

- | | |
|-------------------------|--|
| 1. Record Nr. | UNISA996336472503316 |
| Titolo | Robotics today |
| Pubbl/distr/stampa | [Dearborn, Mich.], : [Society of Manufacturing Engineers] |
| Descrizione fisica | 1 online resource |
| Disciplina | 629.8/92/05 |
| Soggetti | Robots, Industrial
Periodicals. |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Periodico |
| 2. Record Nr. | UNINA9910968893003321 |
| Autore | Camos Daniel |
| Titolo | Shedding Light on Electricity Utilities in the Middle East and North Africa
: : Insights from a Performance Diagnostic / / Daniel Camos |
| Pubbl/distr/stampa | Washington, D.C. : , : The World Bank , 2017 |
| Edizione | [1st ed.] |
| Descrizione fisica | 1 online resource (256 pages) |
| Collana | Directions in Development;Directions in Development - Energy and
Mining |
| Altri autori (Persone) | BaconRobert
CamosDaniel
EstacheAntonio
Mahgoub HamidMohamad |
| Disciplina | 333.790956 |
| Soggetti | Electric utilities - Middle East
Electric utilities - Africa, North
Energy policy - Middle East
Energy policy - Africa, North |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references. |

Front Cover -- Contents -- Acknowledgments -- About the Authors -- Abbreviations -- Introduction -- The Region's Electricity Challenge -- The New MENA Electricity Database -- The Structure and Content of the Report -- Notes -- References -- Part 1 How Do MENA's Electricity Utilities Perform? -- Chapter 1 Quasi-Fiscal Deficits in MENA's Power Sector -- Economy-Level Results -- Utility-Level Results -- What Can Be Done about Underpricing in MENA Economies? -- Conclusion -- Notes -- References -- Chapter 2 Comparing the Region's Performance with the Rest of the World -- Summary of Results and Overall Assessment -- Detailed Comparisons for Selected Indicators -- Conclusion -- Notes -- Chapter 3 A Dynamic Look at MENA Performance over Five Years -- Data Challenges -- Indicator Trends with All Utilities Aggregated -- Indicator Trends Disaggregated by Utility Type -- Conclusion -- Notes -- Chapter 4 A Multi-Indicator Approach to Analyzing Utility Performance -- Methodology -- Data Considerations -- Distribution Utilities: Average Rank Score -- Generation Utilities: Average Rank Score -- Vertically Integrated Utilities: Average Rank Score -- Conclusion -- Notes -- Chapter 5 Drivers of Utility Performance: Institutional and Contextual Characteristics -- Potential Determinants of Utility Performance -- Summary of Results -- Statistically Significant Differences between Subgroups of Characteristics -- Conclusion -- Notes -- References -- Part 2 What Do the Country Case Studies Tell Us? -- Chapter 6 The Urgent Need for Sector Reforms: The Case of the Arab Republic of Egypt -- Electricity Generation -- Electricity Transmission -- Electricity Distribution -- Comparison of Egyptian Generation Utilities -- Comparison of Egyptian Distribution Utilities -- Evolution of Egypt's Electricity Sector since 2014 -- Conclusion -- Notes -- References. Chapter 7 Harvesting Results from a Restructuring of the Power Sector: The Case of Jordan -- Electricity Generation -- Electricity Transmission -- Electricity Distribution -- Electricity Tariffs between Utilities -- Comparison of Jordanian Generation Utilities -- Comparison of Jordanian Distribution Utilities -- Evolution of Jordan's Electricity Sector since 2014 -- Conclusion -- Notes -- References -- Chapter 8 Benefits and Challenges of Multiservice Providers: The Case of Morocco -- Electricity Generation -- Electricity Transmission -- Electricity Distribution -- Comparison of Moroccan Generation Utilities -- Comparison of Moroccan Distribution Utilities -- Evolution of Morocco's Electricity Sector since 2014 -- Conclusion -- Notes -- References -- Chapter 9 A Remarkably Sophisticated Power Market: The Case of Oman -- Electricity Generation -- Electricity Transmission -- Electricity Distribution -- Comparison of Generation Utilities in Oman -- Comparison of Distribution Utilities in Oman -- Evolution of Oman's Electricity Sector since 2014 -- Conclusion -- Notes -- References -- Chapter 10 Synopses of the Case Studies -- Introduction -- Arab Republic of Egypt: An Urgent Need for Sector Reforms -- Jordan: Harvesting Results from a Restructuring of the Power Sector -- Morocco: Benefits and Challenges of Multiservice Providers -- Oman: A Remarkably Sophisticated Power Market -- Note -- Conclusion -- Cutting Hidden Costs in the Power Sector Is Key to Financing Sorely Needed Investment -- Underpricing Is the Major Source of Inefficiencies, Although Otherwise Inefficiencies Are Economy and Utility Specific -- MENA's Power Sector Must Match Its Technical Success with Improvements in Commercial and Financial Management -- Well-Targeted Institutional and Economic Reforms Would Boost MENA's Power Sector. The Case Studies Yield Valuable Insights on the Variety and Nature of Reform Paths -- More Systematic Monitoring of Power Sector

Performance Is Needed -- Appendix A Manual of Indicators and Data Sources -- Appendix B Utilities Considered and Their Basic Characteristics -- Appendix C Quasi-Fiscal Deficit: Hypothesis and Methodology -- Appendix D Methodology for the Analysis of Drivers of Performance -- Appendix E Core Values for MENA Indicators -- Box -- Box I.1The MENA Electricity Database -- Figures -- Figure 1.1The Quasi-Fiscal Deficit as a Percentage of GDP, 14 MENA Economies, 2013 -- Figure 1.2Comparison of Average End-User and Cost-Recovery Tariffs in MENA, 2013 (or most recent year with data, 2009-12) -- Figure 2.1OPEX per Connections for Distribution and Vertically Integrated Utilities in MENA (), 2013 (or most recent year with data, 2009-12) -- Figure 2.2OPEX per Kilowatt Hour Sold (), MENA, 2013 (or most recent year with data, 2009-12) -- Figure 2.3Residential Connections per Full-Time Equivalent Employee for Distribution and Vertically Integrated Utilities, MENA, 2013 (or most recent year with data, 2009-12) -- Figure 2.4Distribution Losses of Distribution Utilities and Vertically Integrated Utilities in MENA (%), 2013 (or most recent year with data, 2009-12) -- Figure 2.5Energy Sales Volume per Connection for Distribution and Vertically Integrated Utilities in MENA (kWh), 2013 (or most recent year with data, 2009-12) -- Figure 2.6 Total Billing per Connection for Distribution and Vertically Integrated Utilities in MENA (), 2013 (or most recent year with data, 2009-12) -- Figure 2.7Collection Rates for Distribution and Vertically Integrated Utilities in MENA (%), 2013 (or most recent year with data, 2009-12). Figure 2.8OPEX Recovery from Sales for Distribution and Vertically Integrated Utilities, MENA (%), 2013 (or most recent year with data, 2009-12) -- Figure 2.9Sales as a Share of Total Costs for Distribution and Vertically Integrated Utilities, MENA (%), 2013 (or most recent year with data, 2009-12) -- Figure 2.10Accounts Receivable to Sales for Distribution and Vertically Integrated Utilities Utilities in MENA (days), 2013 (or most recent year with data, 2009-12) -- Figure 2.11Ratio of Debt to Equity across Utility Types in MENA (%), 2013 (or most recent year with data, 2009-12) -- Figure 2.12Ratio of Current Assets to Current Liabilities: Selected Utilities of All Types, MENA (%), 2013 (or most recent year with data, 2009-12) -- Figure 2.13Return on Assets: Selected Utilities of All Types, MENA (%), 2013 (or most recent year with data, 2009-12) -- Figure 2.14Return on Equity for Selected Utilities of All Types in MENA (%), 2013 (or most recent year with data, 2009-12) -- Figure 6.1Electricity Sector Organization, Arab Republic of Egypt -- Figure 6.2Share of Technology Type in Generating Electricity, Arab Republic of Egypt, 2013 -- Figure 6.3Energy Sold from Distribution Utilities by Sector (medium- and low-voltage consumers), Arab Republic of Egypt, 2013 -- Figure 7.1Electricity Sector Organization, Jordan, 2014 -- Figure 7.2Share of Fuel Type in Electricity Generation, Jordan, 2009-13 -- Figure 7.3Volume of Energy Distributed by Sector, Jordan, 2013 -- Figure 8.1Electricity Sector Organization, Morocco -- Figure 8.2Generated Electricity in Morocco, by Technology Share, 2013 -- Figure 8.3Share of Volume of Energy Distributed, by Sector, Morocco, 2013 -- Figure 9.1Electricity Sector Organization, Oman -- Figure 9.2Share of Energy Distributed, by Consumer Sector, Oman, 2013 -- Tables.

Table 1.1Quasi-Fiscal Deficit Calculations at the Economy Level, 2013 (except as noted) -- Table 1.2Quasi-Fiscal Deficit Calculations at the Utility Level, Selected Utilities across MENA, 2013 (or most recent year with data, 2009-12) -- Table 1.3Comparison of Utility- and Economy-Level Quasi-Fiscal Deficits for Economies with One Utility, 2013 (or most recent year with data, 2009-12) -- Table 1.4Comparison of Economy- and Utility-Level Quasi-Fiscal Deficits for Economies with

Multiple Utilities, 2013 (or most recent year with data, 2009-12) -- Table 1.5 Average Electricity Tariffs for MENA Economies and Comparison with Non-MENA Economies -- Table 1.6 Drivers of Electricity Tariff Design in MENA Economies -- Table 2.1 Comparing the Median Performance of Selected MENA and Non-MENA Utilities, 2013 (or most recent year with data, 2009-12) -- Table 2.2 OPEX per Connection for MENA and Non-MENA Utilities, 2013 (or most recent year with data, 2009-12) -- Table 2.3 OPEX per kWh Sold for MENA and Non-MENA Utilities, 2013 (or most recent year with data, 2009-12) -- Table 2.4 Residential Connections per Full-Time Equivalent Employee for MENA and Non-MENA Utilities, 2013 (or most recent year with data, 2009-12) -- Table 2.5 Distribution Losses in MENA and Non-MENA Utilities, 2013 (or most recent year with data, 2009-12) -- Table 2.6 Volume of Energy Sold per Connection for MENA and Non-MENA Utilities, 2013 (or most recent year with data, 2009-12) -- Table 2.7 Total Billing per Connection for MENA and Non-MENA Utilities, 2013 (or most recent year with data, 2009-12) -- Table 2.8 Collection Rates for MENA and Non-MENA Utilities, 2013 (or most recent year with data, 2009-12) -- Table 2.9 OPEX Recovery as a Share of Sales (%) for MENA and Non-MENA Utilities, 2013 (or most recent year with data, 2009-12).
Table 2.10 Energy Sales as a Share of Total Costs (%) for MENA and Non-MENA Utilities, 2013 (or most recent year with data, 2009-12).

Sommario/riassunto

The electricity sector in the Middle East and North Africa (MENA) suffers from a major paradox. Indeed, while the region continues to hold the world's largest oil and gas reserves and has been able to maintain electricity access rates of close to 100 percent in most of its economies, it may not be in a position to cater to the future electricity needs of its fast-growing population and their business activities. The region's primary energy demand is expected to continue to grow at an annual rate of 1.9 percent through 2035, requiring a significant increase in capacity. Investments have not been rising fast enough to meet those expectations. The main point of this report is to provide quantitative evidence of how improving utility management and more accurately targeting smaller subsidies would free up enough resources to make the needed investments and operate the sector at a lower cost. These management and policy changes would make electricity production and consumption more affordable for the region's taxpayers and could even make it more affordable for the poorest. They would also ease the transition toward renewable energy sources, reducing the dependency on imports for some economies and, for the economies that export oil and gas, extending the asset life of their nonrenewable resources.
