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Assessing the necessity for investments in energy efficiency through the Sustainable Development Goals.

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Investing in energy efficiency is one of the main priorities of European Union's energy and climate policy offering a variety of benefits, including reduced energy costs, reduced carbon emissions, improved security of supply and improved employment conditions. These benefits cannot always be easily measured, while they are rarely considered when assessing the feasibility of energy efficiency projects. Towards this direction, the United Nation's Sustainable Development Goals (SDG) require strategies that build economic growth and address a range of social needs, while tackling climate change. Thus, it is considered a high-priority to link energy efficiency with SDG since the broad promotion and implementation of energy efficiency measures could significantly improve several SDG indices at a country level. In the context of the presented study, primary energy efficiency sectors and measures have been identified for eight European case study countries, namely Bulgaria, Czech Republic, Germany, Greece, Italy, Lithuania, the Netherlands and Spain. In addition, SDG indices, associated directly or indirectly with the implementation of energy efficiency measures have been assigned to relevant sectors. The emerging typology has concluded in an overall ranking among the case study countries by calculating the SDG indices associated with each relevant sector, which depicts the needs of the country on energy efficiency investments.

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