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recommendations

C.1 Sustainable growth of the VLS-PV system conceptC.2 Possible approaches for the future; C.3 Financial and organizational sustainability; C.4 Recommendations; C.4.1 General understandings; C. 4.2 Recommendations on a policy level; C.4.3 Checklist for specific stakeholders; Part I: Background and Concept of VLS-PV; 1. World energy issues; 1.1 Long-term trend in world primary energy supply and demand; 1.2 Potential of renewables; 1.3 Trends in the PV market; 1.3.1 PV module production and PV system introduction in the world; 1.3.2 Perspectives of the PV market; References

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3.2 Trends in government budget relating to PV programmes in three regions3.3 Trends in solar-cell technology; 3.3.1 Crystalline silicon solar cells; 3.3.2 Thin-film solar cells; 3.3.3 Technologies in perspective; 3.4 Trends in PV system technology; 3.4.1 Technologies in perspective; 3.4.2 Estimation of electricity production from PV systems; 3.5 Trends in power transmission technology; 3.5.1 A.C. power transmission; 3.5.2 D.C. power transmission; 3.6 Experiences in operation and maintenance of large-scale PV systems; 3.6.1 Operation and maintenance cost information

3.6.2 Long-term performance

Sommario/riassunto

The world's deserts are sufficiently large that, in theory, covering a fraction of their landmass with PV systems could generate many times the current primary global energy supply. This Energy from the Desert volume examines and evaluates the potential of very large scale photovoltaic power generation (VLS-PV) systems. Following from the success of the first book on the subject, the authors present practical case studies of both virtual and real projects based on selected regions (including the Mediterranean, the Middle East, the Gobi Desert and Western Australia) and their