

(http://www.webnewswire.com)

Home (/)

IEEE Experts Recognize Deployment of Clean & Renewable Energy as a Dominant Technology Trend of 2016

IEEE, the largest professional organization dedicated to advancing technology for humanity, released the technology predictions from their experts for the year 2016. According to the IEEE experts, newer and more efficient ways to consume energy using renewables sources as well as energy efficiency will be one main focus this year. The principal element of this revolution is extensive use of smart-grids and technologies that improve resilience and reliability while assimilating clean energy resources. According to IEEE, 2016 will witness an increased share of technological innovation in the energy sector with a focus on 'global clean energy.'

Dr. Kannan Tinnium, IEEE Senior Member and Technology Leader, Electrical Technologies & Systems, GE Global Research said, "We will see more and more integration of smart grids with renewable power sources such as wind and solar energy, pursuing the primary agenda of clean environment. Although the wind and solar energy sources that are derived from the environment are infinite, these sources are not under human control. When we have such a high penetration of renewables on the grid, there exist operational challenges such as intermittent supply and unpredictable availability of these energy sources. Integration of renewable energy into the smart grid, powered by innovative technology solutions for energy storage will be fundamental in addressing these challenges and achieving greater degrees of reliability and consistency in delivery."

In addition, Dr. Mini Thomas, IEEE Senior Member, Director of Centre for Innovation and Entrepreneurship, Professor of Department of Electrical Engineering at Jamia Millia Islamia University said, "In the year 2016 we will see more distribution, automation and renewable integration onto the smart grid. Around 13 percent of our country's generation is already from renewable energy. With a large boost in the solar power installations happening in North India, India will be a powerhouse in the field of renewable energy."

Yet another trend that will surface in 2016 is more consumer interface of electronic vehicles. "The awareness and sensitivity towards the environment is intensifying on a global scale. This year will see a growing interest among countries and communities in addressing environment pollution and favoring electric vehicles," added Dr. Mohammad Shahidehpour, IEEE Fellow & Bodine Chair Professor and Director, Robert W. Galvin Center for Electricity Innovation, Illinois Institute of Technology.

Internet of Things (IOT)'s Impact on the Energy Revolution

Another productivity revolution in the energy sector in 2016 will be IoT. "In 2016, we will look at energy applications of IoT. Energy and utility are estimated to drive future market growth of IoT and Machine to Machine (M2M) communications given the Indian government's serious initiatives to deploy smart energy meters," said John McDonald, IEEE Fellow & Director of Technical Strategy Industry Standard and Policy Developments for GE Grid Solutions. "In fact, the power sector is already witnessing real-time deployment of IoT with a few production and distribution companies adopting smart grid technology to manage supply and demand and also study customers' power usage behavior. A few companies in the Indian oil and gas industry have also initiated IoT pilot projects for cost-effective remote monitoring and maintenance of pipeline networks. The impetus is real and I see 2016 as the year when IoT will move beyond hype to being visible in all of our lives."

For more information, please visit the following links:

- Dr. Kannan Tinnium, IEEE Senior Member on Smart Grids https://www.youtube.com/watch?v=8nC4GL--qmU&feature=youtu.be
- Dr. Mohammad Shahidehpour, IEEE Fellow, on the Future of Electric Vehicles https://www.youtube.com/watch? v=IQ6XFbTX9HM&feature=youtu.be
- $\cdot \ John\ McDonald, IEEE\ Fellow, on the\ Internet\ of\ Things\ and\ Energy\ -\ https://www.youtube.com/watch?v=A8QGA4Gec1U\&feature=youtu.be$
- $\cdot Dr.\ Mini\ Thomas,\ IEEE\ Senior\ Member,\ on\ the\ Smart\ Grid\ in\ India\ -\ https://www.youtube.com/watch?v=ORTCemRBptA\&feature=youtu.be$