

# Horizon Europe Launch Event

**Trkan Edege**

**R&D and IPR Leader**

**Ford Otosan**

***İstanbul, 22 March 2022***

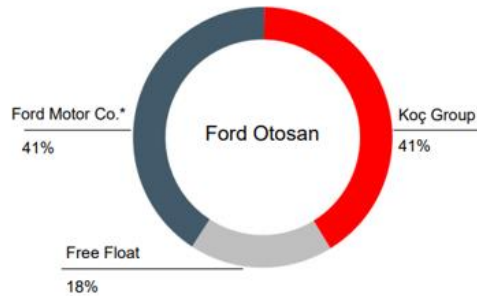
- **About Ford Otosan**
- **R&D Centers and Strategic Priorities**
- **Horizon 2020 Projects**
- **Our Experience In Horizon 2020**
- **Horizon Europe Projects**



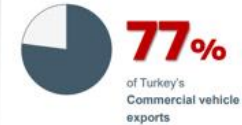
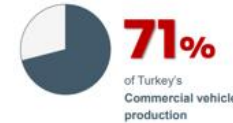
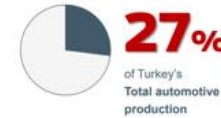
This project is co-financed by the  
European Union and the Republic of Turkey  
Bu proje Avrupa Birliđi ve Trkiye Cumhuriyeti tarafından  
finanse edilmektedir

# ABOUT FORD OTOSAN

## Company Profile



## Leading the Turkish Automotive Industry



## Key Player in Ford Motor Company Universe

**Europe's largest CV manufacturer**

Lead manufacturing plant of Ford Transit globally

Single source of Ford Custom & Ford Courier

Center of Excellence for Ford Trucks (heavy trucks)

The only Ford factory and among 4 automotive factories in the world included in the Global Lighthouse Network

**Engineering and R&D power**

Global hub for Ford Trucks (heavy trucks) and related powertrains

Global support for light commercial vehicle development

Global support for diesel powertrain engineering



This project is co-financed by the  
European Union and the Republic of Turkey  
Bu proje Avrupa Birliđi ve Trkiye Cumhuriyeti tarafından  
finanse edilmektedir

# R&D CENTERS AND STRATEGIC PRIORITIES

**Ford Otosan has the capability and infrastructure to design, develop and test a complete vehicle end-to-end, including its engine and engine systems.**

### Sancaktepe R&D Center

- Center of Excellence for heavy trucks and related diesel powertrains
- Design studio and CAVE lab (1<sup>st</sup> in Turkey)
- Vehicle and engine HIL labs



### Gölcük R&D Center

- Engine & vehicle testing
- Development workshops



### Eskişehir Product Development

- Prototype engine manufacturing and testing
- The only facility to test extra heavy engines over 13L in Turkey



# R&D PRIORITY AREAS

Autonomous  
driving

Electrification

Connectivity

Emissions

Light Weight  
Materials

Digitalisation

Robotics

AGVs

Industrie 5.0

Smart Cities

Sustainability



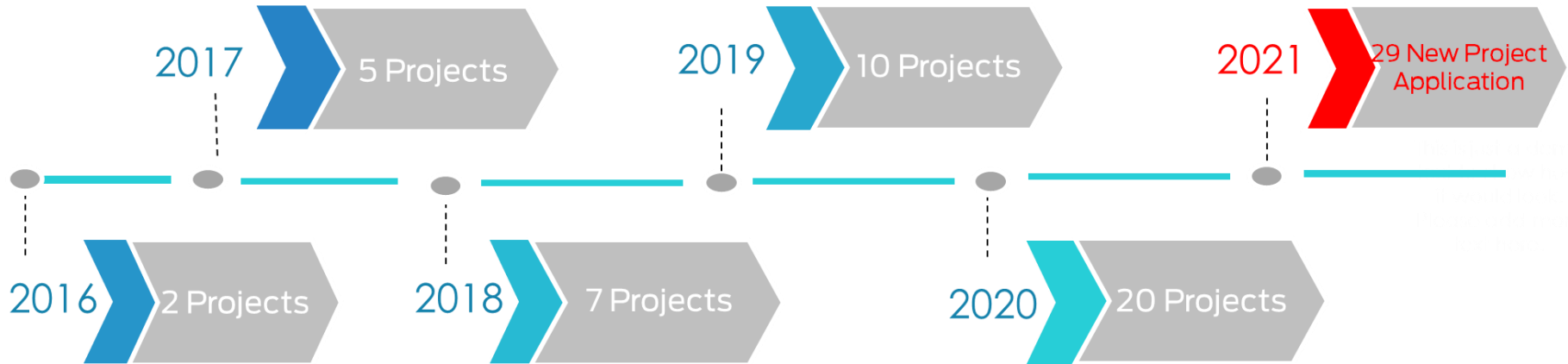
This project is co-financed by the  
European Union and the Republic of Turkey  
Bu proje Avrupa Birliđi ve Trkiye Cumhuriyeti tarafından  
finanse edilmektedir

# H2020



•Ford Otosan first project application in 2015.

•20 Granted Project in H2020 . (5 of them completed successfully)

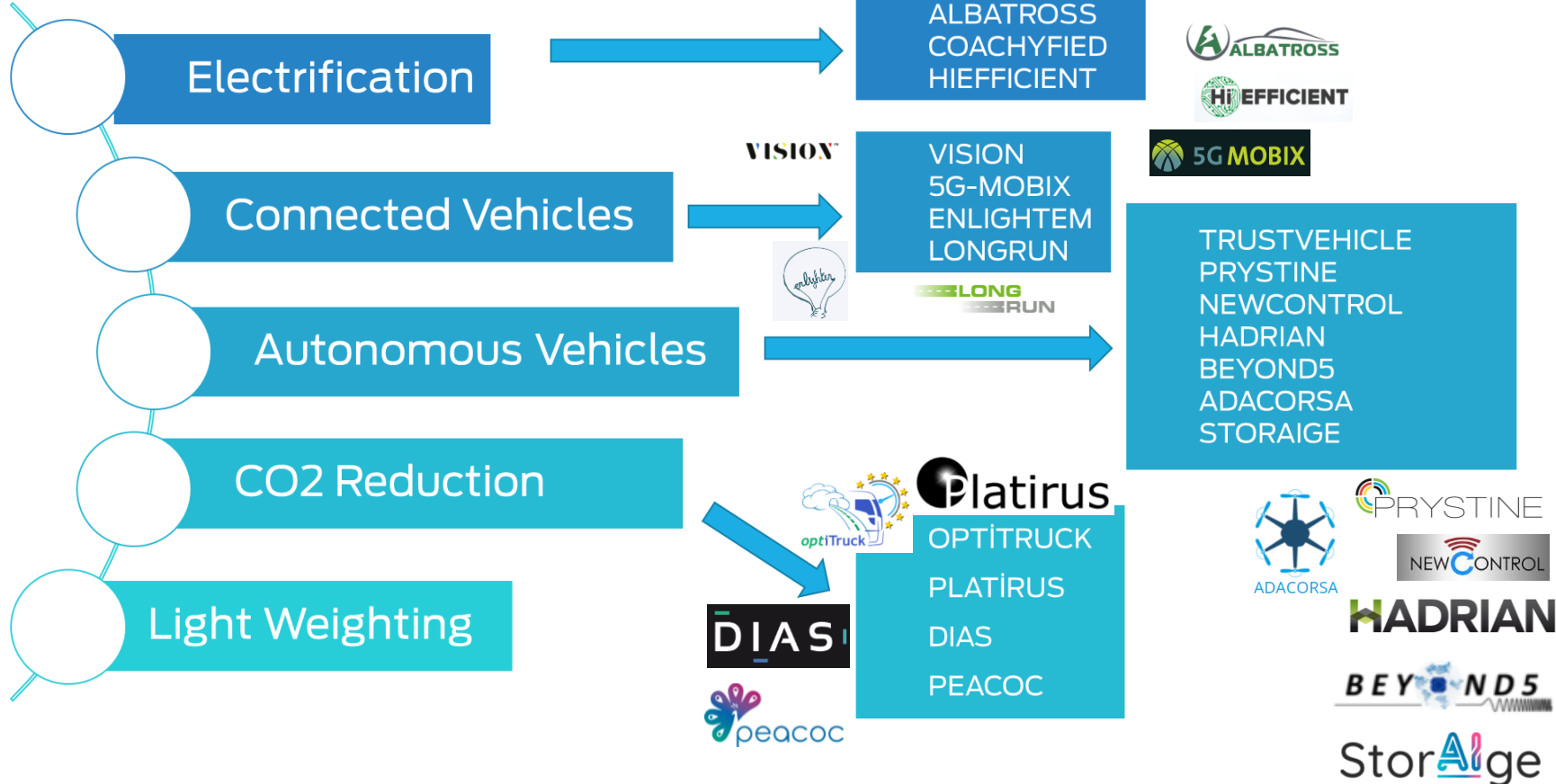




This project is co-financed by the European Union and the Republic of Turkey  
Bu proje Avrupa Birliği ve Türkiye Cumhuriyeti tarafından finanse edilmektedir



# H2020 PROJECTS



# H2020 PROJECTS

- **Prystine & OptiTruck → Development of sensor fusion algorithms for LIDAR, cameras, Ultrasonic sensors and radar to undertake autonomous reverse maneuvering and parking/docking features**

**First granted projects from Turkey in the field of autonomous driving**

- **Coachyfiend → Development of long distance Fuel Cell**

**First granted project from Turkey in the field of hydrogen fuel cell vehicles.**

- **Albatross → Development of new generation, fast-charging and lightweight electric vehicle batteries**
- **Platirus → platinum group metals recovery using secondary raw materials**

# H2020 PROJECTS

- **Peacoc** → unlocking the full potential of the precious metals sector and developing economically and environmentally viable pre-commercial metallurgical system to recovery and refining precious metals.
- **Storage** → Connected & autonomous robots
- **Hiefficient** → 48v electric vehicle studies
- **Longrun** → E-axle development for low-emission
- **Adacorsa** → Development of autonomous functions using drone based sensors inside construction zone (to be developed in collaboration with 5G-MOBIX & NewControl & Beyond5)

## Being in consortia as part of Horizon Projects ;

- Provide great opportunity to be in EU R&D eco-system
- Enables access to ongoing R&D activities about emerging technologies
- Develops Strong Relationships and partnerships
- Provides significant funding for R&D activities
- Define clear IPR boundaries with grant agreement
- Makes you part of ;  
solutions about major global problems  
high value-added project outputs by means of your company's  
contribution to the consortia.

## In Horizon Europe ; 29 New Project Proposals Submitted in 2021. 6 Projects Granted.



HiPE

- Development of 22 kW 800V integrated WBG-based OBC and HV/LV DC/DC



NextETRUCK

- Development of e-truck unique aluminum platform, with metal additive manufactured structural parts
- New PT sizing using digital twin of the truck, with increased overall efficiency.



FLEX  
INDUSTRIES

- Optimization of energy processes with Digital Twin of Paintshop
- 1.5 MW PV plant, solarwall, stationary BESS based on 2nd life batteries integration



BATRAW

- Recycling of end-of-life battery packs for raw material supply chains and enhanced circular economy



- Development of methodologies for re-using, re-purposing, re-conditioning and recycling of EV and stationary batteries.



ROADVIEW

- Development of all weather Autonomous Highway Driving capability for heavy duty truck

**THANK YOU FOR LISTENING**

**Türkan Edege**

**R&D and IPR Leader**

**E-mail : [tedege@ford.com.tr](mailto:tedege@ford.com.tr)**