



## SPECIAL SESSION XXX

### Innovative electrical applications for energy efficiency in buildings and industrial processes

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#### ABSTRACT

The present special session aims at gathering contributions on innovative solutions and applications concerning energy efficiency both in residential buildings and in industrial applications.

Regarding the buildings, the topics included in this special session concern (but are not limited to):

- o **New solutions and technologies to contain energy losses and increase the performance of the building-system.**
- o **Optimized management of energy flows and building components.**
- o **Development of methodologies capable of improving consumption habits on one hand and optimizing production (both on a local and territorial scale) on the other.**
- o **Providing methods, tools, and solutions that enhance the performance of both new and refurbished buildings, laying the groundwork for the energy development of construction in the near future.**



Regarding industrial processes, in line with what is indicated in guiding documents such as the Clean Energy Package, PNIEC, PNRR and in the national emission reduction targets, the topics included in this special session concern (but are not limited to):

- **Developing methods, tools and solutions to strengthen industrial leadership autonomy and resilience in strategic value chains and in areas of potential industrial alliances, bringing them ever closer to the paradigm of dynamic innovation ecosystems.**
- **Increasing the impact of energy efficiency measures known to the scientific community but, in many cases, little explored from an engineering point of view, and which present significant cognitive, managerial and economic barriers to industrial implementation.**
- **Developing tools that facilitate knowledge and skills transfer in relation to energy efficiency in industrial processes and the adoption of energy efficiency measures known to the scientific community within specific sectors/districts/value chains.**
- **Increasing the degree of development/engineering of energy efficiency technologies in the industrial context.**