

# Challenge@PoliTo *By Firms*

## *Circular and sustainable inputs for renewable energy* *\_By ENEL Green Power*

September 2022 – January 2023



### CALL FOR IDEAS

From renewables energies to sustainable energies is the ambition of ENEL GREEN POWER. This is a very challenging path that is possible only through impacts mitigation, local communities acceptability and Net Zero achievement throughout the entire supply chain.

In this context, Innovation EGP is developing several initiatives and, in particular the aim of this challenge proposal is to identify innovative models, projects and KPI able to introduce and booster the adoption of alternative and circular materials in the renewables generation (Wind and Solar).

### CHALLENGE

The challenge requires students to devise new ways for reducing the environmental impact and social risks through:

- the introduction of innovative/circular materials alternative to those already used,
- the technical/economic evaluation and the model of introducing sustainable and circular materials,
- creating synergies with the ecosystem of suppliers,
- supporting the identification of innovation projects that target this ambition.

Starting from an assessment of the alternative materials of the equipment of interest like tracker, inverter, PV module, wind blades and tower, the analysis will be focused on:

- identification of alternative materials to be used in the field of renewable generation with a lower environmental impact (e.g CO2 and water footprint, use of polluting materials) and social risks (to be considered for the entire life cycle), as well as suitable from a technical and economic point of view;
- identification of innovative models and projects to support technical validation, KPIs for assessing the value and benefits related to the introduction of the alternative materials identified.

Challenge@PoliTo are worth 8 curricular or extracurricular credits. Check your degree programme to verify it.

Overcoming the Challenge allows the release of the Open Badge.

Places are limited. For any questions, write to [clik@polito.it](mailto:clik@polito.it)



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