TotalEnergies

Saft in brief
2024

We energize the world.
On land, at sea, in the air, and in space.

SAFT

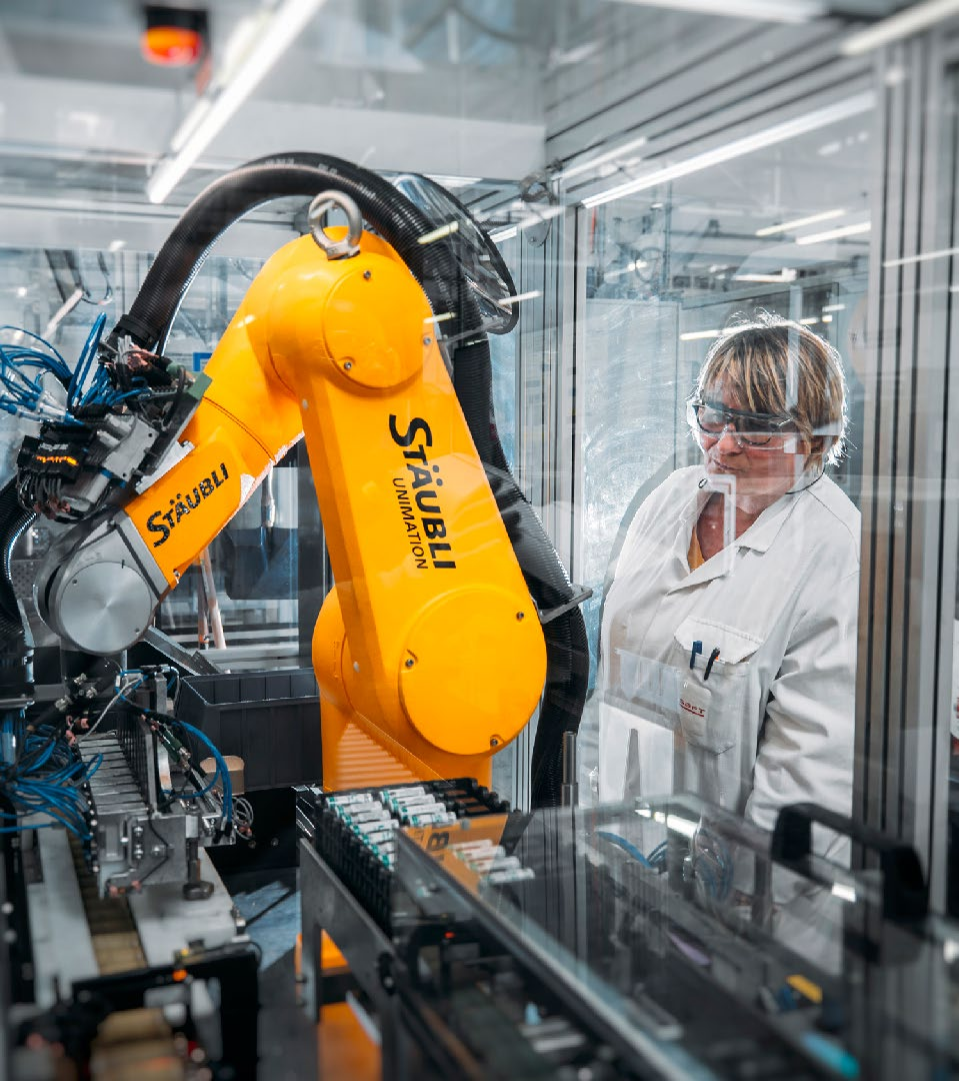
Summary

01 About Saft

02 Our divisions

03 Goals & values

04 Governance & organization



01.

About Saft

About Saft

Saft specializes in advanced technology battery solutions for industry, from the design and development to the production, customization and service provision.

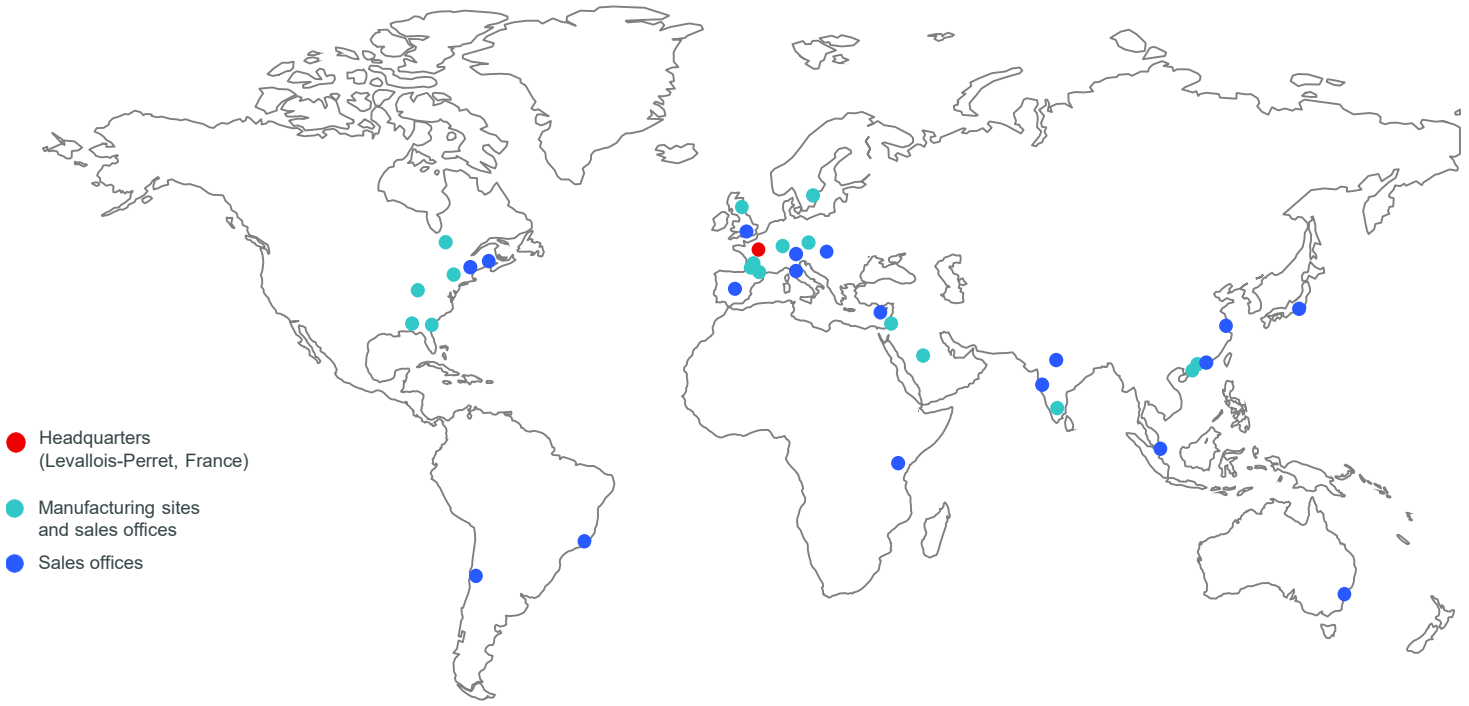
For more than 100 years, Saft's longer-lasting batteries and systems have provided critical safety applications, back-up power and propulsion for our customers.

Our innovative, safe and reliable technology delivers high performance on land, at sea, in the air and in space.

Saft is powering industry and smarter cities, while providing critical back-up functionality in remote and harsh environments from the Arctic Circle to the Sahara Desert.

Saft is a wholly owned subsidiary of TotalEnergies, a multi-energy company that produces and markets energies on a global scale: oil and biofuels, natural gas and green gases, renewables and electricity.

Saft worldwide



17
Manufacturing sites

19
Countries

35
Sales offices

Saft: key figures

€1.2 B revenues in 2023
+18% vs 2022

4300 employees
69% men, 31% women & 56 nationalities

3000 customers in 2023

€101M invested in
R&D in 2023

42 patents filed in 2023

A wide range of offerings designed for specific needs

* IIOT = Industrial Internet of Things

4 divisions serving a wide range of industries & applications

Aerospace, Defense & Performance

- Communication, scientific and observation satellites
- Satellite launchers, space vehicles
- Racing
- Commercial & military aircraft
- Defense ground vehicles

Connected Smart Energy

- Smart metering
- Industrial Internet of Things
- Electronic Toll Collection
- Asset tracking
- Security systems

Energy Storage Systems

- Storage of renewable energy
- Support grid stability
- Frequency regulation
- Commercial & industrial energy back-up
- End user peak shaving

Industry, Mobility & Infrastructure

- Utilities & substations
- Industrial buildings
- Data centers
- Off-road vehicles
- Rail rolling stock & trackside

Some key customers

TotalEnergies

Mobility

KION GROUP · VOLVO

Oil & Gas

 · TotalEnergies

Rail

ALSTOM · mobility by nature · 中国中车 CRRC

Telecom

AT&T · verizon

Utilities

 dewa · एनटीपीसी NTPC

IIoT

BOSCH · nedap

Medical

CARDIAC science · BREAS

Metering

Landis+Gyr manage energy better · Itrón

Commercial & Industrial

TotalEnergies · SANTA ROSA JUNIOR COLLEGE

Utility Energy Storage

174 POWER GLOBAL · enel · TotalEnergies

Aviation

AIRBUS · BOEING

Defense

NAVAL GROUP

Marine

Benetti ITALIAN EXCELLENCE SINCE 1873

Space

ThalesAlenia Space · NORTHROP GRUMMAN

saft

02.

Our divisions

01.

Aerospace, Defense & Performance (ADP)

Aerospace, Defense & Performance

Main applications

Aerospace

- Backup power & emergency systems
- Engine & turbine starting for airplanes
- Communications, scientific & observation satellites
- Satellite launchers & space vehicles

Defense

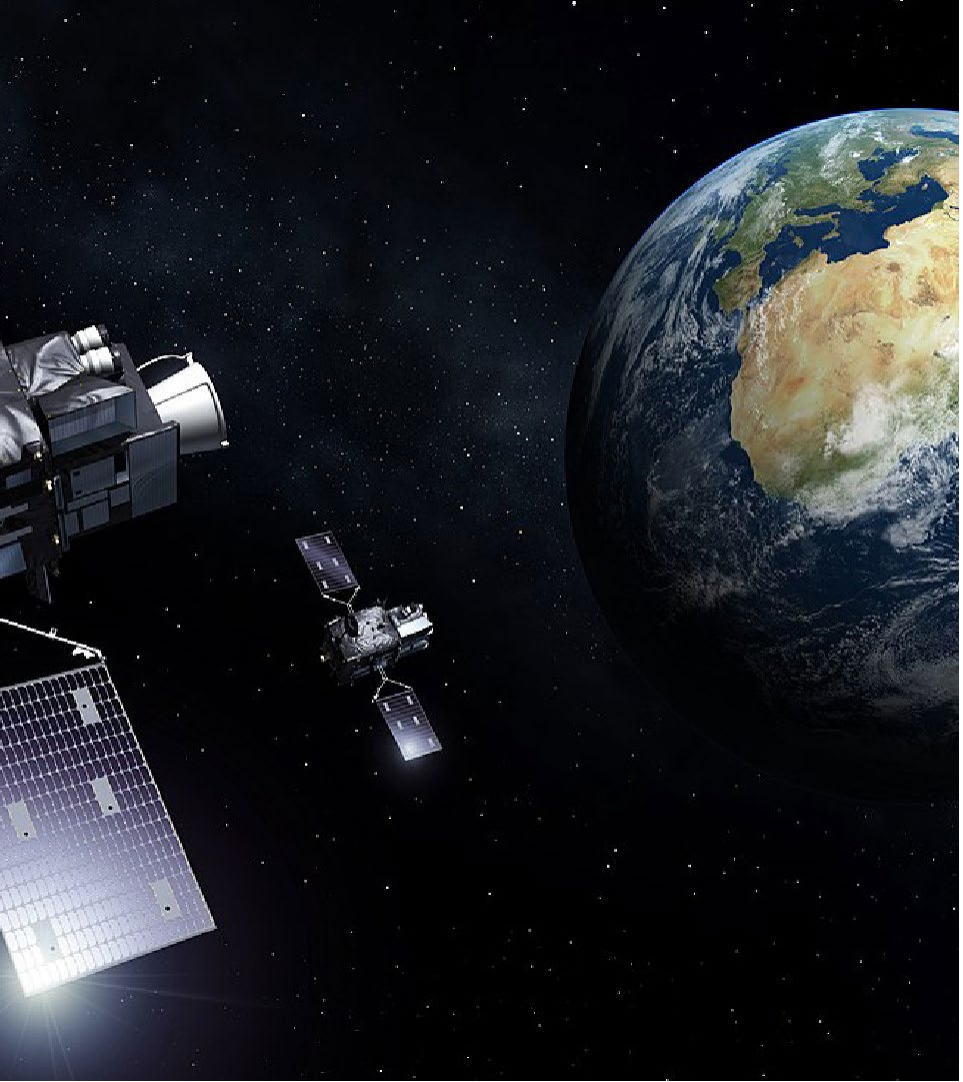
- Military aircraft
- Submarines
- Weapons & torpedo systems
- Armored vehicles

Performance

- Formula 1 & Formula E
- Workboats & ferries
- Cruise liners & luxury yachts
- Cargo & offshore vessels

Technologies

- Nickel batteries for aviation
- Lithium-ion batteries
- Silver-based batteries for military equipment



Highlight 2023

EUMETSAT

Saft provided lithium-ion batteries for EUMETSAT's Meteosat Third Generation program.

These batteries power six satellites, improving the accuracy of weather forecasts.

Saft batteries offer a constant flow of weather data, even during solar eclipses in geostationary orbit.

They will support two types of satellites over the course of the 20-year mission, helping to gather visual data, and monitor water vapor and atmospheric gas.

02.

Connected Smart Energy (CSE)

Connected Smart Energy

Main applications

- Smart metering
- Electronic toll collection systems (ETC)
- E-call
- Asset tracking
- Industrial Internet of Things (IIoT)
- Medical devices
- Portable military applications
- Oil drilling
- Environmental monitoring
- Security systems

Technologies

- Primary lithium batteries
- Li-SOCl2
- Li-MnO2
- Li-SO2
- Hybrid
- Lithium-ion batteries

Highlight 2023

Wi-CARE

Vibration analysis is essential to keep machines in good condition. It can detect problems before they become critical, and provide a real-time view of the state of rotating machines.

Our client I-care launched Wi-care™ 130 Next Gen, a wireless solution for monitoring predictive maintenance and vibration analysis.

Each Wi-care™ 130 device uses a Saft LS26500plus battery, which is ideal for sensors and measurement equipment.

03.

Energy Storage Systems (ESS)

Energy Storage Systems

Main applications

- Energy storage solutions for network services & renewable energy services
- Micro-grids for commercial & industrial applications

Technologies

- Lithium-ion batteries

Highlight 2023

MYRTLE

Saft played a central role in commissioning Myrtle Solar, TotalEnergies largest solar power plant in the United States.

Saft provided 114 high-technology containers that store a total of 225 MWh, thereby helping stabilize the network.

These batteries allow Myrtle to produce enough green energy to power the equivalent of 70,000 households, and to meet the needs of TotalEnergies industrial sites.

04.

Industry, Mobility & Infrastructure (IMI)

Industry, Mobility & Infrastructure

Main applications

Industry

- Backup power
- Starting power & cycling applications in the oil & gas industry
- Power generation & distribution

Mobility

- Electrification of industrial vehicles
- On-board backup power for lighting, air conditioning, communication systems
- Critical safety rail applications (emergency braking, door opening systems)
- On-board rail traction systems

Infrastructure

- Railway signaling systems
- Backup power for the telecommunications industry
- Data centers

Technologies

- Nickel batteries
- Lithium-ion batteries

Highlight 2023

Siemens Mobility

In 2023, Saft equipped SIEMENS MIREO PLUS H hydrogen-powered trains with two battery systems, each providing 100 kWh of energy.

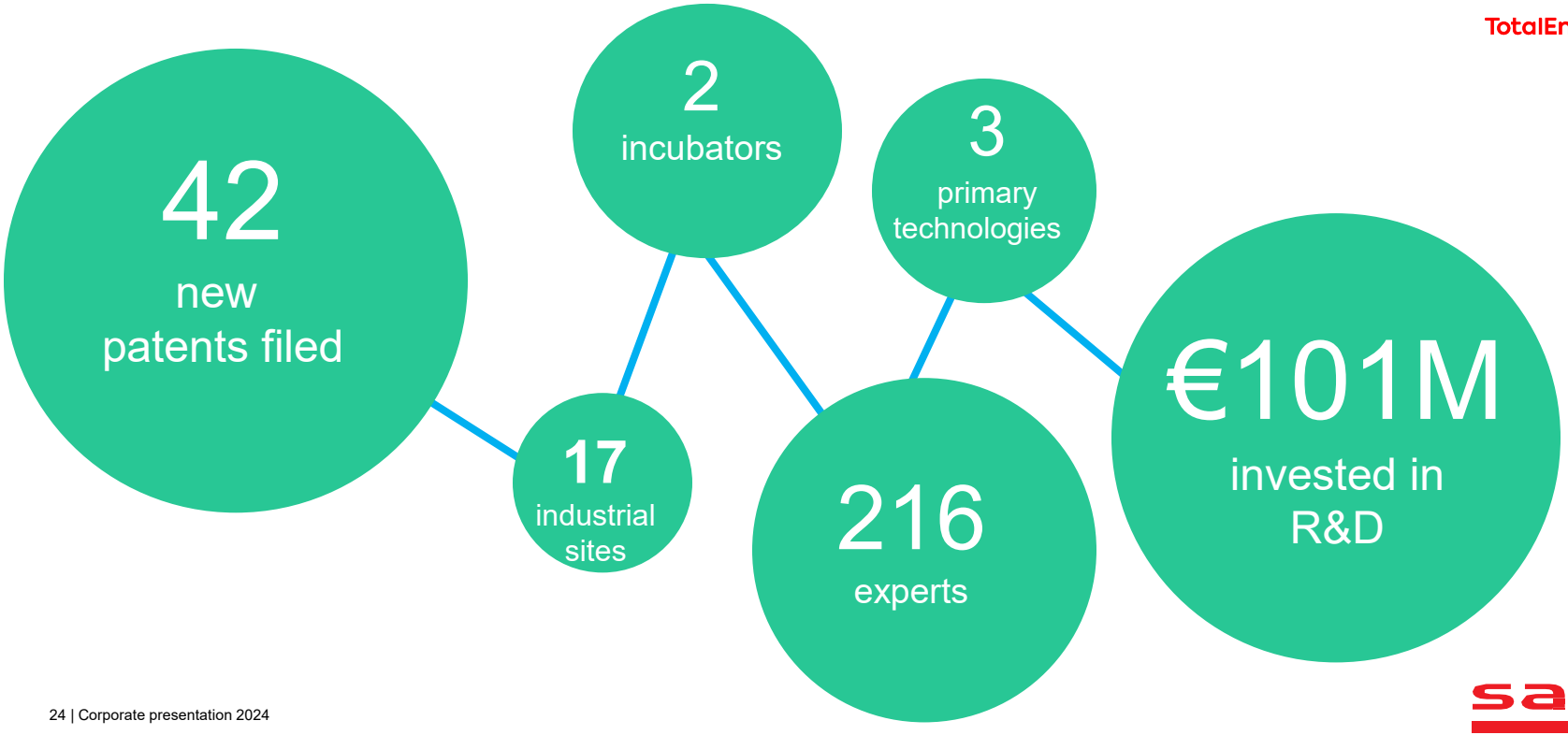
These batteries provide sufficient traction for the train's acceleration before the hydrogen takes over.

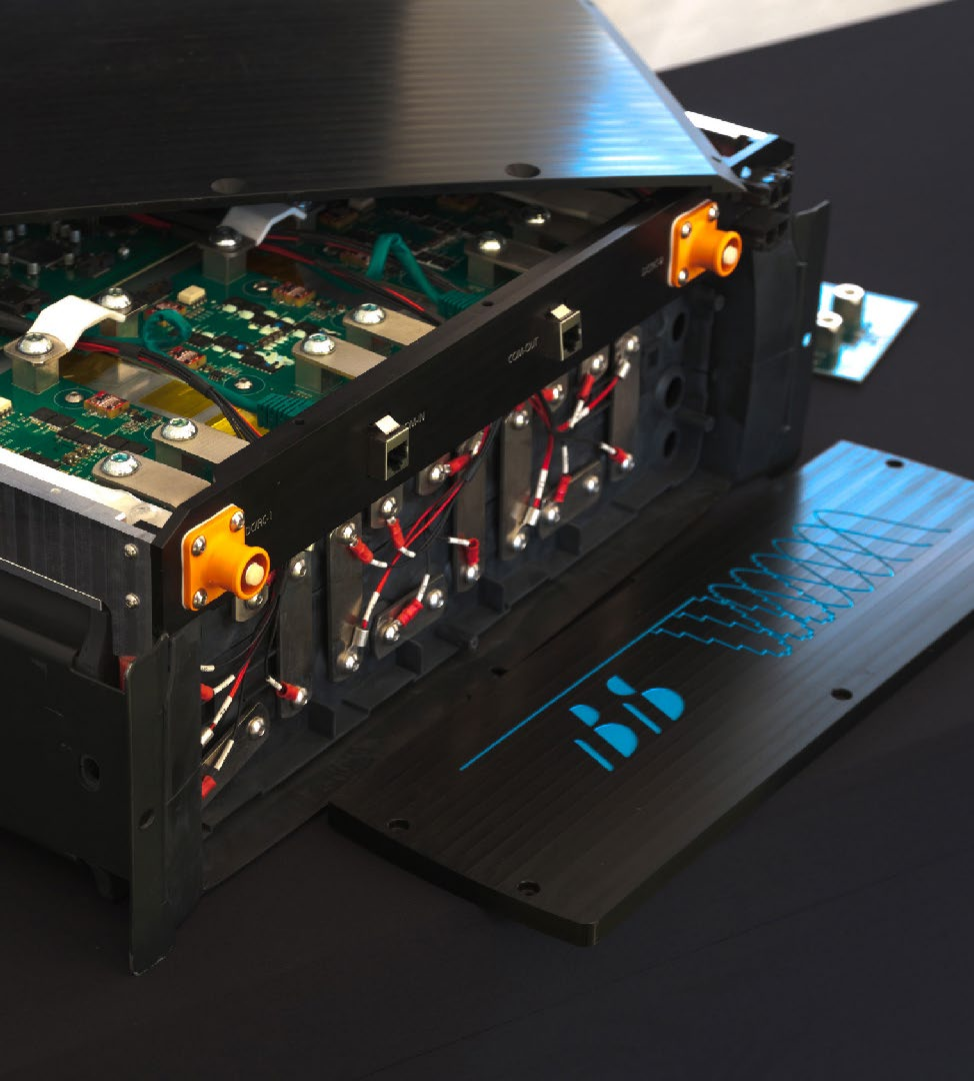
The project was led from Bordeaux, France, with production in Jacksonville, U.S. and assembly in Nersac, France.

03.

Goals & values

Key figures for innovation and expertise



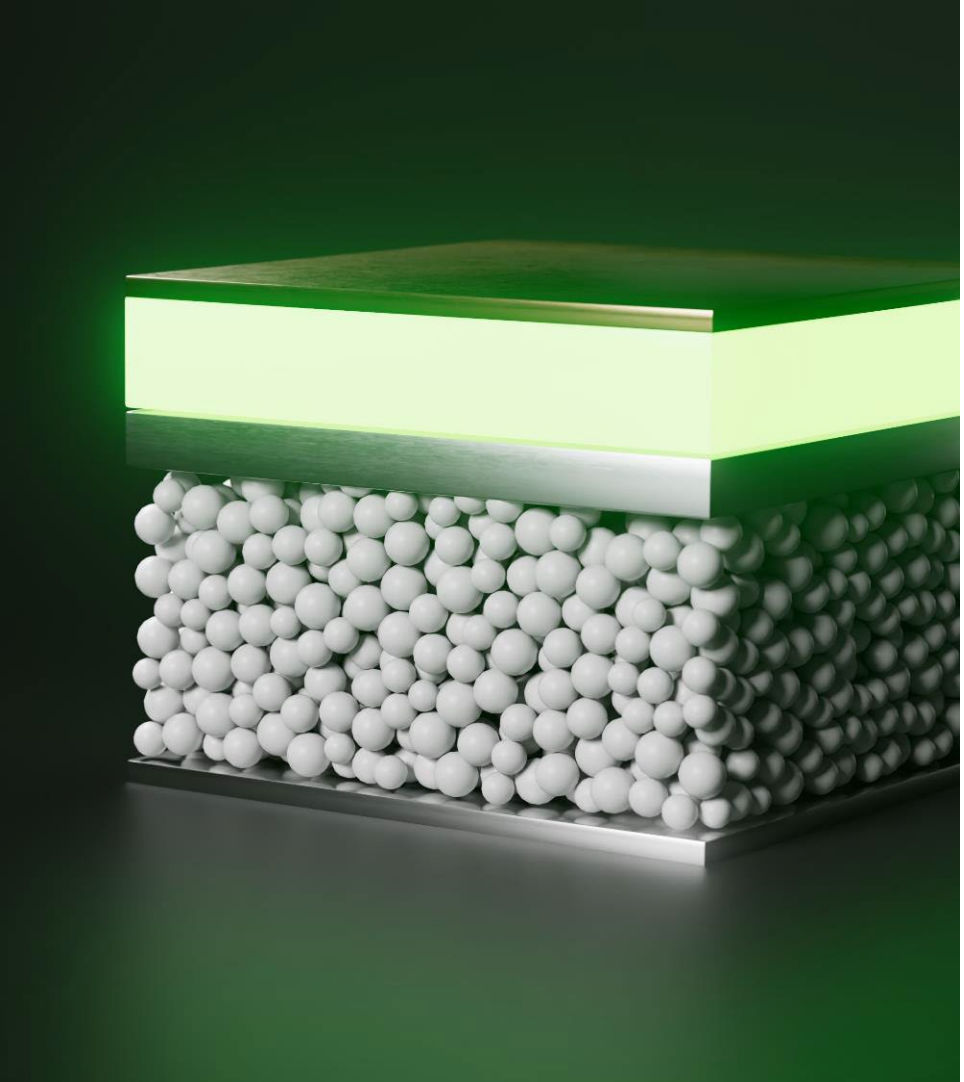


IBIS Project

In July 2023, Saft, CNRS and Stellantis officially presented the IBIS battery (Intelligent Battery Integrated System).

IBIS integrates the electric charger and inverter functions into the lithium-ion battery modules replacing them with electronic conversion cards,thereby freeing up space in the vehicle and reducing cost.

A demonstrator, operational since 2022, is the subject of numerous patents and marks a major break from electrical energy conversion systems currently used.



ELIAS project

In partnership with a consortium of academic and industrial actors, Saft is working on the ELIAS project to create “solid-state” lithium batteries. These batteries offer enhanced performance without compromising safety.

The ELIAS project, supported by France 2030 and Bpifrance, is a response to the expected expansion of the battery market, which should quadruple by 2030.

Saft anticipates having an operational prototype in Bordeaux available in late 2024, marking a major step in the development of this technology.

Program Net Zero

Our 5 pillars

- Reduce our environmental impact
- Help our customers decarbonize
- Implement circular economy throughout our operations
- Procure sustainably
- Develop people and contribute to society

In 2023

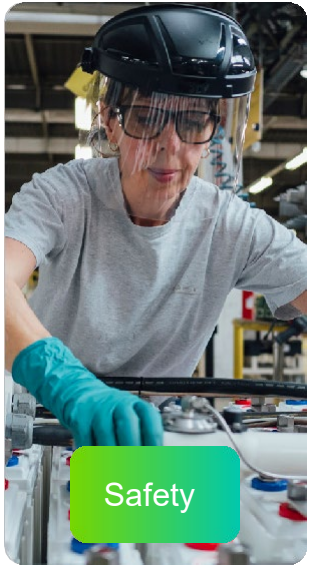
- 6ML Recycled water
- -3.6% carbon intensity /unit produced
- 75% of waste recycled

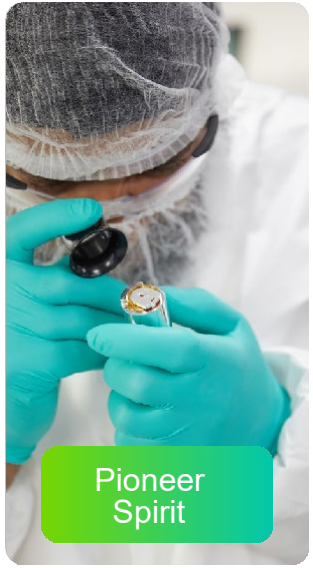
PLATINUM Top 1% 2023 ecovadis Sustainability Rating

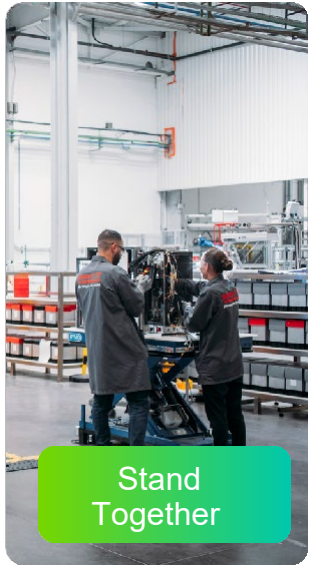
1st battery manufacturer **in the world** to achieve the **Platinum Medal**

Our values

On a daily basis, we rely on a set of values that guide our actions, support our corporate culture, and enhance our organization. They are at the heart of our way of working.







04.

Governance & Organization

Saft management team

Hervé Amossé
Executive Vice President
Energy Storage Systems

Igal Carmi
Executive Vice President
Connected Smart Energy

Lenny Cypel
Executive Vice President
Industry, Mobility & Infrastructure

Annie Sennet
Executive Vice President
Aerospace, Defense & Performance

Cedric Duclos
CEO

- Asset Management
- Communications
- Legal

Bertrand de La Noue
Chief Administrator & Financial Officer

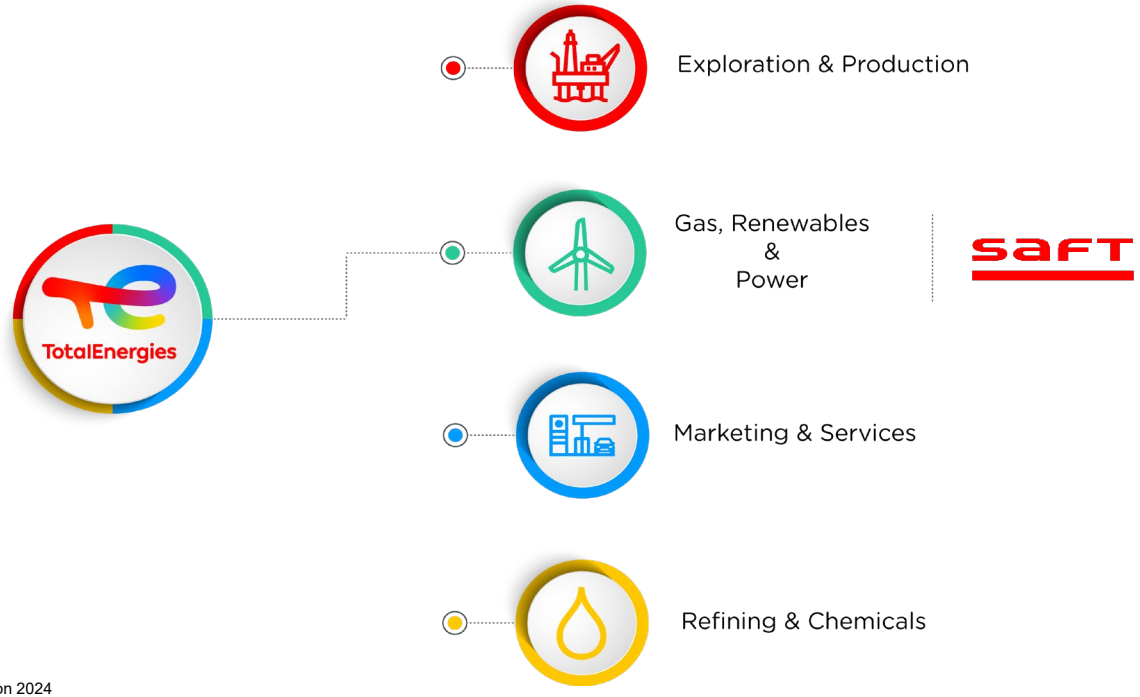
→ Human Resources → Digital Systems & IT

Kamen Nechev
Chief Technology & Innovation Officer

Eric Viriot
Chief Performance & Growth Officer

→ Saft Excellence System → HSE → Sustainability & Government Affairs

Saft, a wholly-owned subsidiary of TotalEnergies since 2016



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