



Market Analysis

Market Research Report @ Smart Energy 2020

Jing Liu

Director, Beijing Chaoyang District Maternal and Child Health Care Hospital, China, E-mail: ljgbj@live.cn

Introduction

[Smart Energy and Future Energy](#) area unit designed to switch gas, diesel oil and coal, that area unit known as “fossil fuels” as a result of they're made of animals and plants that died millions years ago. Biofuels area unit created largely from plants that have simply been harvested. There are three main types of biofuel. Ethanol, biodiesel, and bio jet fuel.

Scope and Importance:

The global Smart Energy market was valued at \$928.0 Billion in 2017, and is expected to reach \$1,512.3 Billion by 2025, registering a CAGR of 6.1% from 2018 to 2025. Renewable energy technologies convert the energy from different natural sources such as sun, tides, wind and others, into its usable forms such as electricity. Energy 2020 focuses on bringing together renewable and non-renewable energy experts, policy makers, economists, academicians and students to discuss the current state of research and development in energy strategies. Today's market is fragmented as hydro and sea control, wind vitality, sun powered vitality, bioenergy, and geothermal vitality. By end client, it is grouped into private, business, and mechanical and others

It emphasizes talks on Economics of Renewable Energy and Non-Renewable Energy, Smart Grid Systems, Advanced Energy Storage Materials, Nuclear Energy, Hybrid Renewable Energy Approaches, etc. to arrive at possible solutions in the near future for better development in this sector.

Major Energy Associations around the Globe:

The American Wind Energy Association (AWEA), USA
 The Wind Energy Foundation, USA
 Women of Wind Energy, USA
 The Solar Energy Industries Association, USA
 The Solar Foundation, USA
 American Council on Renewable Energy
 American Solar Energy Society
 Danish Organization for Renewable Energy
 European Renewable Energy Council
 Green Power Forum
 Office of Energy Efficiency and Renewable Energy
 Renewable Fuels Association

The Global Universities:

Asia Pacific:

National Botanical Research Institute, India
 Bond University, Australia
 Australian National University, Australia
 Curtin University, Australia
 Murdoch University, Dubai

University of the Sunshine Coast, Queensland, Australia
 Zhejiang University of Science and Technology, China
 Central Salt & Marine Chemicals Research Institute, India
 Cochin University of Science and Technology, India
 Fisheries College and Research Institute, India
 University of Pune, India
 Edith Cowan University, Western Australia
 Deakin University, Australia
 Xi'an Jiao tong Liverpool University, China

America:

University of California, Oakland, California, USA
 University of Tennessee, USA
 Saint Francis University, USA
 Northeastern university, USA
 Foothill College, USA
 University of North Carolina, USA
 North Dakota State University, USA
 Michigan State University, USA
 Stanford University, USA
 Northwest Missouri State University, USA
 Wayne State University, USA
 Virginia Tech, USA
 University of Washington, USA
 Duke University Energy Initiative, USA
 University of California Irvine, USA
 Penn state York, USA

Middle East:

Sharjah Surgical Institute, UAE
 European University College, Dubai, UAE
 Murdoch University Dubai, UAE
 University of Sharjah, Dubai, UAE
 Masdar Institute of Science and Technology, UAE
 College of Health Sciences, UAE
 RAK Medical & Health Sciences University, UAE
 University of Sharjah, UAE

Europe:

Durham University, UK
 Edinburgh Napier University, Scotland
 University of Dundee, Scotland
 University of Leon, Spain
 KU Leuven, Belgium
 Vrije Universiteit Brussel, Belgium
 ITMO University Saint Petersburg, Russia
 University of Pavia, Italy
 Vytautas Magnus University, Kaunas, Lithuania
 Stockholm University, Sweden
 University of Groningen, Netherlands
 University of Debrecen, Hungary
 Skolkovo Institute of Science and Technology, Russia

Vrije Universiteit Amsterdam, Netherlands
 Ghent University, Belgium
 University of Antwerp, Belgium
 University of Sussex, UK

Fund Allotment:

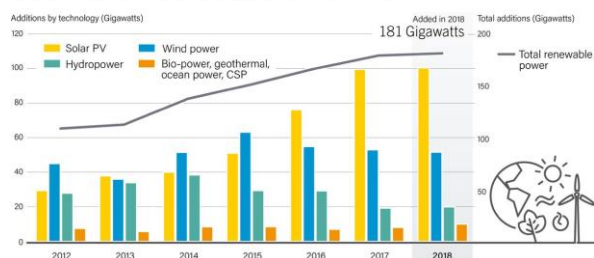
The policy support by the central government as well as improved cost competitiveness has increased the share of renewable energy (RE) based capacity in the overall installed power generation capacity to 21.8% as on March 31, 2019 from 12.9% as on March 31, 2014. Similarly, the share of RE based generation in the overall generation mix at all India level increased to 9.2% in FY2019 from 5.6% in FY2015. With installed capacity of 77.6 GW as on March 31, 2019, incremental capacity of 97.4 GW is required to meet the government's RE capacity target of 175 GW by FY2022, entailing investment of more than Rs 5 trillion. In this context, the government must enhance funding allocation for the renewable energy sector to support the development of renewable energy parks and for augmentation of inter-state transmission infrastructures.

Forecast for next five years:

As the theme of our Conference is "Saving and restoration of species". By repairing ecosystems damaged through human activities, ecological restoration plays an important role in biodiversity conservation efforts. Furthermore, restoration promotes functional ecosystems and the ecosystem services they provide to humans. Restoration projects span virtually every type of ecosystem on Earth, employ a variety of increasingly sophisticated approaches and range in scope from small, locally driven endeavors to global-scale initiatives like the Bonn Challenge (to restore hundreds of millions of hectares of forest).

Since 2004, the global investment in the solar power market has increased ten folds, from USD 11.2 billion to USD 113.7 billion in 2016, thereby making solar power one of the fastest-growing industries across the globe. In 2016, solar power consumption grew by 29.6% from 256.2 TWH in 2015, with China and India leading the solar power market. China and India registered a consumption growth rate of more than 80% per annum during 2005-2015. Backed by the rapid decline in the cost of solar technology, coupled with the growing energy demand, the solar power market is projected to register a CAGR of 16.8% during the forecast period of 2018-2023.

Annual Additions of Renewable Power Capacity, by Technology and Total, 2012-2018



The future of Biofuel and Bioenergy System will be sustainable, efficient, cost effective, integrated and intelligent. The overall aim of the energy system is to provide energy services, requested by the customers, in a reliable, sustainable and cost efficient way. We have established dynamic energy markets, enhanced district heating and gas networks and well integrated

inter connectors to our neighbouring countries, which makes the energy system robust and ready for even larger amount of fluctuating energy.

Statistical review of world Smart Energy & Future Energy:

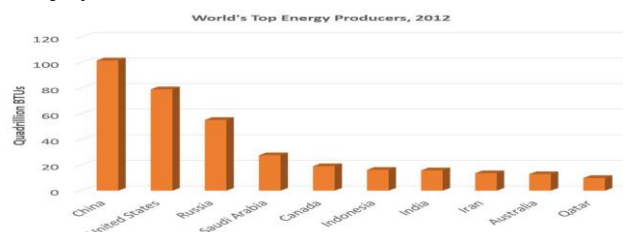
Global energy demand grew by 2.9% and carbon emissions grew by 2.0% in 2018, faster than at any time since 2010-11.

Natural gas consumption and production was up over 5%, one of the strongest rates of growth for both demand and output for over 30 years.

Renewables grew by 14.5%, nearing their record-breaking increase in 2017, but this still accounted for only around a third of the increase in total power generation.

Coal consumption (+1.4%) and production (+4.3%) increased for the second year in a row in 2018, following three years of decline (2014-16).

The United States recorded the largest-ever annual production increases by any country for both oil and natural gas, the vast majority of increases coming from onshore shale plays.



Reference:

- <http://www.alliedmarketresearch.com/renewable-energy-market>
- <http://www.wikipedia.org>
- <http://www.researchgate.net>
- <https://www.e-education.psu.edu/egee102/node/1930>
- <https://www.vox.com/energy-and-environment/2019/6/18/18681591/renewable-energy-china-solar-pv-jobs>