

Power semiconductors for an energy-wise society - A brief review of IEC whitepaper

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This keynote presents a brief outline of the IEC white paper bearing the same title published in October 2023. Power semiconductors deliver economic, environmental, and social values as key electronic components exercising a direct impact on achieving the United Nations Sustainable Development Goals. The white paper facilitated greater awareness as well as practical insights concerning the market-oriented, market-driven, and market-focused roles that power semiconductors perform over a very broad spectrum of industries and in the society. The paper, composed of 5 sections, summarizes the application aspects and social role of power semiconductors and the challenges faced by power semiconductors to realize that role. It also discusses the importance of establishing more effective international standards in the power semiconductor field in order to realize an "energy-wise society". This keynote will outline such essences of the white paper.