REAL CASE SCENARIO EV CATEGORY Formula IHU 2025
Formula IHU goes Formula 1

Lightweight, Low-Carbon Battery Integration for the F1-E Dev Car

Scenario Brief

As Formula 1 shifts to **carbon-neutral racing** by 2030, its 2026 rules introduce higher electric-only power contributions and place pressure on **lightweight packaging**, **recyclability**, and **assembly standardization**.

Formula IHU Electric teams have been invited to develop a **battery system mounting and integration solution** for a new F1 development program: the **F1-E Dev Car**, a single-seater concept car, built to your Formula car EV dimensions, used for subsystem testing under real-world conditions.

You are a **Tier-1 supplier** responsible for building and justifying a **cost-effective, low-emissions structural integration** system for the battery and HV wiring — NOT the battery cells themselves.

Your objective is:

Deliver a full **Cost & Manufacturing plan** for a structural and safety-critical system to:

- Mount the **battery accumulator**
- Route and protect HV cabling
- Enable fast maintenance or replacement
- Minimize weight and emissions
- Comply with FS-E rules (especially EV 5.x – Accumulator rules)

Note: Teams will have to present the answer at the final 10 minutes of Cost and Manufacturing Event. The answer must be a 5-10 slide presentation.