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Sector -- Japanese Study -- European Study -- United Kingdom --

Conclusion -- References -- Chapter 4 Electric On-Road

Transportation -- The Rebirth of Electric Cars -- Environmental Assessment of Plug-In Hybrid Electric Vehicles -- Smart Charging --Truck Stop Electrification -- Truck Driver Benefits From TSE -- Two Major Types of Truck Stop Electrification -- Societal Benefits From TSE -- Emission Reduction Benefits of TSE -- Conclusions -- References --Chapter 5 Electrifying Off-Road Motive Power -- Forklifts -- Airport Electrification -- Seaport Electrification -- Railroad Electrification --Mining Electrification -- New Opportunities for Electrification --References -- Chapter 6 Beneficial Industrial Uses of Electricity: Industrial Introduction and Process Industries -- Process Industries --Food Processing -- Membrane Processing -- Freeze Concentration. Microwave Heating and Processing -- Desalination -- Electrolytics --New Applications for Mechanical Energy -- Electrifying IC Motor Applications -- Municipal Waste and Water Electrification -- Conclusion -- References -- Chapter 7 Beneficial Industrial Uses of Electricity: Metals Production -- Metals Production -- Dielectric Heating --Resistance Heating and Melting -- Conclusion -- References --Chapter 8 Beneficial Industrial Uses of Electricity: Materials Fabrication -- Materials Fabrication -- Electron Beam Machining -- Electric Discharge Machining -- Electrochemical Machining -- Electroforming -- Electrochemical Finishing -- Laser Beam Machining -- Electron Beam Welding -- Laser Beam Welding -- Plasma Welding -- Resistance Welding -- References -- Chapter 9 Beneficial Commercial Building Uses of Electricity -- Space Conditioning -- Variable Capacity Air Conditioners and Heat Pumps for Commercial Buildings -- Advanced Heating and Cooling Technologies -- Space Conditioning and/or Water Heating Using Carbon Dioxide (CO2) Refrigeration Cycle -- Water Heating -- Food Service -- Laundry -- Other Commercial Applications -- Medical Electronics -- References -- Chapter 10 Beneficial Residential Building Uses of Electricity -- Space Conditioning (Heating and Cooling) -- Water Heating -- Residential Appliances --Conclusions -- References -- Chapter 11 Enhancing Energy Efficiency -- Other Estimates of the Potential for Energy Efficiency -- Historic Perspective on Energy Efficiency -- References -- Chapter 12 Demand Response -- Definitions -- Background -- Four Building Blocks of Demand Response -- Where is the Biggest Impact? -- The Potential for Summer Peak Demand Savings from Utility Programs -- Examples of Real Applications -- How to Enable Demand Response -- What Does DR-Ready Entail?.

Why Aren't Today's Appliances, Information Technology and Consumer Electronics DR-Ready? -- Alternatives to Enabling DR-Ready End-Use Products -- A Possible Approach Toward Implementation of Dr-Ready Programs -- Identify Underlying Drivers and Interests among Key Stakeholders -- Determine State of Industry and Technology Including Drivers and Barriers -- Define Product Attributes that Warrant "DR-Ready" Designation -- Build Coalition with Strategic Partners -- Develop Roadmap of Target Products -- Develop standards for exchanging information with smart appliances -- References -- Index.

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.