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Sommario/riassunto	<p>In recent years, the interest of the scientific community towards efficient energy systems has significantly increased. One of the reasons is certainly related to the change in the temperature of the planet, which has increased by 0.76 °C with respect to preindustrial levels, according to the Intergovernmental Panel on Climate Change (IPCC), and is still increasing. The European Union considers it vital to prevent global warming from exceeding 2 °C with respect to pre-industrial levels, as it has been proven that this will result in irreversible and potentially catastrophic changes. These changes in climate are mainly caused by greenhouse gas emissions related to human activities, and can be drastically reduced by employing energy systems for the heating and cooling of buildings, as well as for power production, characterized by high efficiency levels and/or based on renewable energy sources. This Special Issue, published in the Energies journal, includes 13 contributions from across the world, including a wide range of applications such as hybrid residential renewable energy systems, desiccant-based air handling units, heat exchanges for engine WHR, solar chimney systems, and other interesting topics.</p>