

Analyzing the Renewable Energy Industry in Russia

https://marketpublishers.com/r/A4BEF34EA51EN.html

Date: June 2011

Pages: 205

Price: US\$ 400.00 (Single User License)

ID: A4BEF34EA51EN

Abstracts

Russia's real gross domestic product (GDP) surpassed average growth rates in all other G8 countries. Russia's economic growth over the past seven years has been driven primarily by energy exports, given the increase in Russian oil production and relatively high world oil prices during the period.

Internally, Russia gets over half of its domestic energy needs from natural gas, up from around 49 percent in 1992. Since then, the share of energy use from coal and nuclear has stayed constant, while energy use from oil has decreased from 27 percent to around 19 percent.

Renewable energy effectively uses natural resources such as sunlight, wind, rain, tides and geothermal heat, which are naturally replenished. Renewable energy technologies range from solar power, wind power, hydroelectricity/micro hydro, biomass and biofuels for transportation.

Russia has now started realizing the potential of renewable energy and has started developing the industry rapidly.

Aruvian's R'search presents a focus on the Renewable Energy Industry in Russia in its report – Analyzing the Renewable Energy Industry in Russia. The report is a complete analysis of the various sectors of renewable energy in Russia. Starting with an analysis of the energy issues facing Russia and the overall renewable energy industry in Russia, the report analyzes the following renewable commodities: small hydro power, biomass, wind energy, hydro energy, nuclear power, and wind energy. Russia's environment for the development of renewable energy is also discussed in details in the report. Regulatory frameworks, government schemes promoting the use of renewable energy, etc., are all described in the report.



Major industry players promoting and developing the industry are also profiled in the Aruvian's Analyzing the Renewable Energy Industry in Russia. Apart from the Russian Renewable Energy Industry, the report also gives a profile of the global energy industry, the global renewable energy industry, as well as Russia's energy industry.



Contents

EXECUTIVE SUMMARY

SECTION 1: ANALYZING THE GLOBAL ENERGY INDUSTRY

B. A LOOK AT THE GLOBAL ENERGY INDUSTRY

- B.1 Global Energy Demand & Resource
- B.2 Energy Consumption Patterns Worldwide
- B.2.1 Energy Demand Oil Based
- B.2.2 Energy Demand Coal Based
- B.2.3 Penetration of Natural Gas in Energy Markets
- **B.2.4 Electricity Driven Demand**
- B.2.5 Role of Nuclear Energy as Energy Feeder
- B.2.6 Hydroelectricity Consumption

C. REVENUE RETURNS ON GLOBAL ENERGY MARKETS

- C.1 Oil Demand Fuelling Growth Worldwide
- C.2 China's Coal Demand Major Influence in World Markets
- C.3 Developing World Electricity Consumption Adding Up in the Global Pie
- C.4 Renewable Energy
- C.4.1 Hydroelectricity
- C.4.2 Wind Energy

D. GLOBAL ENERGY DEMAND & SUPPLY DYNAMICS

- D.1 Oil
- D.2 Natural Gas
- D.3 Energy Prices
- D.4 Energy Usage

E. GLOBAL ENERGY MARKET – FUTURE OUTLOOK

SECTION 2: ANALYZING THE GLOBAL RENEWABLE ENERGY INDUSTRY

A. A LOOK AT THE GLOBAL RENEWABLE ENERGY INDUSTRY



- A.1 Introduction & Market Profile
- A.2 Global Market Capacity
- A.3 Wind Energy Market Analysis
- A.4 Solar PV Market Analysis
- A.5 Global Solar Water Heaters Market Analysis
- A.6 Small & Large-Scale Hydroelectricity
- A.7 Need for Stability in GHG Emissions
- A.8 Common Barriers to Renewable Energy

B. ANALYZING THE GLOBAL POLICIES PROMOTING DEVELOPMENT OF RENEWABLE ENERGY

- B.1 US Public Utility Regulatory Policies Act (PURPA) of 1978
- B.2 Electricity Feed-In Laws
- B.3 Competitively Bid Renewable Resource Obligations
- B.4 Renewable Energy Portfolio Standards (RPS)
- **B.5 Renewable Energy Certificates**
- **B.6 Cost Reduction Policies**
- B.7 Public Benefit Funds
- **B.8 Market Infrastructure Policies**
- **B.9** Net Metering
- B.10 Transport Biofuels Policies
- **B.11 Emissions Trading Policies**
- **B.12 Renewable Energy Targets**

C. GLOBAL RENEWABLE ENERGY INDUSTRY CASE STUDIES

- C.1 Renewable Energy in China
- C.2 Renewable Energy in India
- C.3 Renewable Energy in the Philippines
- C.4 Renewable Energy in Malaysia
- C.5 Renewable Energy in Thailand
- C.6 Wind Energy in Denmark
- C.7 Solar Photovoltaic Manufacturing in Japan

SECTION 3: ANALYZING THE RUSSIAN ENERGY INDUSTRY

A. INTRODUCTION TO THE INDUSTRY



B. DRIVERS OF ENERGY DEMAND

- **B.1 Demand Drivers**
- B.2 Final Energy Demand per Industry
- B.2.1 Industrial Use
- **B.2.2 Transportation Energy Consumption**
- B.2.3 Residential & Commercial Use
- **B.3 Primary Energy Demand**

C. MAJOR ISSUES IN THE RUSSIAN ENERGY INDUSTRY

- C.1 Lowering of Energy Intensity
- C.2 Development of Export Outlets & Facilities
- C.3 Development of the Nuclear Energy Industry
- C.4 Production Barriers in Oil & Gas Sectors

D. ROLE OF THE STATE IN THE RUSSIAN ENERGY INDUSTRY

E. ANALYZING RUSSIA'S ENERGY POLICY

- E.1 Introduction
- E.2 Objectives of the Russian Energy Strategy
- E.3 Primary Energy Resources in Russia
- E.3.1 Natural Gas
- E.3.2 Oil
- E.3.3 Non-Conventional Oil
- E.3.4 Coal
- E.3.5 Electricity
- E.4 Climate Change Factor
- E.5 EU-Russia Energy Dialogue
- E.6 Russia & the Ratification of the Energy Charter Treaty
- E.7 Major Challenges for the Russian Energy Policy

F. OVERVIEW OF THE MAJOR ENERGY SECTORS

- F.1 Oil
- F.2 Natural Gas
- F.3 Coal
- F.4 Electricity



SECTION 4: ANALYZING THE RUSSIAN RENEWABLE ENERGY INDUSTRY

A. HISTORY OF RENEWABLE ENERGY TECHNOLOGIES IN RUSSIA

B. HOW WOULD RUSSIA BENEFIT FROM RENEWABLE ENERGY

- B.1 Introduction
- B.2 R&D on Renewables
- B.3 Looking at the Potential Market for Renewables in Russia
- **B.4 Efficient Renewable Policies**

C. IMPORTANCE OF RENEWABLE ENERGIES IN RUSSIA

- C.1 Introduction
- C.2 Potential of Renewable Energy
- C.3 Resource Potential of Biomass
- C.4 Resource Potential of Hydro Power
- C.5 Resource Potential of Wind Energy
- C.6 Resource Potential of Solar Energy
- C.7 Resource Potential of Geothermal Energy
- C.8 Role of Renewables in the Energy Market
- C.8.1 Usage in Electricity Generation
- C.8.2 Usage in Heat Generation
- C.9 Analyzing the Applications of Renewable Energy Technologies
- C.9.1 Grid-connected Electricity Supply
- C.9.2 Off-grid Electricity Supply
- C.9.3 Energy Use for Heating
- C.9.4 Industrial Applications

D. RENEWABLE ENERGY IN RUSSIA – AN ECONOMICAL, SOCIAL & ENVIRONMENTAL PERSPECTIVE

- D.1 Securing the Domestic Energy Supply
- D.2 Energy Exports as Source of Earning
- D.3 Diversification of the Russian Economy
- D.4 Achieving Economic & Social Stability
- D.5 Environmental Benefits



E. FACILITATING MARKET DEPLOYMENT

- E.1 How to Go About it
- E.2 Required Government & Regulatory Support
- E.3 Raising Awareness
- E.4 Required Measures
- E.5 Conclusion

F. ANALYZING THE RENEWABLE ENERGY RESOURCES IN RUSSIA

- F.1 Solar Energy Resources
- F.2 Wind Energy Resources
- F.3 Hydro Energy Resources
- F.4 Biomass Energy Resources
- F.5 Geothermal Energy Resources

G. ANALYZING THE POTENTIAL MARKETS FOR RENEWABLE ENERGY DEVELOPMENT

- G.1 Looking at Decentralized Areas
- G.2 Looking at Centralized Areas

H. MARKET ANALYSIS & DEVELOPMENT

- H.1 Analyzing the Market for Solar Energy
- H.2 Analyzing the Market for Wind Energy
- H.3 Analyzing the Market for Biomass
- H.4 Analyzing the Market for Small Hydro Power
- H.5 Analyzing the Market for Geothermal Power

I. ANALYZING BIOFUELS IN RUSSIA

- I.1 Introduction
- I.2 Policies Favoring the Development of Biofuels
- I.3 Using Fuel & Lubricants in Agriculture for Biofuels
- I.4 Production Statistics of Biofuel
- I.4.1 Bioethanol
- I.4.2 Biodiesel
- I.5 Import Regulations Affecting Biofuels



- I.6 Realizing the Energy Potential of Biofuels
- I.7 Rapeseed Production for Biodiesel
- **I.8 Conclusion**

J. ANALYZING NUCLEAR POWER IN RUSSIA

- J.1 Introduction & Market Profile
- J.2 Russia's Electricity Supply
- J.3 Nuclear Capacity
- J.4 Developing the Nuclear Capacity
- J.5 Sector Organization
- J.6 Export Scenario
- J.7 Looking at Russia's Reactor Technology
- J.8 Improving the Reactor Technology
- J.9 Looking at the Resources for Uranium & Uranium Mining
- J.10 Fuel Cycle Facilities
- J.11 Looking at the International Uranium Enrichment Centre (IUEC) Concept
- J.12 Russian Policy on Used Fuel & Reprocessing
- J.13 Decommissioning of Nuclear Reactors
- J.14 Research & Development
- J.15 Public Support for Nuclear Power
- J.16 Non-Proliferation
- J.17 Outlook

K. ANALYZING THE NUCLEAR POWER STATIONS IN RUSSIA

- K.1 Used Fuel & BN-600 Reactor
- K.2 Balakovo Nuclear Power Plant
- K.3 Beloyarsk Nuclear Power Station
- K.4 Kalinin Nuclear Power Plant
- K.5 Kaliningrad Nuclear Power Plant
- K.6 Kola Nuclear Power Plant
- K.7 Kursk Nuclear Power Plant
- K.8 Leningrad Nuclear Power Plant
- K.9 Novovoronezh Nuclear Power Plant
- K.10 Novovoronezh Nuclear Power Plant II
- K.11 Obninsk Nuclear Power Plant
- K.12 Russian Floating Nuclear Power Station



L. POTENTIAL MARKET FOR COMMERCIAL OPPORTUNITIES

- L.1 Generation of Electricity for Electric Power Grids from Wind Power
- L.2 Generation of Electricity for Rural Areas through Hybrid Wind-Diesel & Biomass
- L.3 Heating Buildings from Biomass
- L.4 Hot Water for Buildings from Solar Thermal
- L.5 Generating Electricity & Heat from Geothermal Energy

M. CHALLENGES FACING THE RENEWABLE ENERGY MARKET

N. INCENTIVES FOR THE DEVELOPMENT OF RENEWABLE ENERGY IN RUSSIA

O. LEGISLATIVE INITIATIVES REQUIRED

P. CASE STUDY: WIND-DIESEL HYBRID SYSTEMS IN NORTHERN RUSSIA

- P.1 Introduction
- P.2 Historical Background
- P.3 Looking at the Region's Wind Resource
- P.4 Joint Collaboration with the for Hybrid Wind-Diesel Systems
- P.5 Analyzing the Hybrid Systems
- P.6 Monitoring of the Hybrid Systems
- P.7 A Look at the Pilot Projects
- P.8 Conclusion

Q. ANALYZING THE HYDROELECTRIC POWER PLANTS IN RUSSIA

- Q.1 Bratsk Hydroelectric Plant
- Q.2 Bureya Dam
- Q.3 Cheboksary Hydroelectric Station
- Q.4 Hydroproject
- Q.5 Krasnoyarsk Hydroelectric Dam
- Q.6 Nizhny Novgorod Hydroelectric Station
- Q.7 Paatsjoki River Hydroelectric Plants
- Q.8 Rybinsk Hydroelectric Station
- Q.9 Saratov Hydroelectric Station
- Q.10 Sayano-Shushenskaya Hydroelectric Station
- Q.11 Volga Hydroelectric Station
- Q.12 Volkhov Hydroelectric Plant



Q.13 Zhiguli Hydroelectric Station

R. LEADING INDUSTRY PLAYERS

R.1 Atomstroyexport

R.2 HydroOGK

R.3 ITERA

R.4 Nitol Solar

R.5 Onexim Group

R.6 RusHydro

R.7 Solar Night Industries

R.8 TNK-BP

SECTION 5: CONCLUSION

A. APPENDIX

B. GLOSSARY OF TERMS



I would like to order

Product name: Analyzing the Renewable Energy Industry in Russia Product link: https://marketpublishers.com/r/A4BEF34EA51EN.html

Price: US\$ 400.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/A4BEF34EA51EN.html