

## Driving performance

IDIADA provides **solutions to driving performance and user experience requirements** offering a one-stop shop approach for objective, subjective and functional performance assessments. Our multi-skilled team supports the **vehicle development process from feasibility to validation**, offering engineering solutions led by attributes.

The new challenges of the automotive industry regarding any powertrain architecture and vehicle category can be addressed at IDIADA with full confidentiality control and remote project surveillance.



## Power Performance

With a wide selection of facilities available, **vehicle performance tests** are conducted at our [Proving Ground](#) as well as on our chassis dynamometers, always under safe and controlled environments. At IDIADA, we have extensive experience carrying out powertrain and drivetrain performance assessments and characterization projects on a wide range of architecture types on a daily basis.

By focusing on objective data assessment, added-value data analysis techniques, and system-level reverse modelling, we support our customers with **vehicle performance validations** as well as **market positioning** and **target-setting through benchmarking and simulation**.

## **Driveability**

From sea to mountain level altitude; hot and cold weather; driver or CAV rider analysis, IDIADA provides **high-end support services to your driveability development** with the support of our master drivers and expert engineers, by making use of our correlated driving performance scoring profile, our specialized tools to get the most out of objective and subjective data, and focusing on acceleration features and comfort. Benchmark, target-setting, debugging, and validation activities allow us to position and validate all kinds of vehicles from a user's perspective and in the most common markets.

## **E/E Control and Reliability:**

Since powertrain-related Electric and Electronic (E/E) systems have grown in number and complexity, their controllability must be guaranteed under any possible scenario. Both from a benchmarking or a product-development perspective, **IDIADA provides complete functionality evaluation packages with a test-to-failure approach to determine improvements, glitches and avoid future recalls.** Design Verification Plans (DVPs) with standardized test and evaluation procedures are defined to evaluate any E/E system under normal, abnormal and failure situations. Then, both system and vehicle reactions are analysed in-depth from performance and safety viewpoints, assuring proper robustness and reliability levels.

## **Driving resistance**

Owning a state-of-the-art Proving Ground for coast-down and air-drag testing, **IDIADA is a site of reference for driving resistance evaluation.** More than 500 tests are performed at IDIADA every year for homologation, benchmarking, and research purposes. The driving resistance topic is addressed with testing and simulation, and integrated by different functionality experts such as [aerodynamics](#), [electric powertrain](#), [transmission](#), [brakes](#) and [tyres](#).