FORSEE POWER

Research & Development policy

Cutting edge R&D to fuel continuous Forsee Power battery system innovation.

Forsee Power has been a pioneer in the domain of smart battery systems since its creation in 2011. Innovation is part of our DNA and our passionate teams in Europe, Asia and North America collaborate every day to improve performance and competitiveness of our products, lower their carbon footprint and innovate the smart battery systems and related solutions of tomorrow. Based on 25+ years of battery expertise, the Forsee Power global R&D team is dedicated to innovating efficient, competitive, and sustainable smart battery systems and related end-to-end solutions for targeted electromobility market segments, helping our customers and cities reduce their carbon footprint.

Aymeric Derville,
Chief Technology & Innovation Officer

Major trends and key drivers

Sustainability
Lower carbon footprint and integrate more recycled material, better repairability, recyclability.

Digitalization & AI
Intégration native de la connectivité – IoT, cybersécurité, analyse de données.

Balanced innovation portfolio
Concentration davantage sur les études en amont et les développements génériques.

Platforming & Modularity
Streamline design diversity (product & process), leverage generic building blocks.

Collaboration
Leverage Forsee Power multi-site presence and vast areas of expertise in R&D functions and market segments knowledge.

Solution-focus
Go beyond the embedded battery packs and systems, optimize first life service, anticipate second life.

System safety & Reliability
ISO 26262 compliance; robust system architectures, in-depth design-FMEAs, nonfunctional safety, product design robustness.

Our resources

01
Innovation stream:
6 phases from technology to field

- Innovative upstream studies
- New generic development
- Bid & early project study
- Application project development
- Serial life technical support
- Continuous engineering

02
Multidisciplinary expertise:
10 areas of expertise

- Solutions & End-to-end Systems Development
- Advanced Modeling, Simulations and Optimization
- Systems / Products Development
- Embedded Software Development
- Hardware (Analog & Digital) Engineering
- Power Electronics Engineering
- Electro-Thermo-Mechanical Engineering
- Mock-ups & Prototyping

- Tests Methods & Means
- Systems & Products Testing

03

International organisation: 3 R&D centers

Located in Paris, Lyon (France) and Zhongshan (China), our 3 R&D centers include 4 testing laboratories. They participate in the development of new technologies and growth of people skills, collaborating with a network of experts through academic and B2B partnerships.

04

Technologies: 6 families in a comprehensive technology portfolio

- Solutions & Connectivity
- Complex embedded systems
- Simulation models & Building blocks
- Products development
- Next generation battery modules
- Technology bricks

We continuously assess and improve our current proprietary technologies - including BMS platform and DC/DC conversion expertise - and innovate to strengthen our overall technology portfolio such as to maintain a leading position.

05

Collaborative teams: 160+ R&D talents

The Group R&D teams gather more than 160 engineers and technicians covering all the knowledge and know-how required for innovation, design, development, production implementation and monitoring and maintenance of products and systems in service.

We are moving toward the implementation of agile development principles and methods, to better understand the changing needs during the development phases, and to promote better efficiency and autonomy of multi-business project teams.

06

Eco-design focus: 4 eco-design tools

Our R&D team works closely with all functions to ensure a reduced environmental footprint of our products.

We rely on recognized eco-design tools:

- The 6 RE
- Battery-tailored checklist
- The carbon footprint
- The recycling rate