

# Ferrovial Lab

Where opportunity becomes success



ferrovial

# Ferrovial, creating shared value

Ferrovial is a global infrastructure company focused on the development and operation of innovative, efficient and sustainable infrastructure while creating value for our stakeholders.

Our business model is based on an integrated platform to develop projects with high-value creation through four business units: Toll Roads, Airports, Construction and Energy.

## UNIQUE ASSETS AND KEY PROJECTS

### HIGHWAY 407 ETR

- The largest motorway concession in the world
- \$3.6bn Total Investment
- 1999-2098 Concession Period
- \$13.3bn in economic output



**407 ETR**  
Express Toll Route

### THE NEW TERMINAL ONE, JFK INTERNATIONAL AIRPORT

- \$9.5bn Total Investment
- 23 million pax per annum capacity
- Concession until 2060
- Construction on going



**THE NEW TERMINAL ONE**  
JFK INTERNATIONAL AIRPORT

### ITER

- +€25bn Investment
- +30 Countries partnership
- +€1bn Ferrovial award
- 2012-2029 Est. execution



**iter**

### DEMOSATH

- Floating Off-Shore wind
- Demo 2 MW for 5 years
- Confidential Investment



**DEMOSATH**

## BIG NUMBERS THAT SPEAK FOR US

REVENUES (M€)

**8,514**  
2023

**+12.8%**  
Compared to 2022

CO<sub>2</sub> EMISSIONS  
Scope 1&2 tCO<sub>2</sub> eq

**-45.6%**

In absolute terms  
compared to 2009

CAPITALIZATION (M€)

**24,458**

INNOVATION

**73.97**

million in Digitalization and  
R&D investment

**158**

projects developed in R&D

A global leader opening its doors again to external partners and co-innovation to pursue a common objective with mutual benefits.

# Introducing 'Ferrovial Lab'

## Where opportunity becomes success

Ferrovial Lab is an open innovation sandbox environment created to promote experimentation with emerging technologies and validation of new solutions to leverage the capabilities of external partners through solid strategic alliances.



HIGHWAYS



CONSTRUCTION



AIRPORTS



ENERGY

### STATE-OF-THE-ART FACILITIES THAT PURSUE THREE MAIN OBJECTIVES:



#### VALIDATION

Boost experimentation with emerging technologies & validation of new solutions



#### COLLABORATION

Foster collaboration with the innovation ecosystem: internal and external, corporates, startups, academia, etc.



#### SCALABILITY

Reduce deployment risk and support scalability & adoption of new technologies by demonstrating their value



An innovation sandbox to transform the business and promote efficiency and competitiveness.

A bold move to accelerate Ferrovia connection with the forefront of worldwide innovation.

A Ferrovia Lab to pave the way for a more sustainable future.

# Your chance to be part of a forward-thinking ecosystem

And join the next business paradigms



## CONSTRUCTION

- Design For Less
- 3D Printing
- Modular Construction
- Automated Construction Machinery
- New materials



## ENERGY & STORAGE

- Alternative Energy Storage Systems
- Renewable Industry 5.0
- Energy Efficiency
- Smart Grids



## SUSTAINABILITY

- Renewable Fuels and Fleet Decarbonization
- Decarbonization As A Service
- Circular Economy
- Carbon Management



## DIGITAL INFRASTRUCTURE

- Edge optimized architecture and detection sensors
- Perception software
- Communications: fiber, 5G
- Digital twin: Asset virtualization
- GenAI, AI, ML & LVM

## Because teamwork makes the dream work

### Robotics & Automation



Delivery the vision and roadmap to construction machinery autonomy.

#### OBJECTIVES ACHIEVED

- Volume/quality real-time progress monitoring
- Higher operator efficiency
- Reduction in rework

### Industry 5.0 applied to renewable plants



Experimental platform to test real-time performance and optimization of solar trackers, HTJ panels, I-V sensors and control systems.

#### OBJECTIVES ACHIEVED

- Higher efficiency
- Real-time I/V curves per panel
- Business Intelligence and real-time audit control

### Road & Edge Compute Experimentation



Building a test environment for different sensors and third-party edge solutions.

#### OBJECTIVES ACHIEVED

- Design, build and test road sensors and perception SW (PS)
- 3D real-time modeling

# A close relationship where **you** choose the role you want to play



## VENTURE CLIENT

Test & integrate products from startups to help them grow



## COMMERCIAL PARTNERS

Having an agreement to develop a Project or supporting it by providing solutions



## PARTNERSHIP

Having an agreement where all parties co-invest to pursue a common objective with mutual benefits

## Join our innovation community

### INDUSTRIAL CONSTRUCTION



### ENERGY AND MATERIALS



### CONSTRUCTION PROGRESS MONITORING



### ENERGY AND SUSTAINABILITY



### PLATFORM AND NEW BUSINESSES



### RESEARCH INSTITUTIONS



### DATA MODELS FOR HIGHWAYS



### UNDERGROUND UTILITY DETECTION



Ready to be part of Ferrovial Lab?  
Fill out the form to join us.

