

TABLE OF CONTENTS

1 Table of Contents

- 1.1 List of Tables
- 1.2 List of Figures

2 Introduction to Renewable Energy Policy

- 2.1 Renewable Energy Policy Framework, Global, Overview
- 2.2 Renewable Energy Policy Framework, Global, Major Policy Measures
 - 2.2.2 Renewable Portfolio Standards
 - 2.2.3 Tradable Renewable Energy Certificates Systems
 - 2.2.4 Capital Subsidies, Grants/Rebates
 - 2.2.5 Energy Production Payments/Investments or Other Tax Credits
 - 2.2.6 Tax Reductions
 - 2.2.7 Net Metering
 - 2.2.8 Public Investment Loans
- 2.4 GlobalData Report Guidance

3 Renewable Energy Policy Framework, The US

- 3.1 Renewable Energy Policy Framework, The US, Federal Incentives
 - 3.1.2 Energy Policy Act 2005
 - 3.1.3 Energy Independence and Security Act, 2007
 - 3.1.4 The Energy Improvement and Extension Act of 2008
 - 3.1.5 The American Recovery and Reinvestment Act
 - 3.1.6 Corporate Tax Credits
 - 3.1.7 Federal Grants
 - 3.1.8 Federal Loan Program
 - 3.1.9 Modified Accelerated Cost Recovery System
 - 3.1.10 Renewable Energy Production Incentives
 - 3.1.11 Other Federal Policies
- 3.2.2 SunShot Initiative
- 3.4 Financial Incentives and Policy Support for Geothermal, Federal Incentives
 - 3.4.2 Geothermal Technology Program Funding
- 3.5.2 Hydroelectric Efficiency Improvement
- 3.6.2 Regional Biofuels Promotion Plan
- 3.6.3 Farm Bill 2008 - Title IX
- 3.6.4 Energy Independence and Security Act
- 3.6.5 Federal Tax Credits
- 3.6.6 Import Duty on Fuel Ethanol
- 3.6.7 Clean Air Act Amendments of 1990
- 3.7.2 Renewable Energy Certificates
- 3.7.3 Public Benefit Funds
- 3.7.4 Interconnection Standards
- 3.7.5 Net Metering Laws
- 3.8.2 Financial Incentives and Policy Support for Solar, California
- 3.8.3 Financial Incentives and Policy Support for Wind, California
- 3.8.4 Financial Incentives and Policy Support for Hydro, California

- 3.8.5 Financial Incentives and Policy Support for Geothermal, California
- 3.8.6 Financial Incentives and Policy Support for Bioenergy, California
- 3.9.2 Financial Incentives and Policy Support for Wind, Colorado
- 3.9.3 Financial Incentives and Policy Support for Hydro, Colorado
- 3.9.4 Financial Incentives and Policy Support for Bioenergy, Colorado
- 3.10.2 Financial Incentives and Policy Support for Solar, Iowa
- 3.10.3 Financial Incentives and Policy Support for Wind, Iowa
- 3.10.4 Financial Incentives and Policy Support for Bioenergy, Iowa
- 3.11.2 Financial Incentives and Policy Support for Wind, Minnesota
- 3.11.3 Financial Incentives and Policy Support for Hydro, Minnesota
- 3.11.4 Financial Incentives and Policy Support for Bioenergy, Minnesota
- 3.12.2 Financial Incentives and Policy Support for Solar, Nevada
- 3.12.3 Financial Incentives and Policy Support for Wind, Nevada
- 3.12.4 Financial Incentives and Policy Support for Hydro, Nevada
- 3.13.2 Financial Incentives and Policy Support for Solar, New Jersey
- 3.13.3 Financial Incentives and Policy Support for Wind, New Jersey
- 3.13.4 Financial Incentives and Policy Support for Bioenergy, New Jersey
- 3.14.2 Financial Incentives and Policy Support for Solar, New York
- 3.14.3 Financial Incentives and Policy Support for Wind, New York
- 3.14.4 Financial Incentives and Policy Support for Bioenergy, New York
- 3.15.2 Financial Incentives and Policy Support for Solar, Oregon
- 3.15.3 Financial Incentives and Policy Support for Wind, Oregon
- 3.15.4 Financial Incentives and Policy Support for Bioenergy, Oregon
- 3.16.2 Financial Incentives and Policy Support for Solar, Texas
- 3.16.3 Financial Incentives and Policy Support for Wind, Texas
- 3.16.4 Financial Incentives and Policy Support for Bioenergy, Texas
- 3.17.2 Financial Incentives and Policy Support for Solar, Washington
- 3.17.3 Financial Incentives and Policy Support for Bioenergy, Washington
- 3.17.4 Financial Incentives and Policy Support for Electric Vehicles, Washington

4 Renewable Energy Policy Framework, Canada

- 4.1 Renewable Energy Policy Framework, Canada, Major Policies and Incentives
- 4.2 Renewable Energy Policy Framework, Canada, Federal Incentives
 - 4.2.2 Canadian Renewable Conservation Expenses
 - 4.2.3 Implementing Agreement on Renewable Energy Technology Deployment
 - 4.2.4 ecoENERGY for Renewable Power Program
 - 4.2.5 ecoENERGY for Aboriginal and Northern Communities Program
 - 4.2.6 ecoENERGY Technology Initiative
 - 4.2.7 Trust Fund for Clean Air and Climate Change
 - 4.2.8 Accelerated Capital Cost Allowance
 - 4.2.9 Clean Energy Fund: Renewable Energy and Clean Energy Systems Demonstration Projects
- 4.3.2 Tax Credit
- 4.3.3 Main Provincial Solar Support Programs
- 4.5.2 Geothermal Heat Pump Tax Credit
- 4.7 Financial Incentives and Policy Support for Bioenergy, Federal Incentives
- 4.7.2 Biofuels Bill

- 4.7.3 Canadian Agricultural Adaptation Program
- 4.7.4 ecoENERGY for Biofuels
- 4.8.2 Western Provincial Programs
- 4.9.2 Alberta, Climate Change Strategy
- 4.9.3 Alberta, Provincial Energy Strategy
- 4.9.4 Financial Incentives and Policy Support for Wind, Alberta
- 4.9.5 Financial Incentives and Policy Support for Bioenergy, Alberta
- 4.11.2 Financial Incentives and Policy Support for Solar, Nova Scotia
- 4.11.3 Financial Incentives and Policy Support for Wind, Nova Scotia
- 4.11.4 Financial Incentives and Policy Support for Energy Efficiency, Nova Scotia
- 4.12.2 Financial Incentives and Policy Support for Solar, Ontario
- 4.12.3 Financial Incentives and Policy Support for Wind, Ontario
- 4.12.4 Financial Incentives and Policy Support for Geothermal, Ontario
- 4.12.5 Financial Incentives and Policy Support for Hydro, Ontario
- 4.12.6 Financial Incentives and Policy Support for Bioenergy, Ontario
- 4.13.2 Financial Incentives and Policy Support for Wind, Quebec
- 4.13.3 Financial Incentives and Policy Support for Geothermal, Quebec
- 4.13.4 Financial Incentives and Policy Support for Hydro, Quebec
- 4.13.5 Financial Incentives and Policy Support for Bioenergy, Quebec

5 Renewable Energy Policy Framework, Argentina

- 5.1 Renewable Energy Policy Framework, Argentina, Major Policies and Incentives
 - 5.1.2 Law on the Promotion of Wind and Solar Energy Production: 25.019/1998
 - 5.1.3 Law on Promotion of Renewable Sources of Energy for Electricity Production: 26.190
 - 5.1.4 Renewable Energy Generation Program
 - 5.1.5 Renewable Energy and Energy Efficiency Partnership (REEEP)
- 5.3 Financial Incentives and Policy Support for Wind, Argentina
- 5.4.2 The Biofuel Law
- 5.4.3 Biodiesel Content Requirement
- 5.4.4 National Bioenergy Program
- 5.5.2 Energy Efficiency Policies for Appliances
- 5.5.3 National Program for Rational and Efficient Use of Energy (PRONUREE)

6 Renewable Energy Policy Framework, Brazil

- 6.1 Renewable Energy Policy Framework, Brazil, Major Policies and Incentives
 - 6.1.2 Renewable Energy Auctions
 - 6.1.3 Alternative Energy Auction LFA-2010 and Reserve Energy Auction LER-2010
 - 6.1.4 Brazil National Climate Change Plan
 - 6.1.5 Luz Para Todos (Light for All) Electrification Program
 - 6.1.6 National Biodiesel Program
- 6.3 Financial Incentives and Policy Support for Solar Photovoltaic, Brazil
- 6.4 Financial Incentives and Policy Support for Hydro, Brazil
 - 6.4.2 Incentives for Small Hydro Facilities, Law no. 9648
- 6.5.2 Federal and State Taxes on Ethanol

- 6.5.3 Spending on Biofuels
- 6.5.4 “Social Fuel Stamp” Auction System
- 6.6.2 Regulated Investments in Energy Efficiency
- 6.6.3 The Energy Efficiency Law (Lei de Eficiencia Energetica)
- 6.6.4 Solar Water Heating Legislation

7 Renewable Energy Policy Framework, Mexico

- 7.1 Renewable Energy Policy Framework, Mexico, Major Policies and Incentives
 - 7.1.2 Law for the Use of Renewable Sources of Energy
 - 7.1.3 National Energy Strategy
 - 7.1.4 Mexico Renewable Energy Program
 - 7.1.5 Programa de Promocion y Venta de Calentadores Solares Orientado al Sector Residencial en Mexico (CONAE Program)
 - 7.1.6 Large Scale Renewable Energy Development Project
 - 7.1.7 Integrated Energy Services Project for Small Localities of Rural Mexico, 2006-2011
 - 7.1.8 Accelerated Depreciation for Environmental Investment (Depreciacion Acelerada Para Inversiones Que Reportan Beneficios Ambientales)
 - 7.1.9 Wheeling Service Agreement for Electricity from Renewable Energy Sources (Convenio Para el Servicio de Transmision de Energia Electrica Para Fuente de Energia Renovable)
 - 7.1.10 Methodology to Establish Service Charges for the Transmission of Renewable Electricity (Metodologia Para la Determinacion de los Cargos por Servicios de Transmision de Energia Electrica Para Fuente de Energia Renovable)
 - 7.1.11 Grid Interconnection Contract for Renewable Energy (Contrato de Interconexion Para Fuente de Energia Renovable)
 - 7.1.12 Renewable Energy Outlook - Vision for 2030 on the Use of Renewable Energy in Mexico
 - 7.1.13 Renewable Energy Promotion-PromovER
- 7.4.2 Sustainable Rural Development Project for the Promotion of Alternative Energy Sources in Agribusiness
- 7.4.3 Value Added Agribusiness Risk Sharing Schemes
- 7.4.4 Feasibility Study on the Potential for Ethanol and Bio-Diesel Use and Production in Mexico
- 7.4.5 Bioenergy Promotion and Development Law
- 7.5.2 Energy Efficiency Program
- 7.5.3 Compact Fluorescent Lamp Market, Mexico
- 7.5.4 Green Mortgage Program
- 7.5.5 Solar Water Heaters Program
- 7.5.6 Program for Financing of Electric Energy Saving

8 Appendix

- 8.1 Abbreviations
- 8.2 Bibliography
- 8.3 Methodology
 - 8.3.2 Secondary Research
 - 8.3.3 Primary Research

LIST OF TABLES

1.1 List of Tables

- Table 1: Renewable Energy Policy Instruments by Country
- Table 2: Production Tax Credit, The US, In Service Deadline and Credit Amount, 2013
- Table 3: Treasury Grants, The US, Eligibility and Credit Availability, 2013
- Table 4: Renewable Power Market, The US, Treasury Grants, Total Grants, 2009-2012
- Table 5: Renewable Power Market, The US, Treasury Grants by Technology, Value (%), 2012
- Table 6: Renewable Power Market, The US, Treasury Grants by Technology, Volume (%), 2012
- Table 7: Renewable Power Market, The US, Treasury Grants, No. of Grants by State, 2009-2012
- Table 8: Renewable Power Market, The US, Treasury Grants, Wind Power, No of Grants (\$m), 2009-2012
- Table 9: Wind Power Market, The US, Treasury Grants, Capacity (MW) Supported by Grants, 2009-2012
- Table 10: Renewable Power Market, The US, Treasury Grants, Solar Power, Volume and Value (\$m) of Grants, 2009-2012
- Table 11: Solar Power Market, The US, Treasury Grants, Capacity (MW) Supported by Grants, 2009-2012
- Table 12: Renewable Power Market, The US, Treasury Grants, Geothermal Power Volume and Value (\$m) of Grants, 2009-2012
- Table 13: Green Power Purchasing Goal, The US (%), 2007-2013
- Table 14: Solar Photovoltaic, The US, Cumulative Annual Capacity (MW), 2001-2012
- Table 15: Geothermal Power, The US, Annual Installed Capacity (MW), 2005-2011
- Table 16: Biofuels, The US, Minimum Volume and Ratio of Renewable Fuel, 2013
- Table 17: Biofuels, The US, Amount of Renewable Transportation Fuel to be Sold (Billion Gallons), 2008-2022
- Table 18: Gasoline, The US, Volumetric Ethanol Excise Tax Credit
- Table 19: Renewable Power, The US, Renewable Portfolio Standards, State Targets, 2013
- Table 20: Feed-In Tariffs, California, Based on 2011 Market Price Referents, Nominal (\$/kWh), 2012-2020
- Table 21: Renewable Auction Mechanism, California, Procurement Requirement after the Third Renewable Auction Mechanism Auction, 2010-2013

Table 22: Go Solar Campaign, California, Program Component, 2007-2016
Table 23: California Solar Initiative, California, Program Budget, 2007-2016
Table 24: California Solar Initiative, California, Rebate Levels by Incentive Step and Rebate Type, 2012
Table 25: California Solar Initiative, California, Incentive Type
Table 26: Renewable Power, Colorado, Renewable Portfolio Standard (%), 2007-2020
Table 27: Renewable Power, Colorado, Capital Cost Threshold Rates, 2010-2013
Table 28: Alternative Fuel, Colorado, Vehicle Tax Credit, 2012-2016
Table 29: Renewable Fuel Standard, Iowa (%), 2009-2020
Table 30: Renewable Portfolio Standard, Minnesota, RPS for Xcel Energy and Other Utilities, 2010-2025
Table 31: Renewable Portfolio Standard, Nevada (%), 2005-2025
Table 32: Maximum Incentive Level for Wind, Nevada (\$), 2009-2013
Table 33: Renewable Portfolio Standards, New Jersey (%), 2004-2028
Table 34: RPS with Solar Alternative Compliance Payment Amount, New Jersey, 2008-2028
Table 35: Initial Eight Year Schedule (June-May Energy Year) New Jersey, 2008-2016
Table 36: Renewable Energy Incentive Program, New Jersey, Fuel Cell and Sustainable Biomass Upfront Incentives, 2001-2012
Table 37: Renewable Portfolio Standards, Oregon (%), 2011-2025
Table 38: RPS, Oregon, Eligible Resource Types Based on Facility's Operational Date, 1995-2025
Table 39: Renewable Energy Tax Credit, Oregon
Table 40: Renewable Energy Standards, Washington, 2012-2020
Table 41: MORE Green Power Program, Washington, OPALCO, 2010-2015
Table 42: Solar Power, Canada, New Installed Capacity (MW), 2001-2012
Table 43: Wind Power, Canada, New Installations (MW), 2002-2012
Table 44: Green Power, Canada, Provincial Targets and Policies, 2010-2016
Table 45: Biorefining Commercialization and Market Development Program and Bioenergy Infrastructure Development Program Grant Recipients, Alberta, 2007-2011
Table 46: Biorefining Commercialization and Market Development Program, Alberta, Funding Availability, Phase II, 2010-2012
Table 47: Feed-in Tariff, Nova Scotia, Community Feed-In Tariffs, 2011
Table 48: Feed-in Tariff Prices, Ontario, 2013
Table 49: Green Energy Act, Ontario, Additional Price Incentives on Feed-in Tariff, 2013
Table 50: Solar PV, Ontario, Feed-In Tariff Rates, 2012
Table 51: Wind Energy, Ontario, Feed-in Tariff Program, 2009
Table 52: Hydropower, Ontario, Feed-In Tariffs, From 2009
Table 53: Biomass Energy, Standard Offer Program, Ontario, 2013
Table 54: Retail Sales Tax Rebate for Vehicles Powered by Alternative Fuels, Ontario, Rebate Limits

Table 55: Renewable Energy in Rural Markets, Argentina, Total Program Cost (\$m), 2005-2012

Table 56: Renewable Energy Auctions, Brazil, Renewable Capacity Auctioned, 2007-2012

Table 57: Ethanol Production, Brazil, Financing Lines and Funding Programs by the Brazilian Development Bank

Table 58: Ethanol Production, Brazil, Funding Programs for SMEs Seeking Entry by the Brazilian Development Bank

Table 59: Biodiesel and Mineral Diesel, Brazil, Federal Taxes

Table 60: Mexico Energy Efficiency Framework, Loan Amount Under Green Mortgage Program

Table 61: Abbreviations

1.2 List of Figures

Figure 1: Renewable Power Market, The US, Impact Analysis of Various Policies, 1992-2012

Figure 2: Renewable Power Market, The US, Policy Impact on Applicable Renewable Power Sources

Figure 3: Production Tax Credit, The US, In Service Deadline and Credit Amount, 2013

Figure 4: Renewable Power Market, The US, Treasury Grants, Total Grants, 2009-2012

Figure 5: Renewable Power Market, The US, Treasury Grants by Technology, Value (%), 2012

Figure 6: Renewable Power Market, The US, Treasury Grants by Technology, Volume (%), 2012

Figure 7: Renewable Power Market, The US, Treasury Grants, Wind Power, No of Grants (\$m), 2009-2012

Figure 8: Wind Power Market, The US, Capacity (MW) Supported by Treasury Grants, 2009-2012

Figure 9: Renewable Power Market, The US, Treasury Grants, Solar Power, Volume and Value (\$m) of Grants, 2009-2012

Figure 10: Solar Power Market, The US, Treasury Grants, Capacity (MW) Supported by Grants, 2009-2012

Figure 11: Renewable Power Market, The US, Treasury Grants, Geothermal Power, Volume and Value (\$m) of Grants, 2009-2012

Figure 12: Solar Photovoltaic, The US, Annual Installed Capacity (MW), 2001-2012

Figure 13: Wind Power, The US, Annual Installed Capacity (GW), 2000-2015

Figure 14: Geothermal Power, The US, Annual Installed Capacity (MW), 2005-2012

Figure 15: Biofuels, The US, Amount of Renewable Transportation Fuel to be Sold (Billion Gallons), 2008-2022

Figure 16: Renewable Power Market, California, Policy Applicability to Renewable Power Sources

Figure 17: California Solar Initiative, California, Rebate Levels by Incentive Step and Rebate Type, 2012

Figure 18: Renewable Power Market, Colorado, Policy Applicability to Renewable Power Sources

Figure 19: Renewable Power, Colorado, Renewable Portfolio Standard (%), 2007-2020

Figure 20: Renewable Power Market, Iowa, Policy Applicability to Renewable Power Sources

Figure 21: Renewable Fuel Standard, Iowa (%), 2009-2020

Figure 22: Renewable Power Market, Minnesota, Policy Applicability to Renewable Power Sources

Figure 23: Renewable Portfolio Standard, Minnesota, RPS for Xcel Energy and Other Utilities, 2010-2025

Figure 24: Renewable Power Market, Nevada, Policy Applicability to Renewable Power Sources

Figure 25: Renewable Portfolio Standard, Nevada (%), 2005-2025

Figure 26: Renewable Power Market, New Jersey, Policy Applicability to Renewable Power Sources

Figure 27: Renewable Portfolio Standards, New Jersey (%), 2014-2028

Figure 28: Renewable Power Market, New York, Policy Applicability to Renewable Power Sources

Figure 29: Renewable Power Market, Oregon, Policy Applicability to Renewable Power Sources

Figure 30: Renewable Portfolio Standards, Oregon (%), 2011-2025

Figure 31: Renewable Power Market, Texas, Policy Applicability to Renewable Power Sources

Figure 32: Renewable Power Market, Washington, Policy Applicability to Renewable Power Sources

Figure 33: Renewable Energy Standards, Washington, 2012-2020

Figure 34: Renewable Power Market, Canada, Impact Analysis of Various Policies, 2002-2012

Figure 35: Renewable Power Market, Canada, Policy Impact on Applicable Renewable Power Sources

Figure 36: Solar Power, Canada, New Installed Capacity (MW), 2001-2012

Figure 37: Wind Power, Canada, New Installations (MW), 2002-2012

Figure 38: Renewable Power Market, British Columbia, Policy Applicability to Renewable Power Sources

Figure 39: Renewable Power Market, Nova Scotia, Policy Applicability to Renewable Power Sources

Figure 40: Renewable Power Market, Ontario, Policy Applicability to Renewable Power Sources

Figure 41: Renewable Power Market, Argentina, Impact Analysis of Policies, 2001-2012

Figure 42: Renewable Power Market, Brazil, Impact Analysis of Policies, 1974-2012

Figure 43: Renewable Power Policy, Mexico, Impact Analysis of Policies, 2002-2012