



This project is co-financed by the European Union  
and the Republic of Türkiye



**ICTürkiye2025**  
10 April, İstanbul

PRESENTER FULL NAME: AYSEL PİLAV

ORGANIZATION: YEŞİLOVA HOLDİNG

WORKSHOP NAME: 2-TWIN GREEN AND DIGITAL TRANSITION OF INDUSTRY

E-MAIL: aysel.pilav@yesilova.com.tr

## Description of the Organisation

# YEŞİLOVA

 Yeşilova HQ Bursa/Türkiye  Cansan GmbH Business Development Office Frankfurt/Germany



6 PRODUCTION PLANTS



2000 HIGHLY SKILLED COLLEAGUES



125.00 m<sup>2</sup> PRODUCTION AREA



34.000 TONS OF ALUMINIUM  
CONSUMPTION ANNUALLY



THE INDUSTRIES THAT WE SERVE

- AUTOMOTIVE
- RAILWAY
- OTHERS  
(CONSTRUCTION & BUILDING & ENERGY)

## Product Range

### We Produce Solutions For All Industrial Profile Needs



Under Construction  
System Profiles



Thermal Solar Collector



Photovoltaik Solar  
Panel Profiles

### For All Rail System Vehicles Interior Trim Solutions



Ceiling Modul

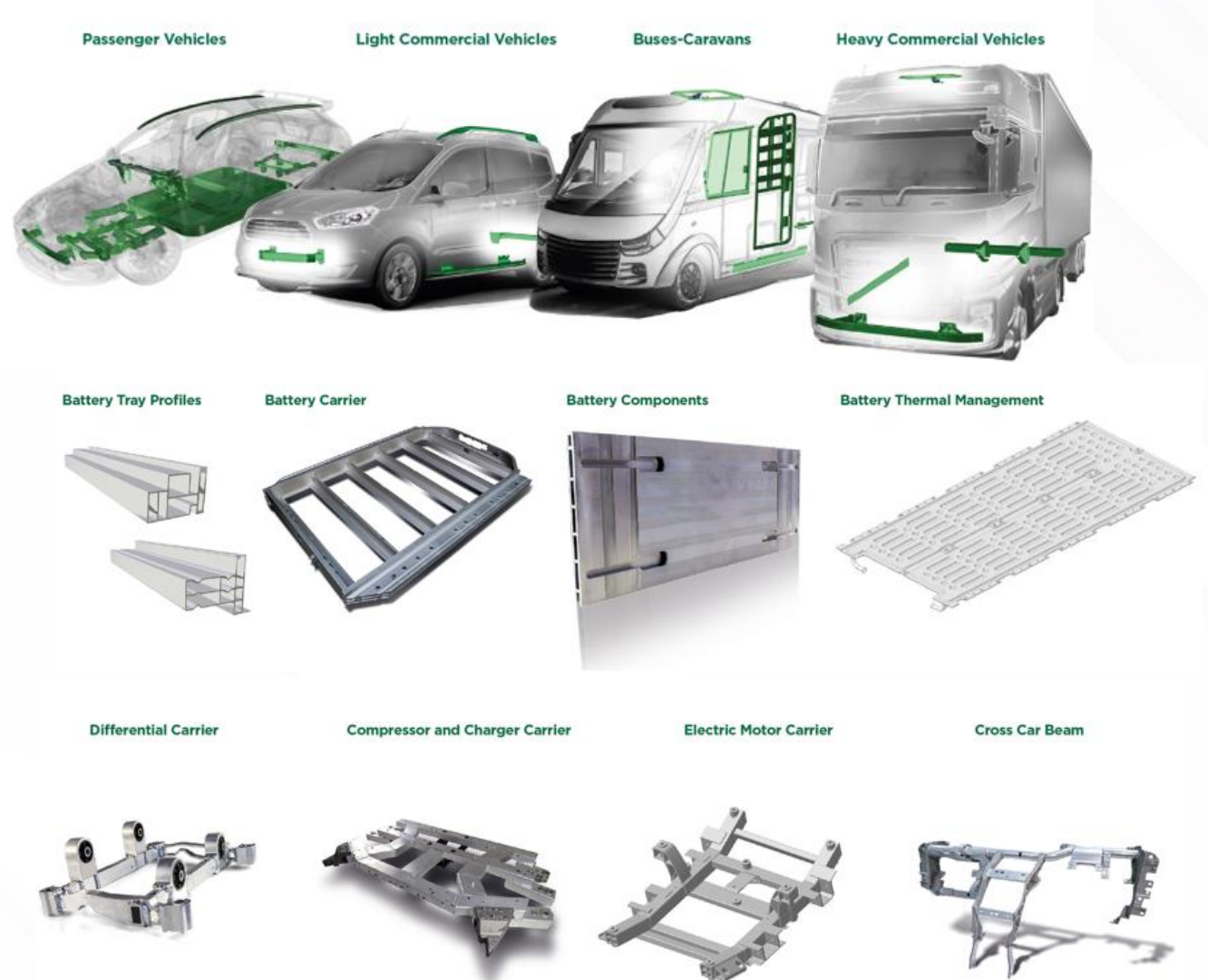


HVAC



Luggage Racks

## Aluminium Solutions We Offer To The Automotive Industry.





## Your Teams' Expertise



### Competencies

- Product development
- Analysis, Design and Validation
- Project Management
- Testing



### Technologies

- **Aluminium Extrusion**  
(6 extrusion lines, up to 10" press diameter)
- **Aluminium HPDC**  
(11 HPDC presses)
- **Surface Treatment**  
(Anodizing, powder coating, wet painting)
- **Mechanical Process**  
(CNC Machines, stretch bending, drilling, cutting)
- **Joining Technologies**  
(TIG&MIG&Oxygen&Robotic CMT & FSW Welding, Riveting, Bonding)

## Your Research Fields

### Lightweight Structures & Mobility Solutions

- *Lightweight solutions for the automotive, rail, and energy sectors*
- *Advanced thermal management and impact protection systems*



### Sustainability and Energy Management

- *Waste reduction, recycling, and reuse strategies*
- *Use of Renewable Energy Sources in Production*



### Advanced Manufacturing Technologies

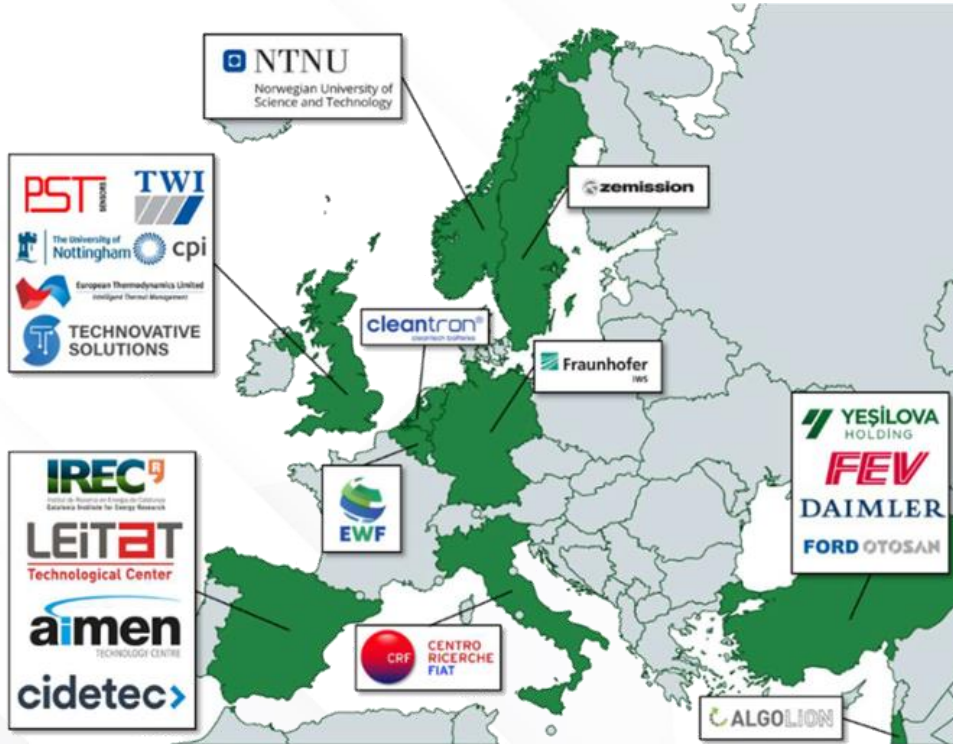
- *Process optimization and automation,*
- *Digital twins and simulation based process control,*



### Simulation and Digital Engineering

- *CAE analyses for structural, thermal, and crash performance*
- *Virtual testing and digital twin methodologies*

## Your On-going Projects



**Advanced Light-weight BATteRy systems Optimized for fast charging, Safety, and Second-life applications**

**Grant agreement ID:** 963580

**Topic:** H2020-LC-BAT-10-2020 – Next generation and realisation of battery packs for BEV and PHEV

**Timing:** 01.01.21 – 30.06.2025 (48 months+ 6 months extended)

**EU contribution:** ~10 mil. €

**Coordinator:** Yeşilova Holding A.Ş.

**21 Partners from 10 Countries**

Association: 1, Large: 3, RTO: 8,  
SME: 7, Uni:2



## Project Idea

**HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-32: Green and resilient flexible production processes (Processes4Planet partnership) (IA)**

**Deadline Dates: September 2025**

- ☐ **Objectives:** Yeşilova aims to improve production flexibility by integrating renewable energy sources and enhancing process adaptability to energy fluctuations.
- ☐ **Expected Results:**  
**Demonstration of flexible production processes adaptable to renewable energy variations,**  
**Improved energy efficiency and reduced costs in production lines,**  
**Scalable use-case for energy-intensive industries to adopt flexible, green production processes.**

## Project Idea

**HORIZON-CL4-INDUSTRY-2025-01-TWIN-TRANSITION-34: Smart integration of net zero technologies into Energy Intensive industries (IA)**

**Deadline Dates: September 2025**

☐ **Objectives:** Yeşilova aims to demonstrate the integration of net-zero technologies into production processes and to decarbonise key manufacturing steps.

☐ **Expected Results:**

**A small-scale, real-life demonstration of net zero technologies in an industrial process,  
Reduction of natural gas dependency and GHG emissions in a selected process line,  
Increased know-how on the integration of clean energy technologies in the aluminum industry,  
Replicable and scalable use-case for other companies in energy-intensive sectors.**



## Project Idea

**HORIZON-CL5-2026-02-D4-06: Phase out fossil fuel in energy-intensive industries through the efficient integration of renewable energy sources**

**Deadline Dates: February 2026**

☐ **Objectives:** Yeşilova aims to demonstrate the integration of renewable energy sources into fossil fuel-based thermal processes and to optimize process efficiency energy storage and flexibility.

☐ **Expected Results:**

**A small-scale, real-life demonstration of renewable energy sources in industrial process,  
Reduction of natural gas dependency and GHG emissions in a selected process line,  
Increased know-how on the integration of clean energy technologies in the aluminum industry,  
Replicable and scalable use-case for other companies in energy-intensive sectors.**



PRESENTER CONTACT  
DETAILS:  
[aysel.pilav@yesilova.com.tr](mailto:aysel.pilav@yesilova.com.tr)  
COUNTRY:  
TÜRKİYE