



BIOTECHNOLOGIES

GREENCELL

**A NATURAL RESPONSE
TO THE MAIN CHALLENGES
OF TOMORROW'S WORLD**

AGRONOMY - ENVIRONMENT
HEALTH - FOOD - COSMETICS

GREENTECH^{GROUP}
WE SOURCE NATURE TO RESOURCE THE FUTURE

Visit

Schedule

3 STEPS



Factory

Industrial fermenters

Around 1h



Lab

Microbiology lab

Around 1h



Products / Fields trial

- Presentation of soil microbiota and impact in agriculture
- Livestock effluent valorization

Around 1h



WHO WE ARE ?

AT THE VANGUARD OF THE INFINITELY SMALL

A leader in microbial ecology, Greencell produces micro-organisms and transforms them into innovative ingredients.

For 25 years, Greencell has been a pioneer in biotechnology, an expert in industrial fermentation (solid and liquid), with reference products in biostimulation, biocontrol and treatment of polluted environments.

Greencell is also a pioneer in microbiota research.

GREENTECH GROUP

ORGANISATION

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44M€
2021 Turnover

230
Collaborators

GREENTECH GROUP

PRODUCTS FOR THE FUTURE

The Greentech Group companies are united in meeting the challenges of tomorrow by combining **scientific innovation, sustainability and ethics.**

AGRO-ECOLOGY



ENVIRONMENT



NUTRITION



HEALTH



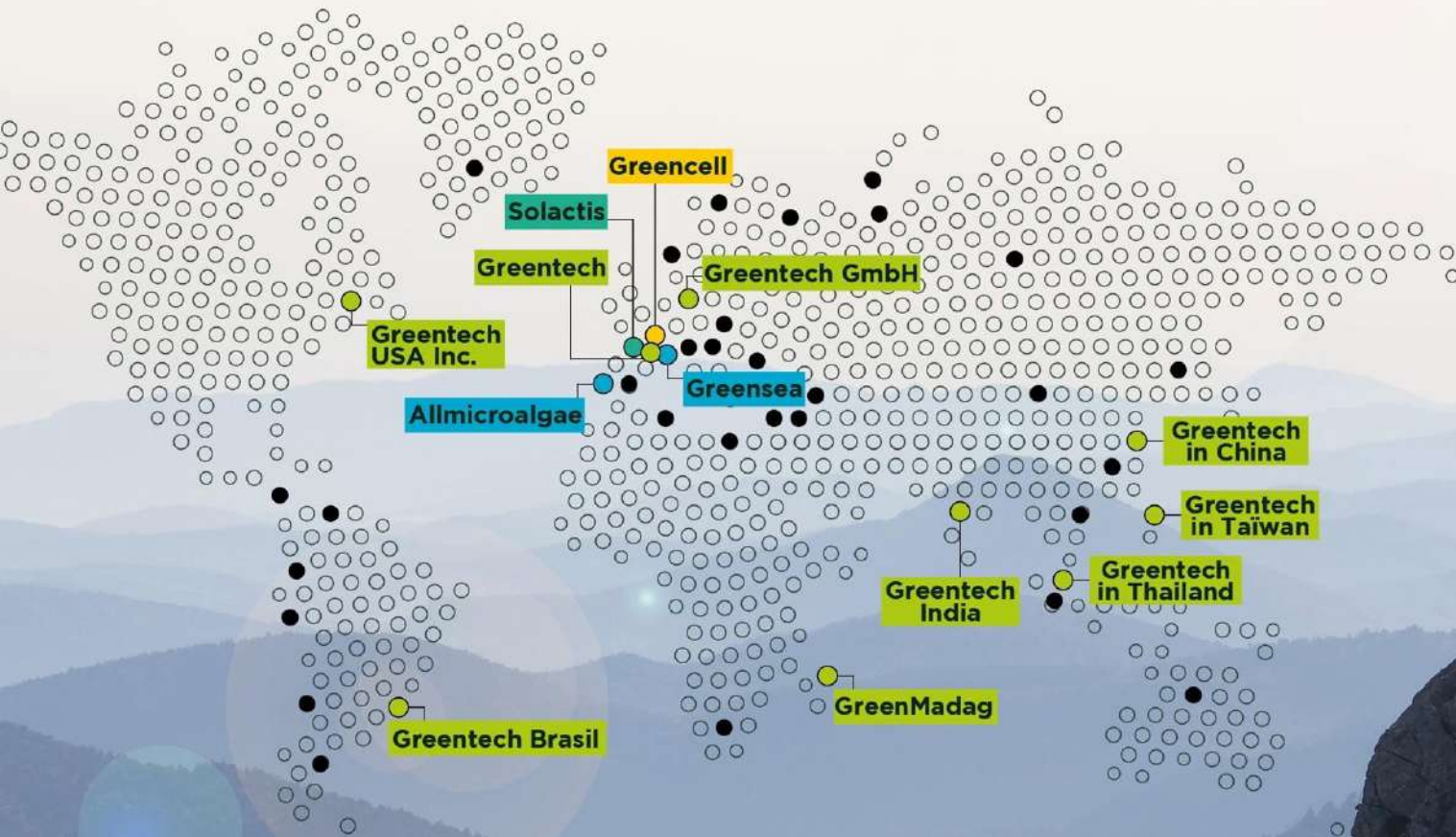
BIOPLASTIC



COSMETICS

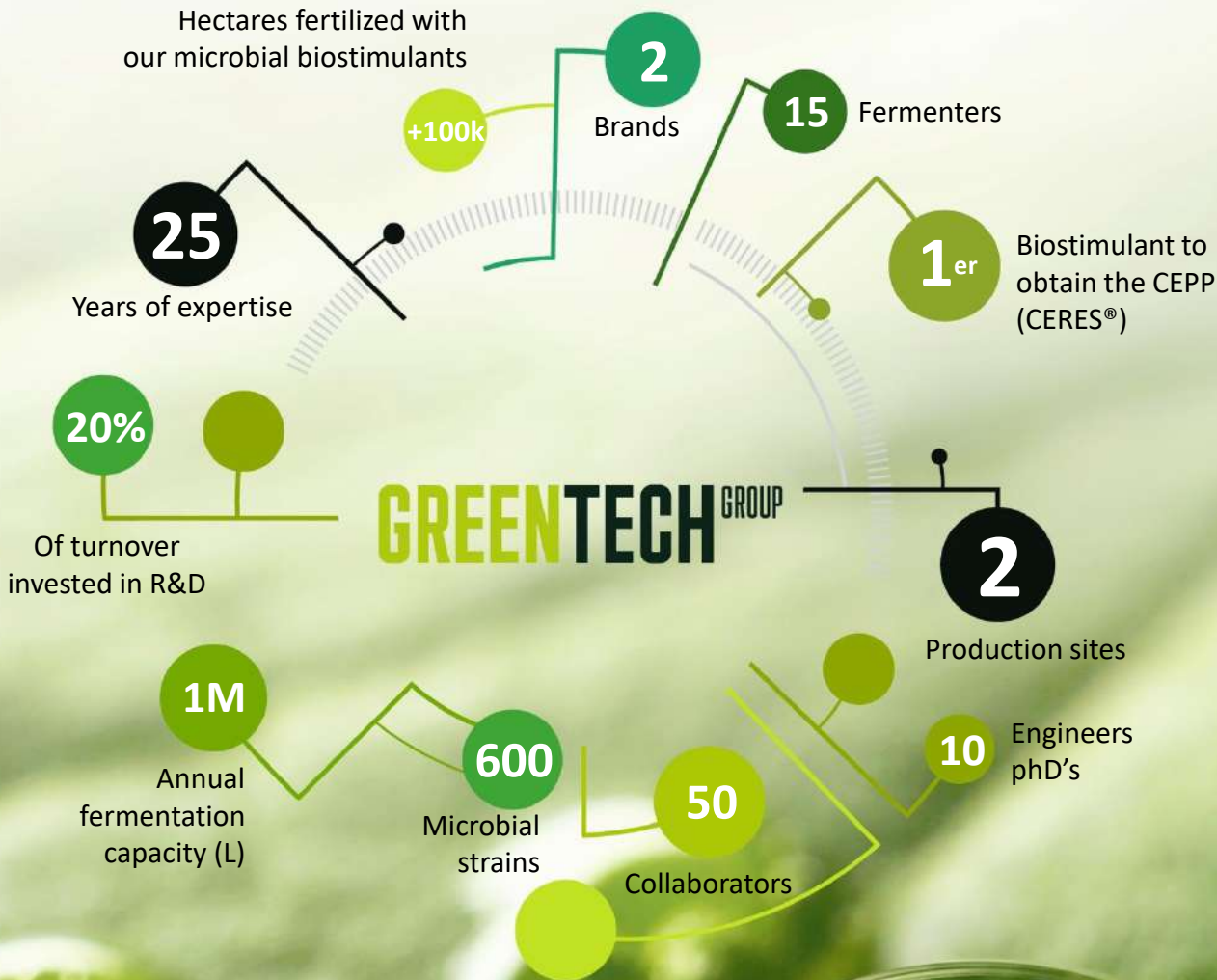


OUR PLAYING FIELD



KEY FIGURES

GREENCELL 2022



Saint-Etienne-de-Chomeil (15)



Saint-Beauzire (63)

4,6M€
2021 turnover



OUR
EXPERTISE

INDUSTRIAL FERMENTATION

- > **Aerobic or Anaerobic Production**
- > **Liquid and solid**
- > **Bioconversion**
- > **Strain library: 600 microbial strains**

OUR **MARKETS**

OUR MARKETS



AGRI-FOOD



AGRONOMY



ENVIRONMENT



HEALTH AND WELL-BEING

COSMETIC - NUTRACEUTICAL - PHARMACEUTICAL



MICROORGANISMS & **AGRONOMY**

BIOSTIMULATION

BIOCONTROL

3 ACTION MODES

- Stimulation of growth
- Nutrient regulation/release
 - Detoxification
- Induction of natural plant defences
- Antagonism towards pathogens
- Spatial and trophic competition

RESULTS

PERFORMANCE

Efficiency & Quality ++



- Degradation of organic matter
- Phosphorus solubilisation
- Better root development
- Resistance to abiotic stresses
- Better implementation

CÉRÈS®

**1st BIOSTIMULANT ON THE
MARKET TO OBTAIN A CEPP**



MICROORGANISMS & **AGRONOMY**

4 LINES OF PRODUCTS

NATURAL BIOSTIMULANTS BASED ON MICRO-ORGANISMS



NATURAL BIOSTIMULANTS BASED ON MICROALGAE



THE INFINITELY SMALL
IN THE SERVICE OF
FIELD CROPS

PRODUCTS DEDICATED TO FARMING

*Making the most of slurry
and manures.*



PRODUCTS PHAGE-BASED

*Treatment of
Melon crops*





CDMO

SUPPORTING YOUR INDUSTRIAL
FERMENTATION PROJECTS

AGILITY & EXPERTISE

From your conceptual ideas and benchtop developments to routine production, GREENCELL builds **solutions on industrial fermenters**.

All our **services** (production, R&D, quality control...) and **industrial resources** allow the **agility** required for a controlled industrial transfer.

OUR FACILITIES

INDUSTRIAL CAPACITY

- **2 PRODUCTION SITES**
- **15 Liquid fermenters** from 1L to 5000L.
- **Aerobic and Anaerobic production**, CIP (Cleaning in Place) and SIP (Steam Sterilisation in Place) batch fed for all liquid fermentation and freeze drying processes.
- **3 centrifuges**
- **2 freeze dryers** (7L and 15L trap). Solid-state fermentation in Roux boxes, petri dishes and in a regulated tray cabinet.
- **Controlled atmosphere production areas** with ISO8 to ISO5 particle classes.
- **4 freezing chambers -50°C** for 450L of biomass.



NOS CERTIFICATIONS

Registered in a **HACCP approach**, the industrial teams respect the GMP (good manufacturing practices)

Grencell is **ISO 22000 Food Safety Management** and **FSSC 22000 certified** for the two production sites.

In terms of our procurement, all our **suppliers go through a selection, approval and monitoring process** to ensure that they meet the specified requirements.



10 engineers/phD's

Active laboratories

- Fundamental research
- Characterisation of the strain library
- Industrial process development
- Quality analysis
- Molecular biology
- Microbiota research

Many partnerships

Végépolys, Agri sud ouest, biocontrol consortium, IBMA, Agroecology Development Committee, AFAIA, MOPAD

Recognised achievements

- Submission of biocontrol AMMs
- 30 articles published
- 5 theses supervised and defended

20% of the turnover invested each year

OUR **R&D**





BIOTECHNOLOGIES

GREENCELL

THANK YOU
FOR YOUR ATTENTION

Greencell
Biopôle Clermont-Limagne
63360 Saint-Beauzire

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