-year.

In May 2022, MS China piloted a new membership system named "ONE CRM". The core concept is to integrate various value-added services across MS China business units to create a customer-centric & diversified service driven business model with the purpose of boosting sales.

In 2022, MS China Lubricants business unit completed the digitalization of the entire business value chain, building a digital ecosystem from production to channel sales, to terminal sales. It provides customer-centric digital solutions for internal sales, distributors, workshop owners, mechanics and end-consumers, with the purpose of process optimization, cost reduction, and the build-up of innovative business models.

In e-commerce, in 2021 TotalEnergies signed strategic cooperation with well-known domestic internet car maintenance brands, including Tuhu, Tmall AutoCare and others, and officially joined the "Integrity Alliance" established by Tuhu.

Stations and fuels

It was 1999 when TotalEnergies began to operate its wholly-owned service stations in Hubei, China. Only a few years later, in 2005, the company formed partnerships with Sinochem under two JVs, TotalEnergies-Sinochem Fuels Co., Ltd and TotalEnergies -Sinochem Oil Co., Ltd. At the end of 2021, TotalEnergies and its partner in the two JV's decided to merge the entities under one. By June 2022, the total number of service stations operated by our Company in China rose to 361.

Our quest for clean mobility and our drive for innovation has led to the introduction of TotalEnergies' Excellium fuels. Excellium fuels can clean and keep cleaning the essential components of the engine, so to enhance performance while economizing consumption. The new line of fuels is available in all self-operated TotalEnergies sites in Wuhan and in all TotalEnergies-Sinochem co-branded sites located in Beijing and Tianjin city.

In addition, in accordance with government requirements and following national standards, TotalEnergies service stations also provide ethanol fuels in designated areas.

In actively supporting e-mobility, TotalEnergies brought its high-quality electric charging services into China with the launch of its first standalone electric vehicle (EV) charging station in Wuhan in 2020. In 2021, TotalEnergies established a Joint-Venture company with China Three Gorges Corporation (CTG), the operator of the Three Gorges Dam and China's largest clean energy corporation as well as the world's largest hydropower producer, to develop co-branded public fast charging hubs and dedicated B2B charging stations. By leveraging TotalEnergies' worldwide expertise in electric mobility and CTG's strong green energy and production supply capability, the JV has plans of installing and operating more than 11,000 high power charge points by 2025. In addition, the Joint Venture will deploy its own

CRM with an aim of directly manage relations with clients and store customers' and transactions' data within the Hubei Province.

Electric vehicles could represent nearly a third of all vehicles and half of all sales worldwide by 2040. If that boom is to materialize, the number of charging points needs to be increased dramatically. Current growth in the EV industry is bringing charging solutions into a new era in terms of ambition and capacity. Our ambition is to deliver to our customers top-notch charging services wherever we do operate charging points.

Lubricants

TotalEnergies has recorded a steady increase in the sales of its lubricants in China since it first entered the country in the early 1990s. Today, TotalEnergies operates three lubricant plants, one grease plant and a nationwide logistic network in China. Active on the Chinese lubricant market for more than 20 years, TotalEnergies has been committed to providing customers with a full range of lubrication solutions. With its customer centricity strategy, TotalEnergies has been deepening the understanding of customers and enhance the customer experience by data collecting and analysis, and providing customers with high-quality diversified products, which help us earn the recognition from both end consumers and professionals. China has become one of TotalEnergies' largest lubricant markets.

In the field of automotive oil, we provide a full range of diversified lubricant products designed for passenger cars, commercial vehicles, and motorcycles, as well as gear lubricants, flushing oil, antifreezes, and other associated petroleum products, including Quartz automotive lubricants, Rubia commercial vehicle lubricants, HI-PERF motorcycle lubricants, as well as a variety of lubricants under Elf brand.

For the fast-developing EV market, TotalEnergies takes the lead in launching EV fluid, an electric vehicle fluid product for new energy vehicles, to quickly respond to the booming trend of new energy vehicles (NEV) and meet the needs of NEV manufacturers and car owners. The product range includes high-performance multi-purpose electric vehicle fluid that can provide speed reducer lubrication and motor cooling at the same time as well as innovative immersion battery cooling technology. The new technology of TotalEnergies made its world premiere at the 2018 CTI Technology Exhibition in Berlin and won the 2019 Product of the Year Award issued in Fuels & Lubes Asia, the authoritative magazine for the Asian lubricants market, in Singapore.

In addition, our industry oil division is developing and promoting lubricants and greases to maximize the New Energy Efficiency, reducing carbon emissions, such as CARTER WTC/WT in Wind power, NATERIA range in Gas Engines, CERAN grease in Steel mill. Meanwhile, TotalEnergies Equipment Lubricant Online Monitoring service uses digital ways to help customer increase equipment reliability, reduce energy consumption and CO_2 emission.

Our JV with the China Three Gorges Corporation has plans of installing and operating more than

11,000

power charge points

by 2025

Working side by side with partners is key for our performance in the Chinese market. In 2021, TotalEnergies signed strategic cooperation agreements with Great Wall Motor (GWM), to enhance their international business cooperation and partnership in R&D. This cooperation will enhance the collaboration between TotalEnergies and GWM on new energy vehicle fluids.

As a champion of a healthy lifestyle, TotalEnergies has been an active sponsor of local sporting events in China. Since 2017, TotalEnergies has organized the TotalEnergies - Li Ning - Li Yong Bo Cup 3V3 Badminton Tournaments in more than ten Chinese cities, which attracted extensive attention and created a new world record for the largest number of badminton contestants in one tournament. TotalEnergies has also been the official sponsor of several major events under the Badminton World Federation (BWF) since 2015, including the 2019 TotalEnergies BWF Sudirman Cup held in Nanning in May.

Special fluids

TotalEnergies has more than 50 years of product development experience in the field of special fluids and is committed to providing and producing the highest purity and renewable special fluids for users all over the world. We supply more than 150 kinds of products, which can be used in metal processing, rubber & plastic, water treatment, poultry vaccine and other special industries. In China, special fluids can provide customers with customized solutions and services based on customer applications, develop customized special fluid products according to customer needs, provide formula application and new formula development support, and provide patent support and other services.

Marine fuel

TotalEnergies Marine Fuels is TotalEnergies' dedicated business unit in charge of worldwide bunkering activities. With over three decades of market experience, TotalEnergies Marine Fuels serves more than 200 shipping customers across over 120 ports in Europe, Asia Pacific and Africa. Its current product portfolio consists of low sulfur fuel oils, distillate marine fuels, biofuels and LNG.

As part of its drive to help shipping customers adopt the cleanest available marine fuels today, TotalEnergies Marine Fuels has made key investments to supply marine LNG at strategic bunker hubs. TotalEnergies currently operates two 18,600-m³ LNG bunker vessels built by Hudong-Zhonghua Shipbuilding in Shanghai, China: the Gas Agility, at the Port of Rotterdam, Netherlands; and the Gas Vitality, at the Port of Marseille-Fos, France. A third LNG bunker vessel will start operations at the Port of Singapore this year, where the Company has been awarded an LNG bunker supplier license for a five-year term.

TotalEnergies Marine Fuels also delivers sustainable biofuels as drop-in replacements to conventional fuel oils, thereby providing an immediate solution for existing vessels to reduce their greenhouse gas (GHG) emissions with little or no technological developments required to their engines. It has successfully delivered biofuel bunkers in Rotterdam and performed Singapore's first bio-VLSFO bunker operation for a bulk carrier and a vehicle carrier.

Lubmarine

TotalEnergies supplies lubricants also to the marine industry through TotalEnergies Lubmarine, its specialized marine lubricants business which provides innovative solutions to the global shipping industry.

TotalEnergies Lubmarine provides lubricant solutions in over 1,000 ports worldwide, with the Lubmarine China team based in Shanghai, offering premium marine lubricants and services throughout China. Our pioneering solutions in marine engine oils and greases operate in the most extreme conditions, and our technical expertise helps OEMs, vessel owners and operators to successfully reduce costs, increase vessel reliability, mitigate engine risks and improve environmental credentials.

As a testament to the excellent work TotalEnergies has done in this area in China, TotalEnergies Lubmarine has been holding the best performance award from COSCO Shipping group in the past 10 years and was the largest marine lubricant suppliers within COSCO shipping group.

04

Sustainable development in China

1

Research and development

As one of the first international energy company entering China, TotalEnergies sees itself as an integrated part of the local community. We actively promote the achievement of sustainable long term development goals together with the country and its people. On the one hand, we seek to enable innovation in China and in the world by means of investing in cutting-edge energy solutions via R&D and Energy Venture programs; on the other hand, we feel the responsibility of promoting the well-being and the development of our host communities. We believe in Corporate Social Responsibility (CSR), and we translate that belief in concrete actions from supporting education to strengthening public health.

Research & Development is at the core of TotalEnergies' DNA and represents a key factor in our goal to achieve net-zero carbon emissions by 2050. Being one of the top 100 most innovative companies worldwide, we allocate more than $1 billion a year to invest in our R&D programme, which involves more than 4,300 employees with 18 research centers globally, as well as numerous partnerships with universities, start-ups, and industrial companies.

To meet Company's ambitions, TotalEnergies' R&D programme concentrates on five strategic domains, which include digital transformation, safety, efficiency, low-carbon mix, and new products & services.

TotalEnergies sees China as a crucial partner in our global innovation map, where we have launched over 40 research projects successfully since 2009. We are committed to innovation in China, while seeking to provide sustainable energy solutions globally.

R&D is a driver for long-term transformation and a key factor of our Climate Ambition strategy to net-zero carbon emission. Thus, our Company are dedicated to devoting more than 40% of its research effort in projects aiming at decarbonizing our energy mix. We are investing in strategic sectors that will contribute to carbon neutrality in the future, including renewable energies and hybrid power systems for mobility and industrial sites, biofuels, and carbon capture.

To further innovation and drive future development, starting September 1st, 2021, our technical and scientific teams have been brought together within a single entity, the OneTech Branch. OneTech will

strengthen our innovation capacity, our ability to design and manage major industrial projects in all energies, while leveraging our operational excellence.

Carbon capture, utilization, and storage (CCUS) is an important part of our efforts toward carbon neutrality. It helps capturing carbon dioxide and store it underground in a safe and permanent manner, further reducing the carbon footprint of associated industrial operations.

TotalEnergies has been a pioneer in this area since 2010, the year we began developing a pilot project for CCUS in Lacq, southern France, to which we dedicated 10% of our total R&D spending. Following Lacq, we have participated in numerous initiatives, including the Northern Light project in Norway and the partnership with Svante, LafargeHolcim, and Oxy Low Carbon Ventures for a CCUS facility in Colorado.

TotalEnergies participates in CHEERS in China, The Chinese-Europe Emissions-Reducing Solutions project, together with prestigious universities, leading research institutions, and premier local equipment manufacturers from both China and Europe for the development of large-scale, low-cost, and high-efficiency CCUS technology to refining, petrochemical power, and other energy industries. The success of CHEERS project will contribute a unique solution with potential to reduce 15% or even higher CO_2 emission in refining and chemical process.

Industrial carbon emissions are not only an object of research and experimentation, but also are explored for potential alternative uses. In 2020, through innovation partnership between LanzaTech, TotalEnergies, and L'Oréal, we premiered the world's first sustainable packaging made from captured and recycled carbon emissions. This successful project demonstrates the commitment of our Company towards a sustainable circular economy and paves the way

for more opportunities for the capture and reuse of industrial carbon emissions.

TotalEnergies also strongly push toward digital transformation as a form of innovation. 30% of the Company's investment in R&D is devoted toward digitalization in areas from product innovation to service and operations. In 2020, we signed a MoU with Alibaba Group in utilizing the Alibaba Business Operation System to provide digital infrastructure and support our service stations. Another tech giant, Google, has become our partner for the development of Solar Mapper, which is our innovative tool. By leveraging Google Cloud's brand-new AI algorithms, promises to accelerate the development of solar panels for individuals by providing a faster and more accurate estimate of the solar energy potential of their homes compared to any other currently available tool.

TotalEnergies is also a partner with the Chinese Academy of Sciences for the development of new generation and advanced bioprocesses for fuel and chemical production. In addition, TotalEnergies has also been active in the exchange of research and innovations with China via TotalEnergies China Scientific Forum (TCSF), an initiative launched for the first time in 2009. The forum now has grown into an international platform for the energy industry. The latest TCSF was held in May 2022, in Chengdu under the theme of "Low Carbon Energy Innovation". With two-day gatherings, we focused on the development of innovative technologies for the LNG industrial chain, low-carbon transportation, and CCUS.

2

Contributinig to our host communities

The outbreak of the epidemic reinforced our commitment to the health and safety of our employees as well as strengthened our sense of being an integral part of the Chinese community.

TotalEnergies called for immediate actions to ensure the health and safety of our employees and to support local communities in their frontline efforts to combat the epidemic. The leadership of TotalEnergies China, in line with local government policies, timely devised and implemented specific company policies and measures aimed at reducing the risk of contagion and promote the safety of our staff in China. Postponed working hours, remote working, strict disinfection protocols, distribution of protection items such as masks, gloves and goggles are just some of the measures we implemented to guarantee operations in a safe environment.

In February 2020, TotalEnergies China donated RMB 2 million to China Charity Federation (CCF) to help China fight the coronavirus epidemic. The donated fund was designated to purchase medical supplies for the epidemic prevention and control in Hubei Province, support frontline hospitals and medical workers, as well as support the epidemic prevention and control work in other areas of Hubei Province. TotalEnergies staff in China have also made voluntary donations in cash or medical supplies to the affected regions.

These were not only cash donations. To support frontline efforts against the epidemic, all TotalEnergies-operated service stations in Wuhan continued to work to ensure an adequate and continuous supply of fuel, crucial for the transportation of rescuers and supplies.

Support to communities in the vicinity of South Sulige

As an integral part of the joint project between TotalEnergies and CNPC, every year we extend support to the local rural communities in the development area of South Sulige with initiatives in Education, Farming and Environment.

In education, we enable poor students to attend college in the nearby bigger cities and offer aid to teachers and schools by equipping their classrooms. In farming, for several years we helped disadvantaged areas in setting up mushroom farming. Support is provided in the form of logistic bases for vegetable handling and corn drying facilities. Finally, on the environmental side, support has been extended to local villages in setting up garbage collection and land cleaning up activities as well as greening activities in the form of tree planting in and around our facilities, in an effort to enhance biodiversity in the area.

Since its inception, the South Sulige project has always worked to balance its development and the biodiversity in the area via the constant implementation of measures towards the protection of vegetation and wild animals, including initiatives to minimize the land occupation of the operations (drilling/fracking, etc.).

Sand barriers are set up to fix sand and grass seeds are planted for vegetation restoration. Various measures have been taken for the protection of the habitat of the Demoiselle Crane, including exempting areas from well clusters construction, optimizing pipeline and road routes, avoiding construction activities as much as possible between April and August to minimize disturbance, and setting up the necessary information boards and signs. As a result of these efforts, the South Sulige project has become the No.1 gas field enterprise in the list of “green mines” of Inner Mongolia.

Road safety training programm

Road Safety Training program aims to teach the value of safety to children and assist educators in developing a robust road safety program for schoolchildren. Since the launch in 2010, TotalEnergies Road Safety education program has been held for 12 consecutive years. It has involved near 50 schools in 19 cities across the country, training more than 17,000 students.

In 2021, our training camp was held in schools in 7 cities, including Shanghai, Beijing, Tianjin, Xi’an, Wuhan, Zhenjiang and Guangzhou. With the strong support of the Beijing Traffic Safety Publicity and Education Base, more than 1,000 students participated in the training this year.
For its distinctive contribution to the promotion of a better and safer environment, our Road Safety Training program received the “Good Planet” award by the CCI China French Chamber of Commerce and Industry in China.

TotalEnergies Professeurs Associés

TotalEnergies Professeurs Associés (TPA) is one of our most successful initiatives in bridging the gap between the energy industry and academic institutions. Consisting of a group of senior or retired professionals from TotalEnergies, TPA has been active in providing intensive practical courses on topics covering many aspects of the energy industry, with no charge to the participants. This has made TPA a valuable industry platform for trust building and information sharing of latest developments.

In 2009, TPA offered its first course in China at the SCUT. Thus far, we have partnered with numerous top Chinese universities such as Tsinghua University, the South China University of Technology (SCUT) and the China University of Petroleum in Beijing (CUPB), and have successfully delivered courses to over 17,000 students.

Since 2020, considering the limitation imposed by the epidemic, much of the event was held online, a decision that managed to guarantee the continuity of what has become a valuable industry platform for trust-building and information sharing among Chinese and international professionals and students.

3

Safety

Safety is the core value of TotalEnergies. As a multi-energy company with operations in risky environments, we apply strict safety standards that hold on both our employees and contractors alike. This has allowed our Company to boast safety figures among the best in the energy business, which is a proof to our relentless pursuit of the safety of our employees.

At TotalEnergies, safety is not only a business principle but is also embedded as an integral part of our DNA. Our commitment to enhancing the safety conditions for our employees is reflected in the overall decline of our Total Recordable Injury Rate (TRIR) and Loss Time Injury Rate (LTIR) figures over the past decades.

In 2022, we published the latest edition of our 12 Golden Rules on occupational safety. The guidelines are built on the lessons learned from previous cases and provide an understandable reference for employees to act upon in creating a safe work environment.

At TotalEnergies, we strive to promote safety as a shared value among our employees across all our locations. Stemmed from this perspective, initiatives such as the World Day for Safety have been launched to bring our employees together on a shared platform to promote a common culture around safety. In 2022, TotalEnergies' World Day for Safety reached its 15th session with the "The Golden Rules: My Commitment, Our Safety." All TotalEnergies China's subsidiaries, offices, plants, stations, and worksites carried out a wide range of activities applying our Golden Rules on that day, boosting employee safety skills.

Safety is our first and foremost, personal and collective responsibility that requires all to take action and play an indispensable part. Since September 2007, TotalEnergies China has maintained its record of fatal accidents at zero, an extraordinary testament to our commitment to safety.

Zero accidents

TotalEnergies China has maintained its record of fatal accidents at zero, an extraordinary testament to our commitment to safety

Key Figures

$18.1bn
in adjusted net income **in 2021**

World no.2*
in liquefied natural gas

8.8 million
gas and power **customers in Europe**

150,000
charge points
for electric vehicles by 2025

> $3bn
invested in renewables and electricity **in 2021**

30%
circular polymers
by 2030

> 100 GW
of production capacity for **renewable electricity** by 2030

150
hydrogen filling stations
operated in Europe by 2030

More than
8 million
customers served in nearly **16,000 service stations** each day

2.8 Mboe/day
produced in 2021, of which **54% natural gas**

740
business-related competencies

More than
4,000
researchers in our 18 R&D centers

± $1bn
invested in R&D in 2021, of which **50% devoted to decarbonation solutions**

* Second largest private firm

TotalEnergies is a global multi-energy company that produces and markets energies: oil and biofuels, natural gas and green gases, renewables and electricity.
Our 100,000 employees are committed to energy that is ever more affordable, cleaner, more 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.

TotalEnergies

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