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Sommario/riassunto

Through different applications, electricity provides the energy required for light, heat, comfort, and mechanical work. In order to sustain society's expectation for comfort, convenience and productivity, it will remain necessary to continue to seek and find reasonable quantities of energy in forms which are accessible, affordable and have modest or zero environmental impacts. This in turn will call for an international imperative to make existing uses of electricity both efficient and practical. This book will guide the reader toward a clearer vision of that goal, with explanations of the concept of electrification, along with CO2 reductions through expanded end-use applications of electricity.

Topics will include electric cars; airport, seaport, railroad and mining electrification; industrial uses of electricity in a variety of processes; residential building use of electricity; and enhancing energy efficiency and demand response.