

FREE TECH[®]

THE VACUUM CAPACITOR

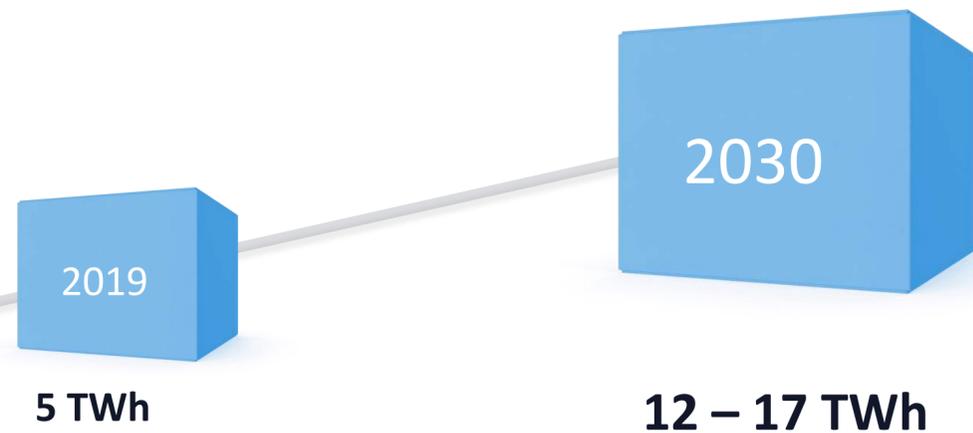
THE ULTIMATE ENERGY STORAGE TECHNOLOGY



CLEAN ENERGY REQUIRES HUGE ENERGY STORAGE CAPACITIES

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CURRENT TECHNOLOGIES CANNOT ADDRESS
THESE REQUIREMENTS



TENS, HUNDREDS OF TWh

AN APPROPRIATE
ENERGY STORAGE SOLUTION IS CRUCIAL FOR THE CLEAN ENERGY TRANSITION TO HAPPEN

ENERGY STORAGE GLOBAL DEMAND

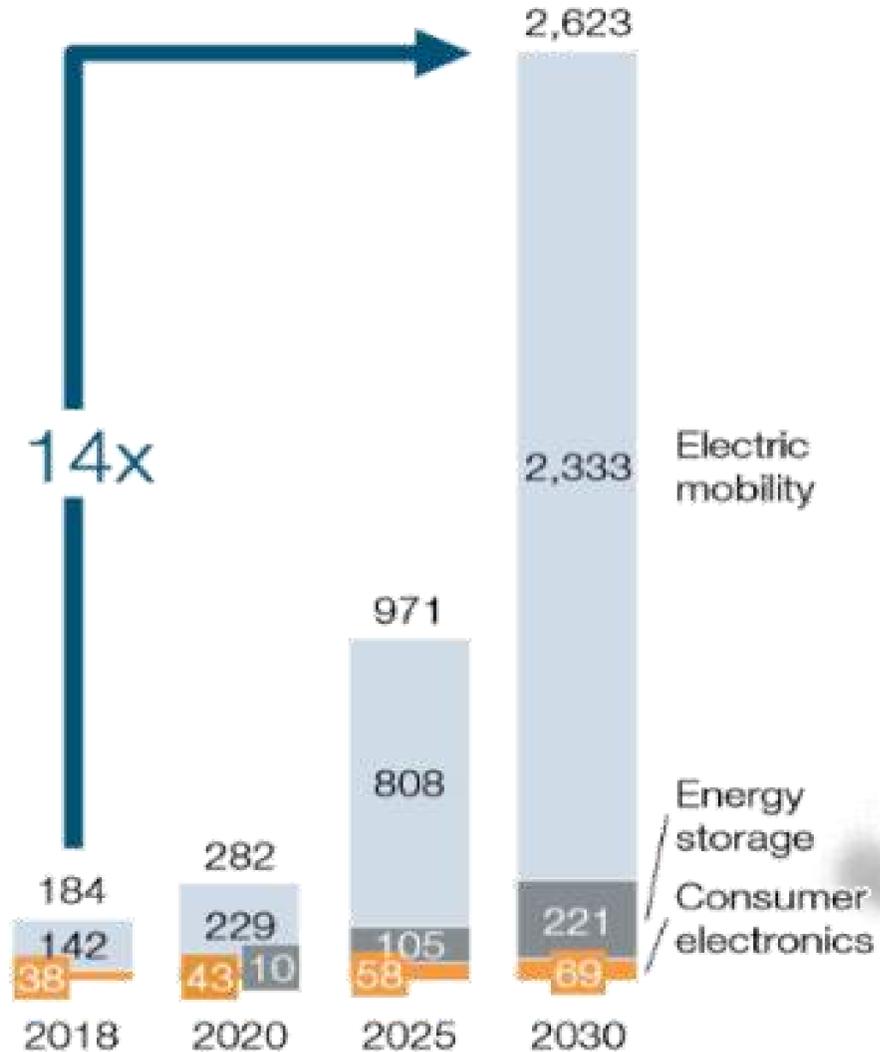
ALL APPLICATIONS:
 → 2,600 GWH EXPECTED BY 2030

SUSTAINABLE DEVELOPMENT SCENARIO
 → UP TO 17,000 GWH BY 2040

STATIONARY STORAGE DEPLOYMENTS (WITHOUT PHS)
 → MORE THAN 2,800 GWH BY 2040

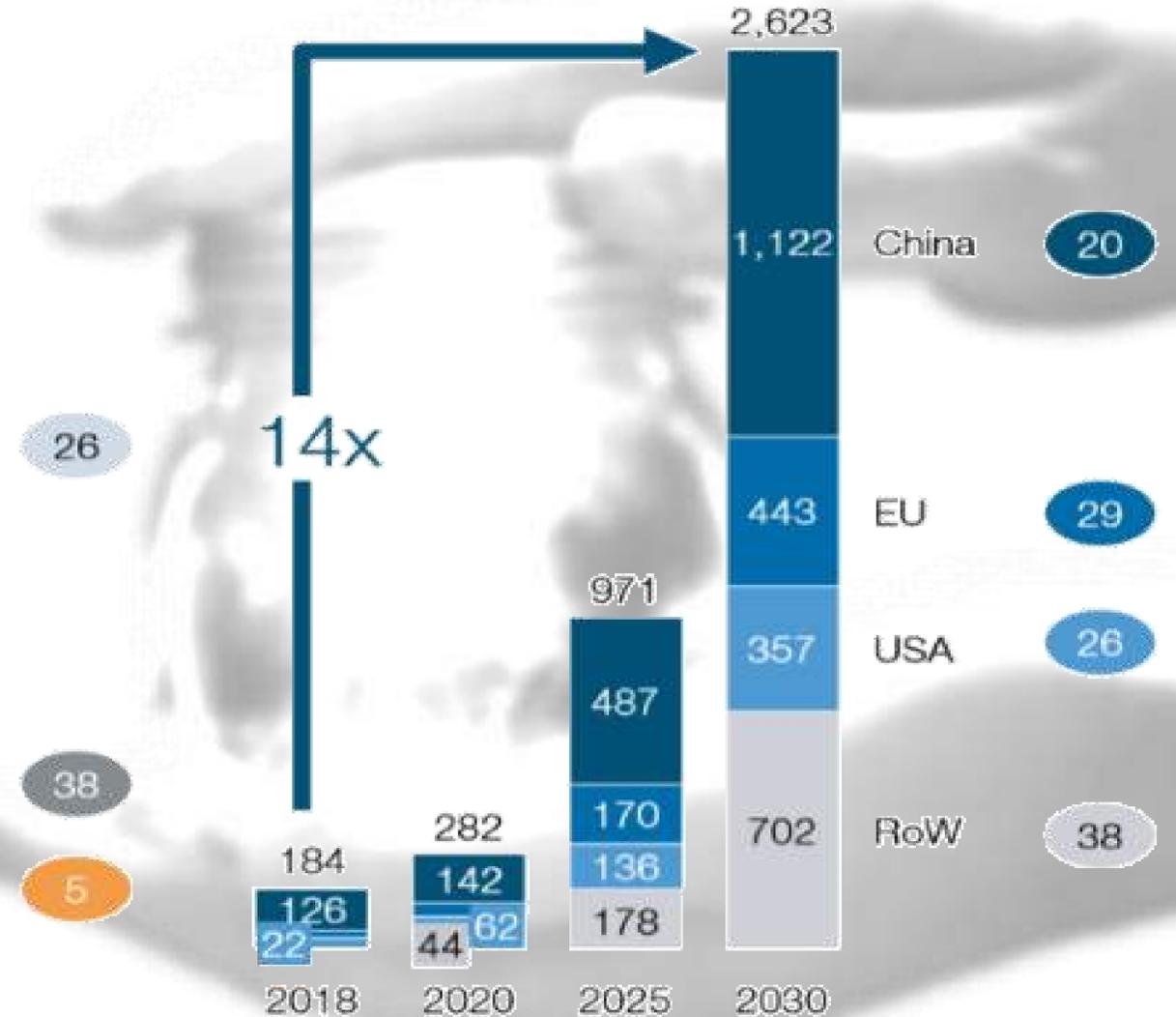
Source : BNEF 2019

Global battery demand by application
 GWh in 2030, base case



CAGR, % p.a.

Global battery demand by region
 GWh in 2030, base case



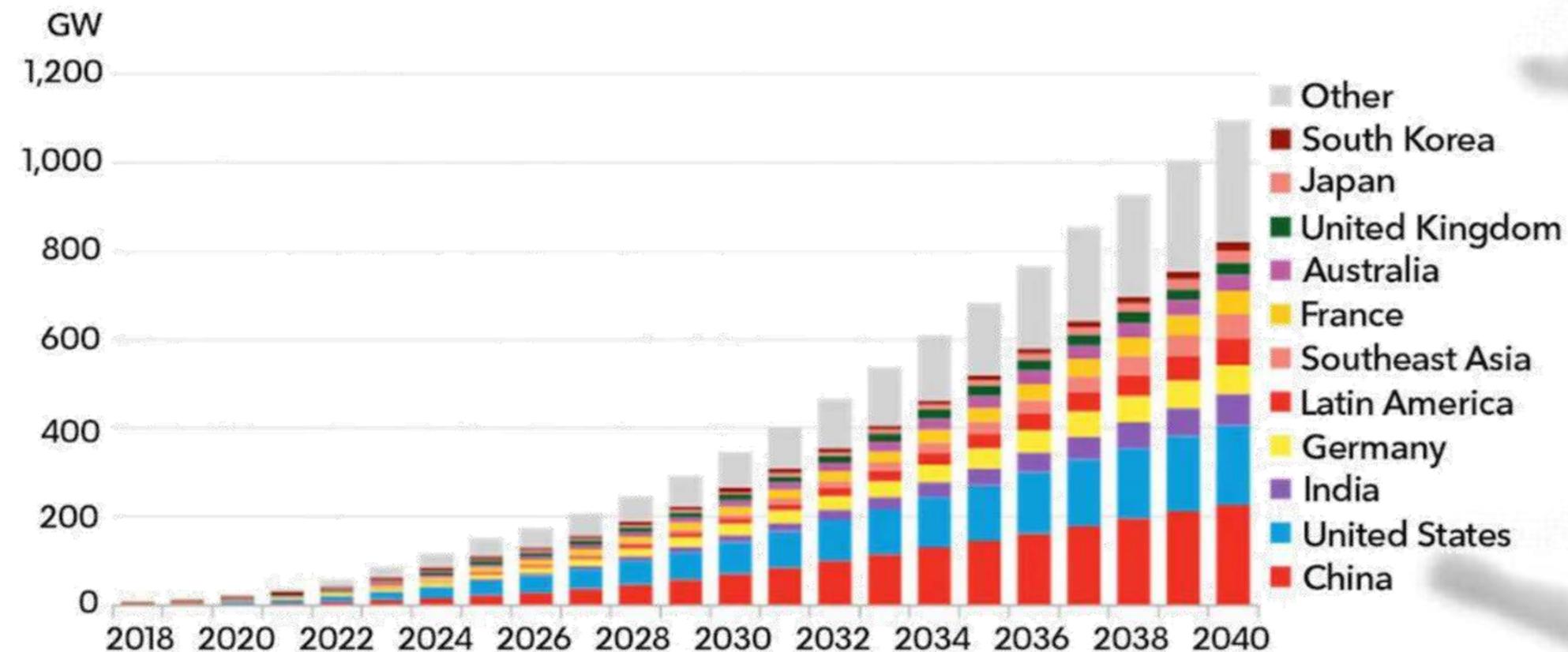
CAGR, % p.a.

Source : Battery 2030+ Roadmap – March 2020

GENERAL FIGURES & TRENDS

LI-ION REPRESENTS A GROWING SHARE OF NEW ADDITIONS OVER THE LAST YEARS (> 90 %)

Global cumulative power storage installations



Source: BloombergNEF

\$60 BN
VALUE OF THE LI-ION MARKET
IN 2024

7 %
SHARE OF ENERGY STORAGE
IN GLOBAL POWER CAPACITY
BY 2040

\$600-1,000 BN
INVESTMENTS IN
ENERGY STORAGE
BY 2040

A DISRUPTIVE SOLUTION

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VERY HIGH DENSITY



**PURE ELECTRICITY
HIGH ROUND-CYCLE EFFICIENCY**



LIGHT



**CHEAPEST
TECHNOLOGY**



SAFE



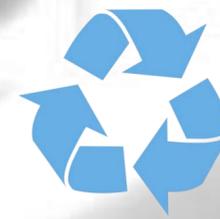
**NO RELIANCE ON RARE,
EXPENSIVE OR 'ECO-DAMAGING'
RESOURCES**



**FIT-ALL SOLUTION FOR ALL
CLIMATIC CONDITIONS,
INCL. SPATIAL**



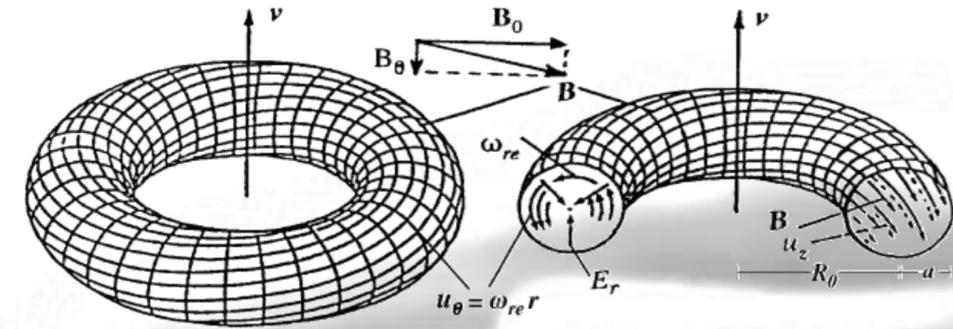
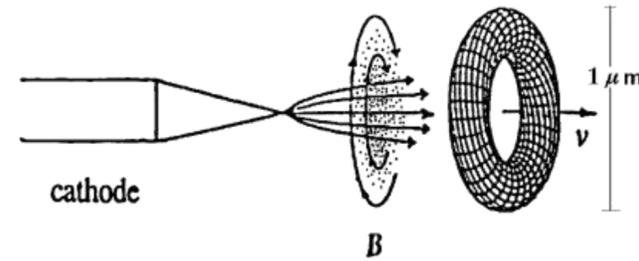
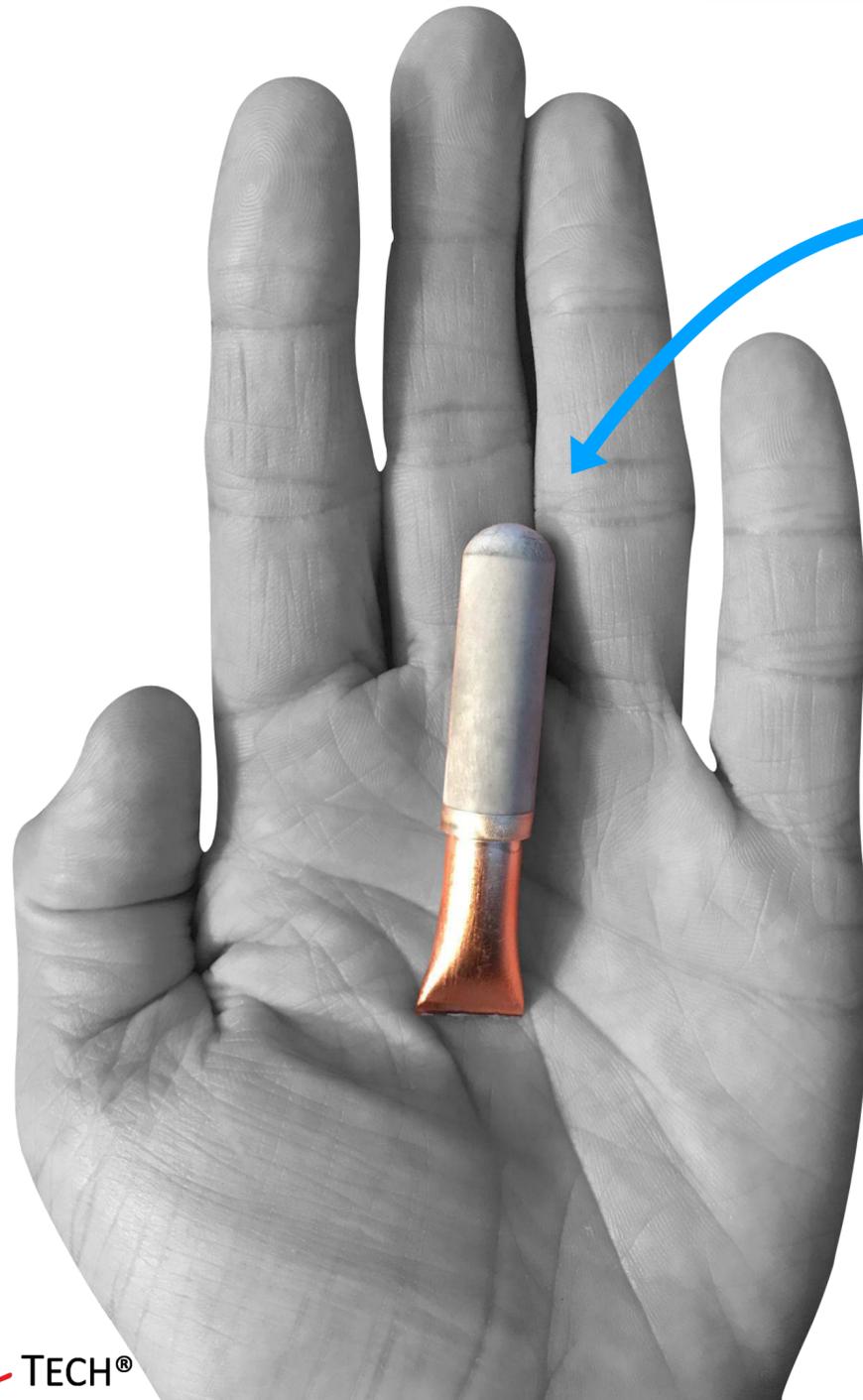
**ALL TYPES OF
APPLICATIONS**



**ENVIRONMENTALLY-FRIENDLY
EASY RECYCLING**

THE VACUUM CAPACITOR

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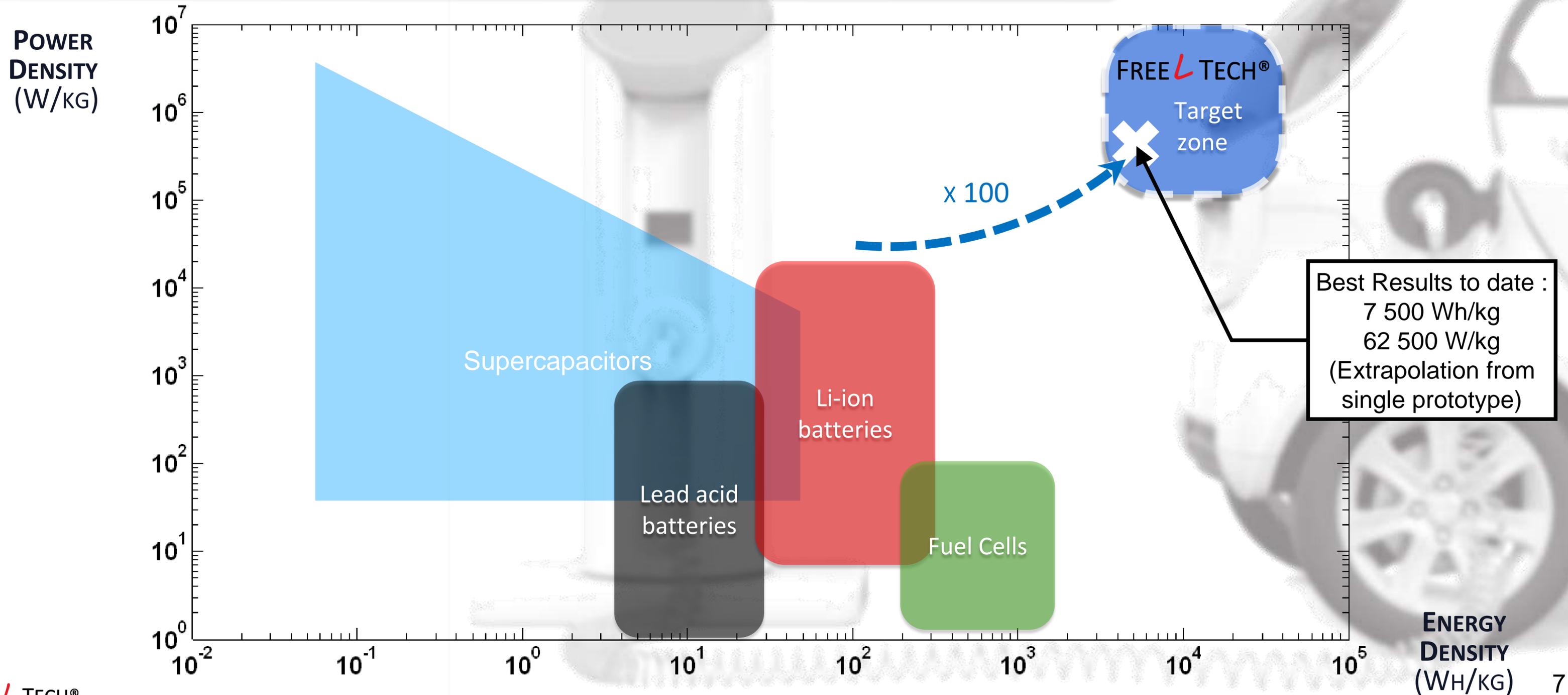
**CHARGES (e^-)
STORED
DIRECTLY
INSIDE
A SMALL BULB
UNDER VACUUM**

TARGET PERFORMANCES

- ▶ **ENERGY DENSITY : 0,5 - 1 kWh / cm³**
- ▶ **AFTER INTEGRATION : Up To 20 kWh / kg**
- ▶ **LOW COST : << 100 USD / kWh**
- ▶ **HIGH NUMBER OF CYCLES**
- ▶ **HIGH ROUND-CYCLE EFFICIENCY**
- ▶ **SMALL QUANTITIES OF MATERIALS NEEDED**
- ▶ **NO RARE OR EXPENSIVE RAW MATERIALS**
- ▶ **LOW ENVIRONMENTAL IMPACT**
- ▶ **SIMPLE RECYCLING**

UNMATCHED ENERGY & POWER DENSITY

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THE VACUUM CAPACITOR: SUITABLE FOR MOST APPLICATIONS



THANKS TO ITS COMPETITIVE ADVANTAGES, FREEL TECH TARGETS A SIGNIFICANT SHARE OF THE ENERGY STORAGE MARKET IN FUTURE YEARS, FOR ALL TYPES OF APPLICATIONS.



BEHIND THE METER
RESIDENTIAL I&C

MAIN TARGET
MARKETS AND
APPLICATIONS FOR
THE VACUUM
CAPACITOR



ELECTRICAL MOBILITY
(ROAD, AIR, SEA)

STATIONARY STORAGE
SMART GRIDS
GRID SCALE



THE TEAM

FREE L TECH®



Michael IRGANG
CEO

Civil Engineer
(Mines ParisTech)

Expert in Energy,
Nuclear Energy

Co-founder



Roman KHOLOSHENKO
CTO

Military career, then Engineer
& Business owner In Russia

Expert in Electronics and
Magnetic Fields, invented the
« Vacuum Capacitor »



Sergueï GODIN
**Scientific & Technical
Researcher**

Graduated from Moscow
Electrotechnical &
Communication Institute

Expert in electrical engineering,
digital and analog electronics,
signal processing, instruments.



Julien PLAN
**Business Dev.
Director**

Mechanical Engineer
Nuclear Engineer
Executive-MBA

Expert in Energy &
Industrialization



William WEBER
Energy Engineer

Graduated from the Griffith's
School of Engineering
(Brisbane, Australia)

Expert in Energy Storage,
Renewable Energy



Roland IRGANG
CFO

Post-graduate Degree in
Banking&Finance
(La Sorbonne, Paris,
France)

Fundraising, Strategy,
Valuation, Investment
Policy, Financial Advisory

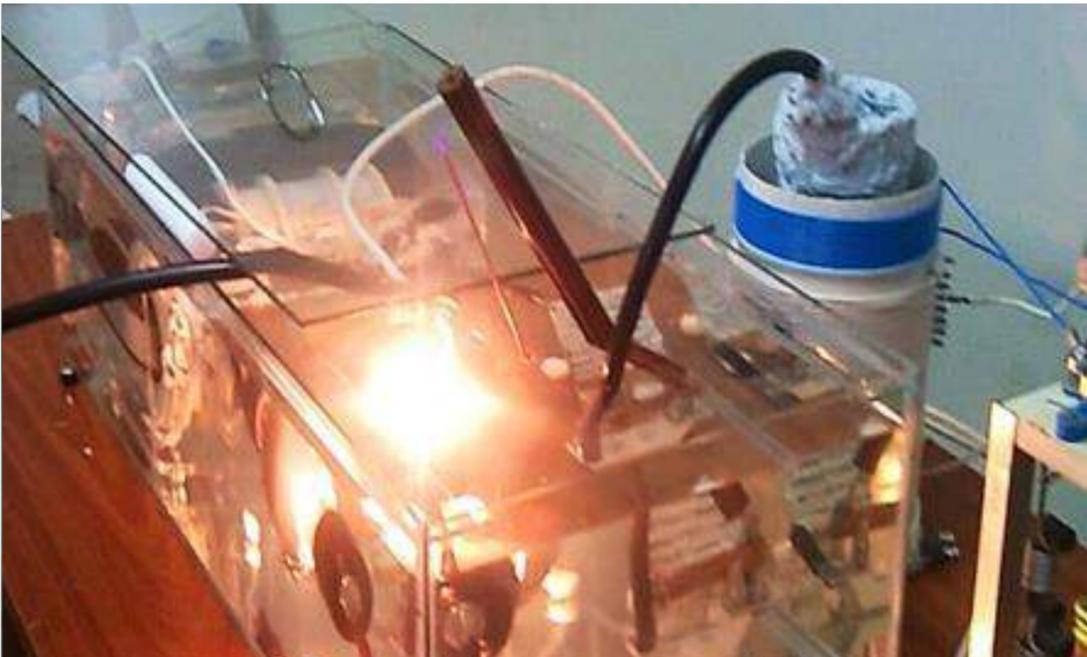
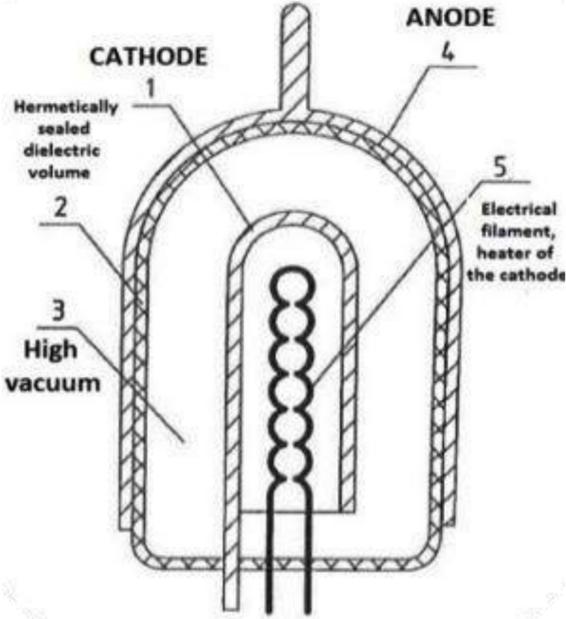
PROJECT ROADMAP

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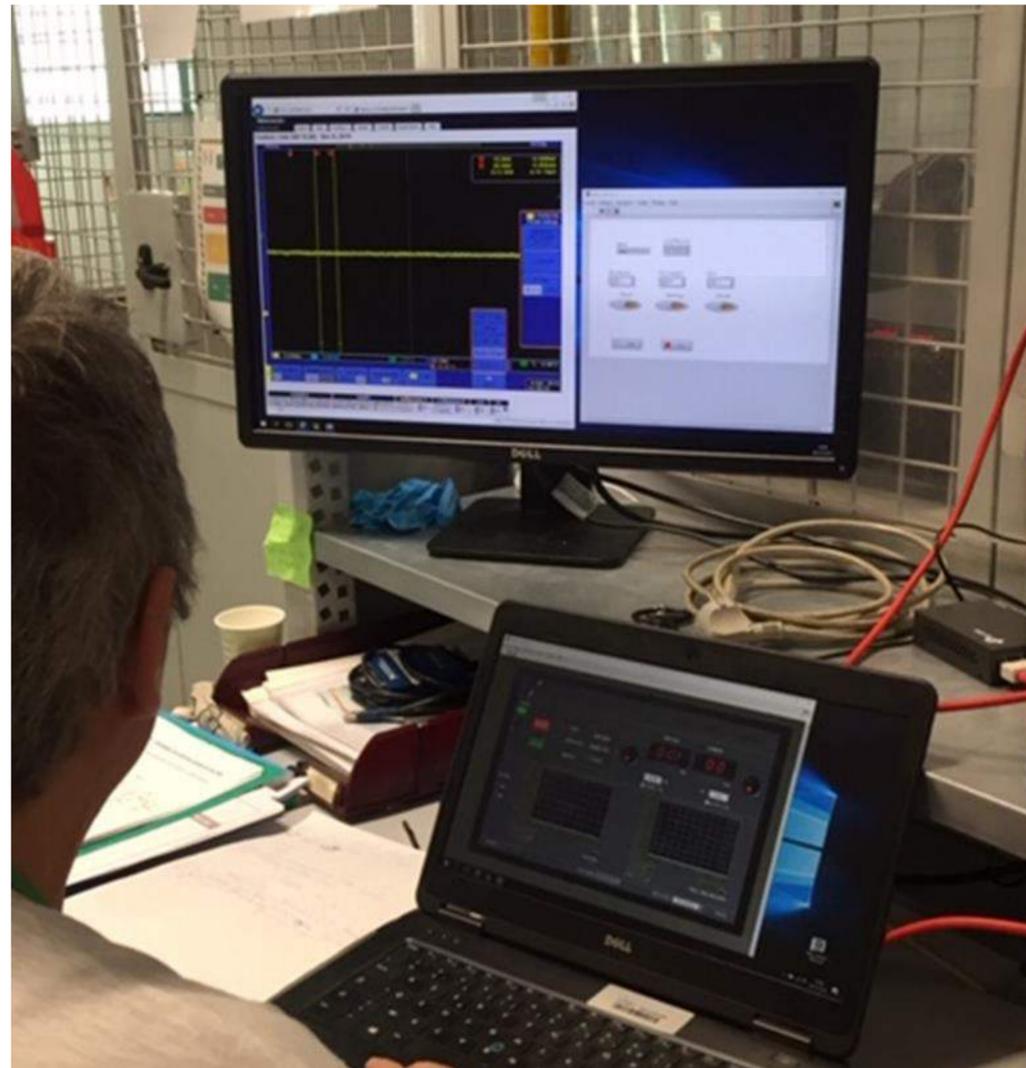
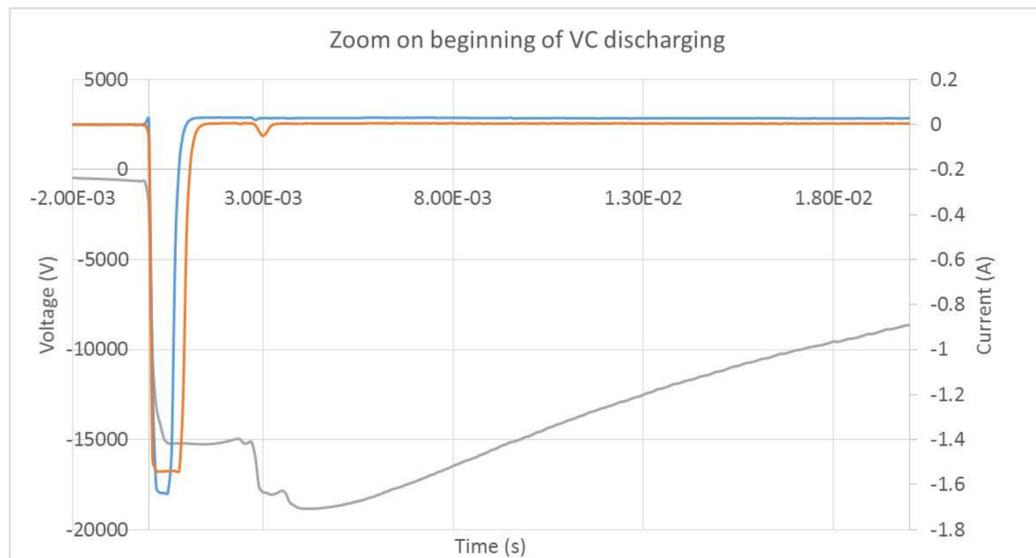
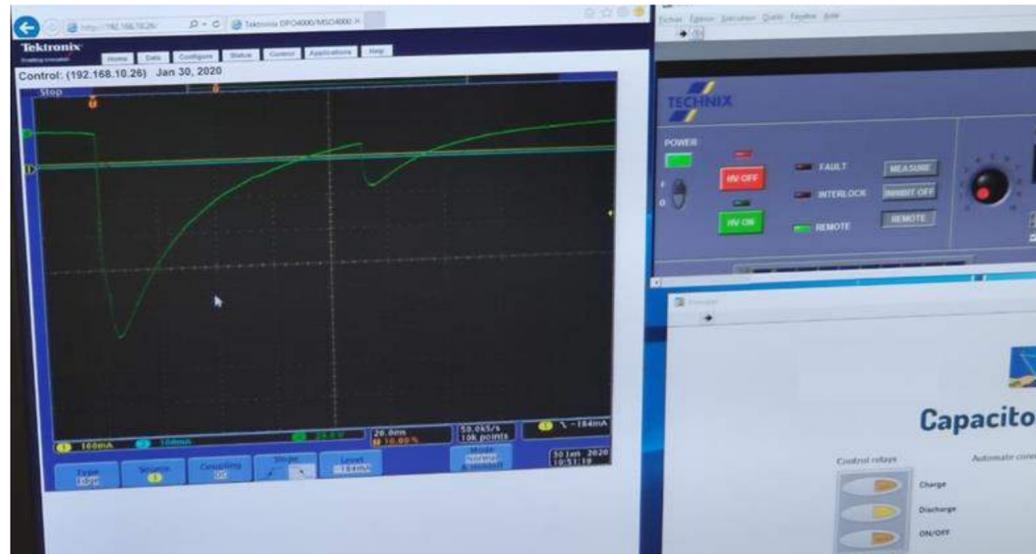
HOW IT ALL STARTED (2007)

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TESTS IN FRANCE (WINTER 2019-2020)

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PARTNERSHIP WITH TECHNIP ENERGIES (AUGUST 2020)

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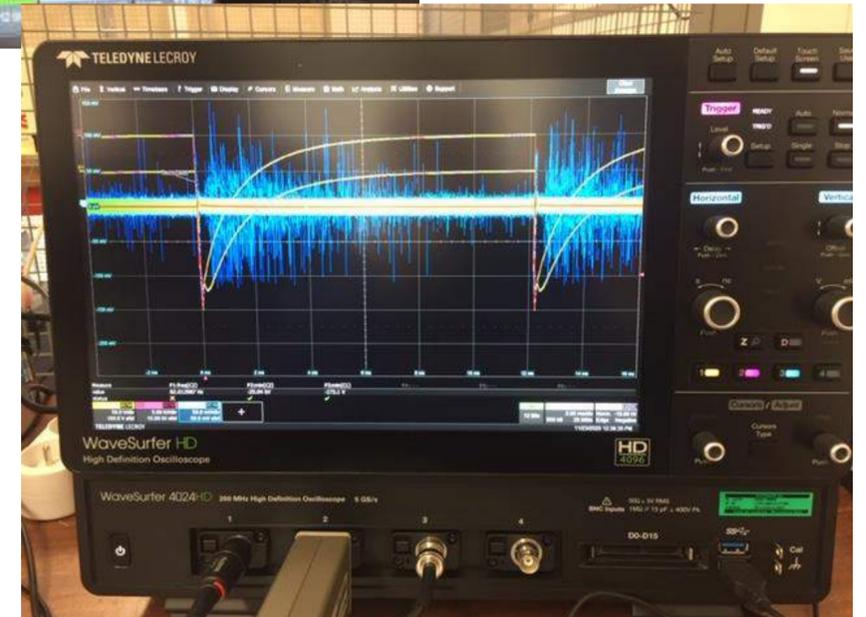
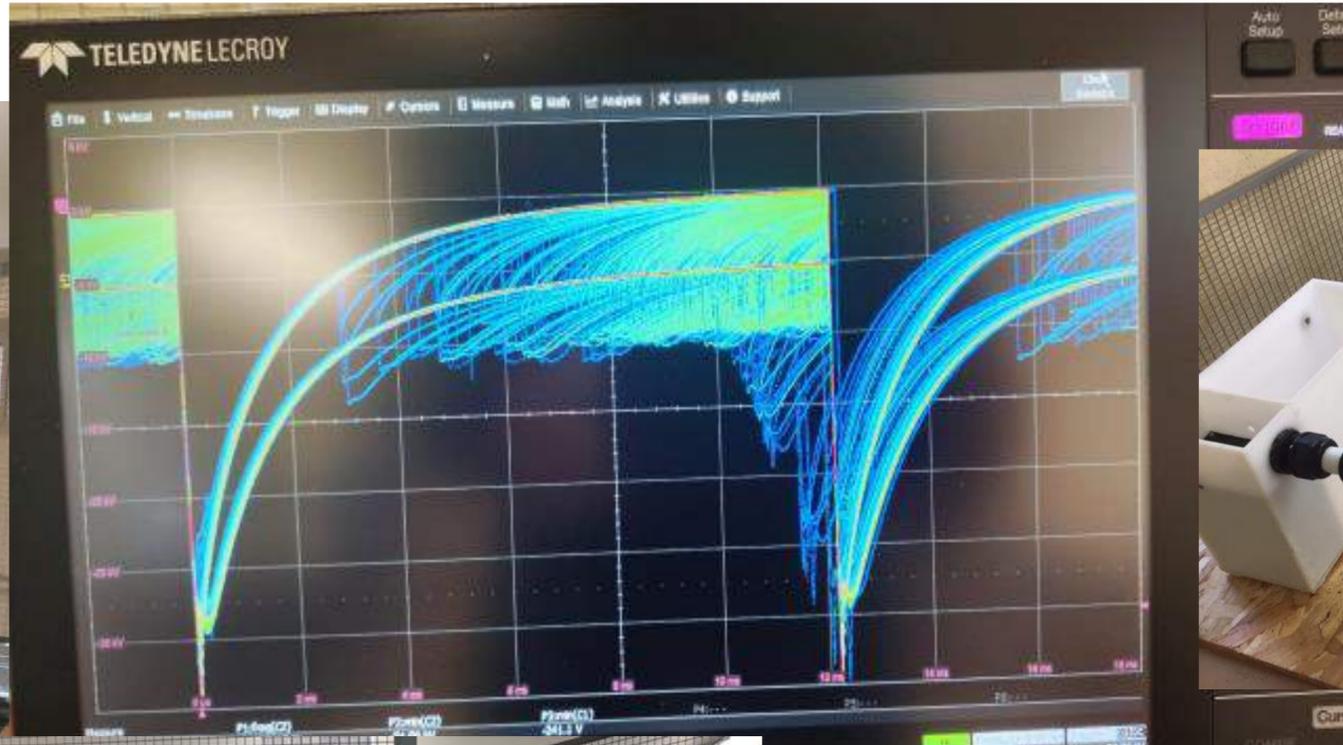
FREEL TECH HAS FINALIZED A STRATEGIC PARTNERSHIP WITH TECHNIP ENERGIES (TECHNIPFMC GROUP), BRINGING FRESH INVESTMENT, EQUIPMENT, LAB FACILITIES, TECHNICAL AND MARKET EXPERTISE.

R&D CONTINUES AT A FIRST-CLASS INDUSTRIAL FACILITY IN THE SOUTH OF FRANCE SINCE OCTOBER 2020.



TESTS IN FRANCE (SINCE OCTOBER 2020)

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SNAPSHOT

FREE TECH®



CREATED AND INCORPORATED IN LUXEMBOURG IN APRIL 2017



CORE MANAGEMENT OWNS MAJORITY OF CAPITAL



MULTIPLE WORLDWIDE PATENTS FOR THE TECHNOLOGY