

CONTENTS

I. EARTH'S LIFE SUPPORT SYSTEMS

- Current Uncertainties in Assessing Aerosol Effects on Climate,
Surabi Menon 1
- Marine Reserves and Ocean Neighborhoods: The Spatial Scale of Marine
Populations and Their Management, *Stephen R. Palumbi* 31
- Elemental Cycles: A Status Report on Human or Natural Dominance,
R.J. Klee and T.E. Graedel 69

II. HUMAN USE OF ENVIRONMENT AND RESOURCES

- Prospects for Carbon Capture and Storage Technologies, *Soren Anderson
and Richard Newell* 109
- Plant Genetic Resources for Food and Agriculture: Assessing Global
Availability, *Cary Fowler and Toby Hodgkin* 143
- Construction Materials and the Environment, *Arpad Horvath* 181
- Contested Terrain: Mining and the Environment, *Gavin Bridge* 205
- Grazing Systems, Ecosystem Responses, and Global Change,
*Gregory P. Asner, Andrew J. Elmore, Lydia P. Olander,
Roberta E. Martin, and A. Thomas Harris* 261

III. MANAGEMENT AND HUMAN DIMENSIONS

- Assessing the Costs of Electricity, *Daniel M. Kammen and Sergio Pacca* 301
- Advances in Energy Forecasting Models Based on Engineering
Economics, *Ernst Worrell, Stephan Ramesohl, and Gale Boyd* 345
- Energy Management and Global Health, *Majid Ezzati, Robert Bailis,
Daniel M. Kammen, Tracey Holloway, Lynn Price, Luis A. Cifuentes,
Brendon Barnes, Akanksha Chaurey, and Kiran N. Dhanapala* 383
- Energy Infrastructure and Security, *Alexander E. Farrell, Hisham Zerriffi,
and Hadi Dowlatabadi* 421

INDEXES

- Subject Index 471
- Cumulative Index of Contributing Authors, Volumes 20–29 493
- Cumulative Index of Chapter Titles, Volumes 20–29 497