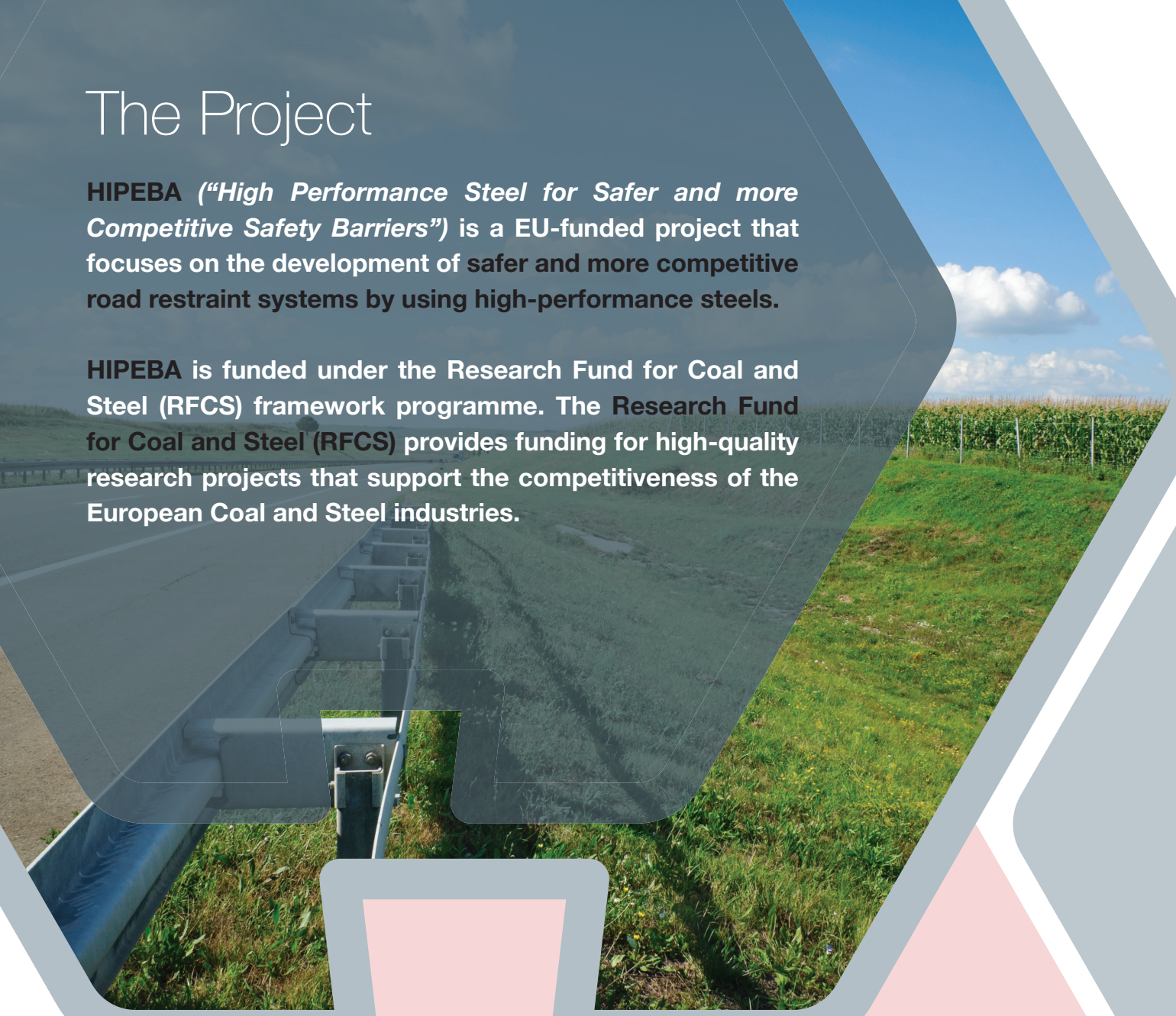
Hipeba

High Performance Steel for Safer and more Competitive Safety Barriers

The Project

HIPEBA *("High Performance Steel for Safer and more Competitive Safety Barriers")* is a EU-funded project that focuses on the development of safer and more competitive road restraint systems by using high-performance steels.

HIPEBA is funded under the Research Fund for Coal and Steel (RFCS) framework programme. The Research Fund for Coal and Steel (RFCS) provides funding for high-quality research projects that support the competitiveness of the European Coal and Steel industries.



The Objectives

Map current and future **performance-related requirements** for safety barriers.

Determine **how steels with enhanced material** characteristics can contribute to improve the performance of safety barriers in all stages of their life cycle.

Deliver **criteria for the technical implementation** of high-performance steels into road safety barriers.

Demonstrate that introducing high-performance steels in safety barriers can make products more competitive and yield **economic revenues for EU's industry** and society, compensating the initial purchase cost.

Develop and **test pilot designs** that demonstrate the benefits of high-performance steels.

Ensure that road safety barriers manufactured with high-performance steel **meet the required certification** and approval processes.

Why?

The European Union, a world leader in the steel industry, is facing increasingly fierce competition from non-EU producers. **Advanced research** is essential for European industry to remain competitive, as well as a deeper understanding of the paramount importance of **high-performance steel** within the everyday needs of the road safety sector.

With the purpose of supporting this leadership, HIPEBA is a ground-breaking initiative relevant to the **maintenance and new construction of EU road infrastructures**, as the latest and safest technology must become available to European road users.

Who?

The HIPEBA Consortium has gathered a group of specialist organisations from **industry, academia and research** securing a successful implementation and deployment of its planned activities.

How?

Learn more about the stages HIPEBA will follow during its 36-month project implementation in our website: **www.hipeba.eu**

WORK PACKAGE 1: Analysis and selection of scenarios

WORK PACKAGE 2: Material properties and processes' analysis

WORK PACKAGE 3: Prototype product design

WORK PACKAGE 4: Product testing

WORK PACKAGE 5: Cost-benefit analysis

WORK PACKAGE 6: Dissemination and exploitation

The Targets

Assess the technical advantages of using enhanced steels in new safety barriers, basing such analysis on barrier design criteria, manufacturing processes and real life operation under impact conditions.

Develop a full life cycle cost model -including raw materials, manufacturing processes, installation and product service life- for safety barriers bringing better cost-benefit ratios.

Develop conceptual prototype demonstrators in order to validate the findings and evaluate concept designs.

Apply computational mechanics (simulation) for parametric studies and assessment of its predictive capability.

Provide input into standardisation activities, to allow improvements in safety barriers' evaluation and approval process.

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HIPEBA: HIGH PERFORMANCE STEEL
FOR SAFER AND MORE COMPETITIVE SAFETY BARRIERS

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Research Fund for Coal & Steel

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