

FIREMAT

FIRE resistant MATerials & composites

FIREMAT is meant to overcome the main limits of Polymeric Matrix Composites (PMCs), such as low resistance to temperature and non-recyclability, and Ceramic Matrix Composites (CMCs), which boast excellent thermal resistance, but are too expensive and time-consuming to produce.

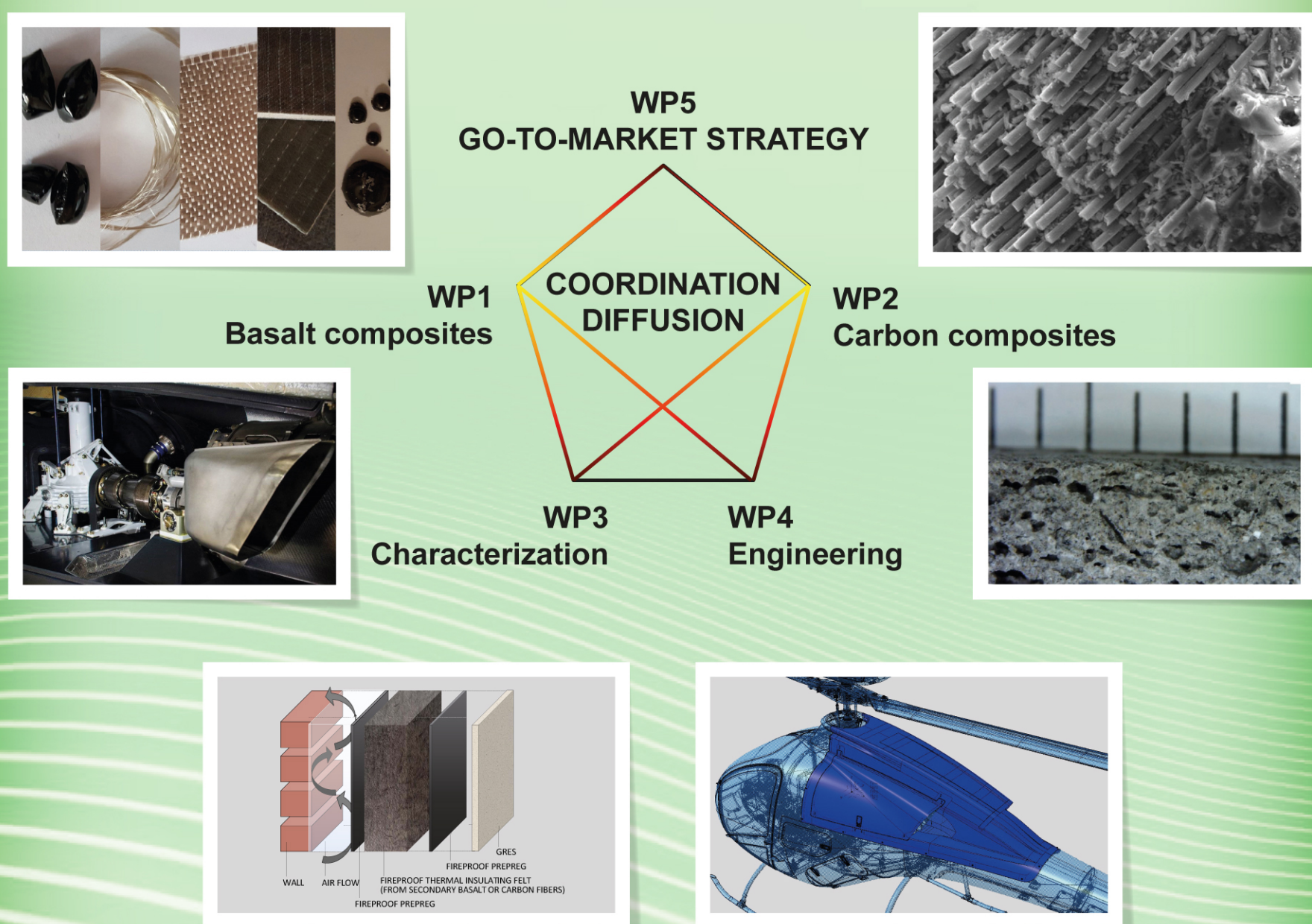
FIREMAT will develop long and short fiber-reinforced composites for high temperature and fireproof applications, aiming at exhaust pipe applications and fireproof insulating panels such as:

1. fireproof composites reinforced with basalt fiber,
2. composites reinforced with long or short carbon fibers with a nano-structured refractory matrix.

FIREMAT will study:

- ✓ the sustainability and environmental impact of the designed materials;
- ✓ the reduction of production times and production/maintenance costs;
- ✓ the minimization of production defects and the increase in production quality;
- ✓ the patentability and go-to-market strategy.

The TRL 4/5 already acquired about fire-resistant PMC within the EEE-CFCC project (eee-cfcc.it) will be implemented at TRL 6 by improving the formulations, realizing specific pilot lines and full-scale prototypes.



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The project is co-funded by Emilia-Romagna Region in the fields of the European Regional Development Fund (POR FESR 2014-2020)

