





























**SPEEDING INNOVATION FOR INDUSTRY** 



# A word from our Director

CEA Tech is building on CEA Leti's successful track record innovating for industry.

Our organization's 4,500 researchers and administrative staff are dedicated to bringing manufacturers a broad range of Key Enabling Technologies developed by Leti, List, Liten, and other CEA operating divisions.

What makes CEA Tech unique in France is a strategic focus on four key pillars:

### • Pillar 1

CEA Tech operates at Technology Readiness Levels (TRLs) 3 to 7, serving as an innovation catalyst and accelerator for businesses.

## • Pillar 2

CEA Tech develops Key Enabling Technologies of interest to all industries and all types and sizes of businesses, from major multinational corporations to SMBs and start-ups. These technologies are protected by patents held by the CEA, the world's leading filer of international patents.

### • Pillar 3

CEA Tech boasts international-caliber technology platforms available for use by partner businesses at a competitive cost.

## • Pillar 4

CEA Tech has built a results-oriented organizational culture based on a long history of cooperation between research and industry. Our researchers and staff deliver proven experience transferring new technologies to industrial-scale manufacturing facilities.

We are ready to work with your business to understand your technological innovation needs. Our priority is building long-term partnerships with the ultimate goal of making your business more competitive on global markets.

CEA Tech's 4,500 employees are proud of their contributions to making businesses more competitive.

**Jean Therme** 

Deputy Director for Renewable Energies, CEA Director of Technological Research of CEA, CEA Tech Annual operating budget of more than €650 million

4,500 researchers

More than 50 high-tech start-ups over the past 10 years

600 priority patent applications per year

**Customers:** 

80% listed on the CAC 40, more than 500 SMBs, 145 international customers

# **CEA Tech's labs**

**Leti:** Micro- and nanotechnologies and their integration into systems.

**Liten:** New energy technologies and nanomaterials.

List: Smart digital systems.

# CEA TECH DELIVERS UNRIVALLED EXPERIENCE IN TECHNOLOGY RESEARCH

At CEA Tech we feel strongly that technology research is a crucial component of both innovation and value creation. It is this belief that has driven our successful technology development activities over the past 50 years.

CEA Tech is the CEA's (the French Atomic Energy and Alternative Energy Commission) technology research unit. CEA Tech's three labs—Leti, Liten, and List—develop a broad portfolio of technologies for ICTs, energy, and healthcare. CEA Tech leverages a unique innovation-driven culture and unrivalled expertise to develop and disseminate new technologies for industry, effectively bridging the gap between the worlds of research and business. CEA Tech also provides businesses with access to Key Enabling Technologies developed by other CEA operating divisions.

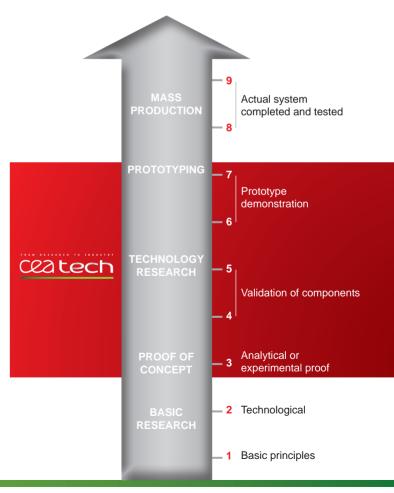
# A 50-year history

**1967:** Leti is founded, and develops a model that will shape the future of research in France, transferring research outcomes to the world of industry through partnerships with manufacturers and the creation of start-ups.

2000s: List and Liten are founded.

2013: CEA Tech regional branch offices opened.

Technology Readiness Levels (TRLs) describe a technology's degree of maturity





R&D is becoming increasingly transversal in nature.

Key Enabling Technologies
(KETs) are "technology bricks" that can be used in combination with each other to develop a wide range of high-added-value products and applications.

# **CEA TECH OFFERS**

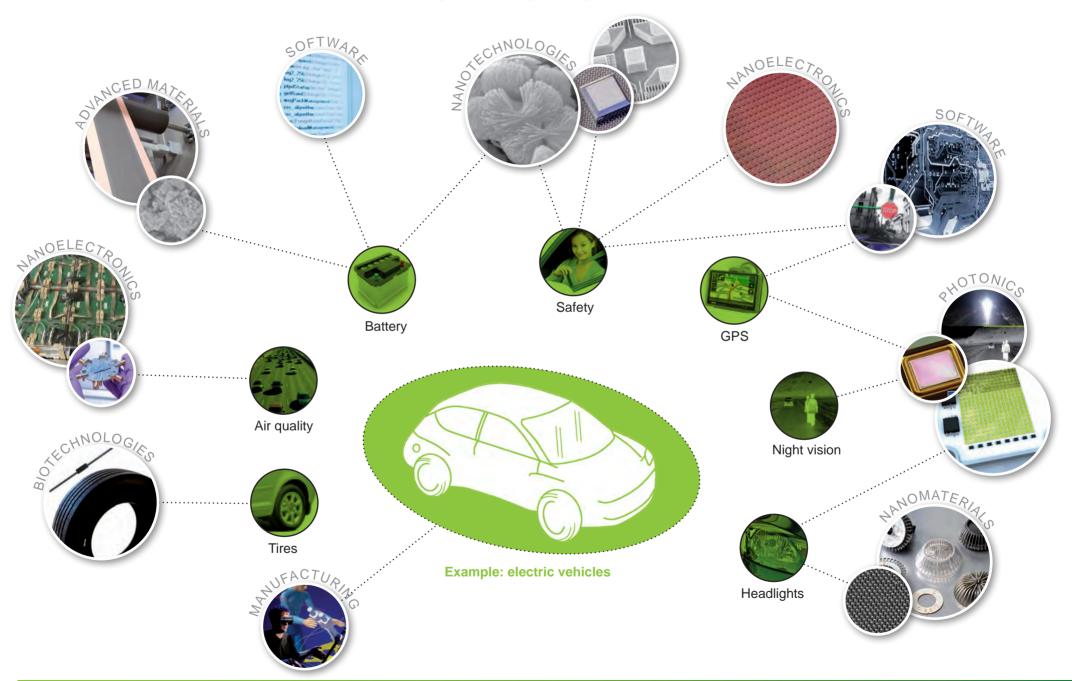
# ADVANCED RESEARCH AND DEVELOPMENT IN KEY ENABLING TECHNOLOGIES

Key Enabling Technologies drive industry across France and around the world. Businesses of all sizes across all industries—from traditional manufacturing to high tech—leverage new technologies to add value to their products and services. CEA Tech has built up substantial expertise in KETs, which offer the potential to boost business competitiveness and bring economic prosperity.

# KETs drive new developments across a broad range of industries



# Developing innovative new products by combining and integrating several KETs





CEA Tech leverages
state-of-the-art industrial
equipment, large-scale
infrastructure, and advanced
knowledge in multiple fields to
bring you powerful technology
platforms designed to boost
innovation.

# CEA TECH TECHNOLOGY PLATFORMS ARE A UNIQUE RESOURCE TO DRIVE INNOVATION FOR BUSINESS

Advanced KET research and development requires a "critical mass" of world-class experts and equipment. CEA Tech's technology platforms are unique in Europe, bringing together at a single location all of the resources and technologies today's businesses need to drive innovation.

# CEA Tech's Grenoble and Saclay technology platforms: a strong record of success

CEA Tech's technology platforms meet today's highest industrial standards, offering the knowledge and methods—like reports and certifications—businesses of all sizes require. Our technology platforms are currently playing a major role in France's strategy to leverage innovation to boost the country's competitiveness on global markets by transferring KETs to businesses.

Today, CEA Tech's Grenoble (Rhône-Alpes) and Saclay (Ile-de-France) technology platforms are spurring innovation and driving economic development across their respective

regions. The platforms are a source of innovation and growth for businesses.

Substantial investment over the past 10 years

€120

in CEA Tech
technology platforms

# A closer look at some of the CEA Tech technology platforms

CEA Tech has invested heavily—both financially and in terms of technology—to develop multidisciplinary platforms with the necessary equipment and expertise to successfully transfer new technologies from lab to industry.

# Nanoelectronics and microand nanosystems

7,200 sq. m. (clean rooms), Staff: 400 Investment: €500 million



# **Nanocharacterization**

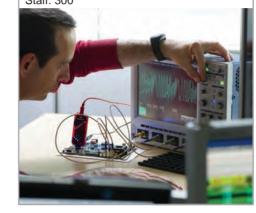
3,000 sq. m. Staff: 80

Investment: €30 million



# Integrated circuit and embedded systems design

3,000 sq. m. Staff: 300



# Nanobiotechnology

5,500 sq. m. Staff: 200

2,500 sq. m. of lab and clean room space



# **Batteries**

3,000 sq. m. Staff: 200

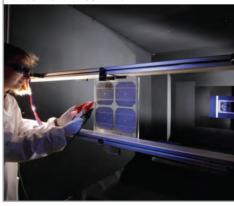
Investment: €40 million



# Photovoltaic solar

15,000 sq. m. Staff: 200

Investment: €100 million



# **Clinatec**

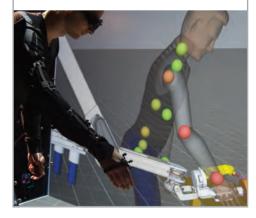
5,000 sq. m. Staff: 100

Investment: €27 million



# **Advanced manufacturing**

2,000 sq. m. Staff: 200





CEA Tech has developed a comprehensive range of services to meet the unique needs of businesses of all types.

# CEA TECH HELPS BUSINESSES BECOME MORE COMPETITIVE THROUGH A FULL RANGE OF INNOVATION-RELATED SERVICES

## **CEA TECH'S SERVICE LINEUP FOR BUSINESSES:**

# **UNIQUE**

Businesses can use our technology
platforms and extensive intellectual
property

# **INNOVATIVE**

Our **Key Enabling Technologies** drive innovation

# COMPETITIVE

We deliver world-class knowledge and methods that meet the highest international industrial standards

# **CUSTOMIZED**

- Services for businesses of all sizes from start-ups and SMBs to corporations
- Strategic partnership, consortium, or bilateral agreements to suit our customers' business volumes
  - Research outcomes that can be transferred immediately to industry
  - Regional technology-transfer platforms in our customers' local areas

# **PROTECTED**

We back our services with a guarantee of confidentiality

and all of the necessary protection for your data and sensitive project information

# **MULTI-INDUSTRY**

Our Key Enabling Technologies deliver benefits for all industries, from the traditional to the high-tech

# **INDIVIDUALIZED**

You get **personal service** at every stage of your innovation project with:

- Technical and economic feasibility studies
  - Creativity sessions
  - Market research
  - Financing assessments