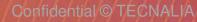
## **TECNALIA**





TECNALIA is the first applied research center in Spain and one of the most important in Europe with around 1.300 people on staff, 100€ millions turnover and more than 4.000 clients.

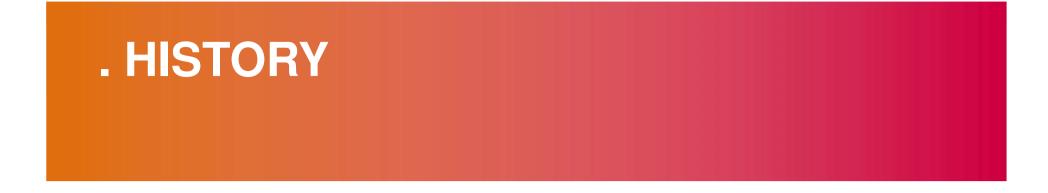
A unique commitment, an opportunity, a challenge.





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TECNALIA was constituted in the year 2010. TECNALIA incorporated organizations with a long history, knowledge and curriculum. We were 8 technology centers. Now we are one.





# **INSPIRING BUSINESS IS** ENTIFYING AND DEVELOPING BUSINESS **OPPORTUNITIES**

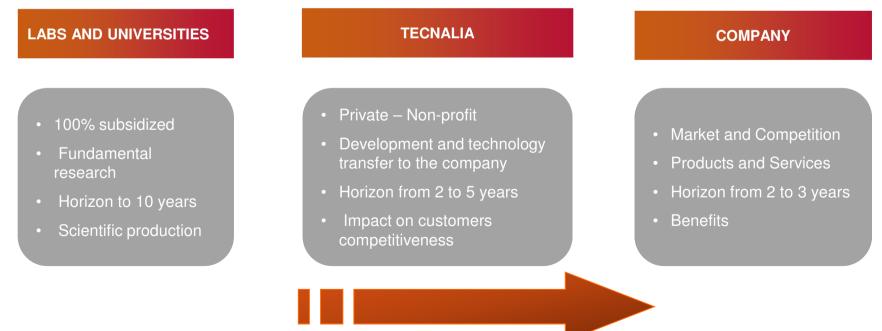
THROUGH APPLIED RESEARCH.

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## .Positioning

### Research and Development Technological Center

 Positioning between Fundamental Research (University) and Industrial Application (Company)



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**Organized in 7 Business Divisions:** we work from the experience and the expertise in each of the markets in which we operate, with an efficient and proactive attitude.



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### **.Industry and Transport Division**

### 2 STRATEGIC CHALLENGES

### WITH IMPACT ON DIFFERENT SECTORS



Sustainable Transport

tecnalia) Inspiring



Industry and Factory of the Future

X
Aeronautics

Rail





Foundry and Steelmaking





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## **.Our challenges** Industry 4.0





© Co-operation and networking System integration



AUTOMATED
Repeatability and reliability
Increased productivity and efficiency



SUSTAINABLE © Environmental © Cost-effective



SOCIAL
Spaces shared by people and machines
Social responsability







Reconfiguration capability
Processes and systems integration



SMART
Environmentally sensitive systems
Rational use of resources

© Preventive and predictive

### . being close to the markets

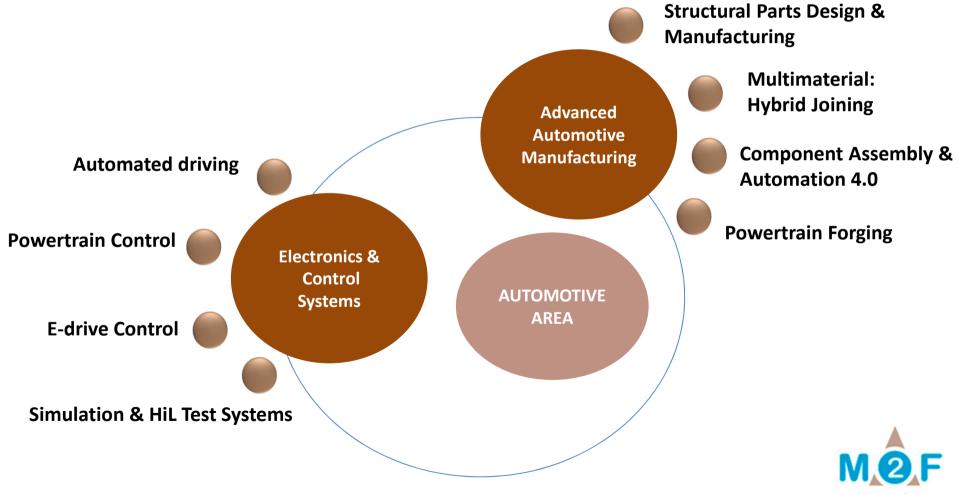


### **Automotive Sector**

Cutting Edge Solutions for Automotive Industry

TECNALIA boosts competitiveness of AUTOMOTIVE companies, developing breakthrough ideas for a future sustainable transport

## **Automotive Technology Domains**



Move to Future

### SPAIN 2017: Sistema de Propulsión Avanzado INtegrado 2017

#### **Objetivos**

Desarrollo de una serie de tecnologías viables económicamente que permitirán maximizar el aprovechamiento de la energía, combinando la energía eléctrica con sistemas de combustión de alta eficiencia (2015-2017):

- nuevas formulaciones de gasolinas ligeras
- generadores y motores eléctricos más eficientes
- sistemas de control energético
- sistemas de recuperación de energía de los gases de escape
- acoplamientos ligeros
- sistemas de refrigeración de alto rendimiento.



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