

# National Conference on **Energy and Environment**

16<sup>th</sup> & 17<sup>th</sup> September 2016  
CODISSIA Trade Fair Complex, Coimbatore



## Call for Papers

Organised by



IIT - Indian Institute of  
Technology Madras

**Elektrotec 2016**  
An Event of



CODISSIA  
Intec Technology Centre



## MISSION

Mission of this conference is to identify and create a global platform to connect industrialists / Entrepreneurs, Academicians, Proposers and the Investors in the field of Energy and Environment and its allied sciences. This meet facilitates best experimental study from research lab/academic allows one to find industry partner, the most optimized and viable business for engaging people in to constructive discussions, evaluation and execution of promising business.

### Conference on Energy and Environment

Energy and Environment are co-related in the technological and scientific aspects including energy conservation, and the interaction of energy forms and systems with the physical environment. The levels of atmospheric carbon dioxide has increased by 31% between 1800 and 2000, going from 280 parts per million to 367 parts per million. Scientists predict that carbon dioxide levels could be as high as 970 parts per million by the year 2100. Different factors are responsible for this development, such as progress with respect of technical parameters of energy converters, in particular, improved efficiency; emissions characteristics and increased lifetime. Various environmental policies have been implemented across the globe for reduction of GHG emissions for improvement of environment. The major focus areas of presentation, discussion includes five themes:

This present conference creates a global platform to connect industrialists / Entrepreneurs, Proposers and the Investors in the field of Energy and Environment and its allied sciences. This meet facilitates the most optimized and viable business for engaging people in to constructive discussions, evaluation and execution of promising business.

#### Theme 1: Renewable / Green Energy / Green Technology

Green Technology is also used to describe sustainable energy generation technologies such as photovoltaic, wind turbines, bioreactors, etc. with an ultimate goal of sustainable development. Its main objective is to find ways to create new technologies in such a way that they do not damage or deplete the planet's natural resources and aid in reduction of global warming, greenhouse effect, pollution and climate change. The global reduction of greenhouse gases is dependent on the adoption of energy conservation technologies at industrial level as well as this clean energy generation. That includes using unleaded gasoline, solar energy and alternative fuel vehicles, including plug-in hybrid and hybrid electric vehicles..

Green Energy is derived from non-conventional energy which is continuously replenished by natural processes. Renewable Energy has attracted a lot of attention in the recent past owing to exhaustion of fossil fuels and in the lookout for alternate energy for a clean and green future. Various forms of renewable energy include solar energy, wind energy, hydro energy, wave and biomass energy. Based on REN21's 2014 report, renewable contributed 19 percent to our energy consumption and 22 percent to our electricity generation in

the current situation. Renewable power is cost effective, reliable, sustainable, and environmentally friendly. Today the renewable energy sector is already providing more than 4,50,000 jobs and has an annual turnover exceeding 45 billion US Dollars.

● Solar Energy Engineering ● Wind Energy Systems ● New Energy Applications ● Electric Vehicles ● Hydrogen and Fuel Cells ● Green Computing ● Pyrolysis ● Photovoltaics ● Biomass Conversion

#### Theme 2: Energy Conservation

The goal with energy conservation techniques is reduce demand, protect and replenish supplies, develop and use alternative energy sources, and to clean up the damage from the prior energy processes. Carbon Capture and Storage (CCS) is the process of capturing waste carbon dioxide (CO<sub>2</sub>) from large point sources, such as fossil fuel power plants, transporting it to a storage site, and depositing it where it will not enter the atmosphere, normally an underground geological formation. Carbon Capture and Storage (CCS) is a technology that can capture up to 90% of the carbon dioxide (CO<sub>2</sub>) emissions produced from the use of fossil fuels. Energy Efficiency has proved to be a cost-effective strategy for building economies without necessarily increasing energy consumption. A building's location and surroundings play a key role in regulating its temperature and illumination. Green Building refers to both a structure and the using of processes that are environmentally responsible and resource - efficient throughout a building's life-cycle: from siting to design, construction, operation, maintenance, renovation and demolition.

● Carbon Capture & Storage ● Sequestration Technologies ● Green Buildings ● Energy Efficiency

#### Theme 3: Environment and Waste Management

Environment and Waste Management track provides an interdisciplinary forum for the presentation of new advances and research results in the fields of Environment and Waste Management, relevant to electronics and energy industries. Topics of interest for presentation and discussion include, but are not limited to.

The main focus in this track is to evolve the waste management techniques towards a 'zero waste economy'. In a society where resources are fully valued, financially and environmentally, it is essential that we reduce, reuse and recycle all we can, and throw things away only as a last resort.







- Industrial Wastewater treatment
- Resources recovery including reduce, reuse and recycle (3Rs)
- Hazardous waste management
- Energy from waste
- E-waste
- Zero waste concept
- Environmental Management / Public Involvement

**Theme 4: Nano Technology Application in Industries**

Application of nanotechnology which involves the manipulation of materials at the scale of the nanometer to green engineering principles is "Green Nanotechnology". It also refers to the use of the products of nanotechnology to enhance sustainability. Maintaining and improving soil, water and air quality represent some of the most formidable challenges facing global society in the 21st century. Detecting and treating existing contaminants and preventing new pollution are among the challenges. Application of nano-materials in diverse fields such as enhancing the production and refining of fuels and reduction of emissions from production, energy storage (batteries and nano-enabled fuel cells), to provide safe drinking water through improved water treatment, desalination, nano-enabled insulation and design of nano-materials for process monitoring and detection.

- Nanotechnology in Energy sector
- Bio-inspired nanomaterial's and their applications
- Nano sorbents
- Nanotechnology for sustainable energy production

**Theme 5 : Smart City**

One session on Smart City shall be presented

**NOTE :**

1. Parallel sessions are planned for the themes of Energy and Environment Separately.
2. Last date for Abstract Receipt date 31.5.2016
3. Last date for Final Paper 31.7.2016

**Poster Session on ENERGY & ENVIRONMENT**

- Solar Energy
- Wind energy
- New Energy application
- Electric vehicles
- Hydrogen and fuel cells
- Green Computing
- Pyrolysis
- Photovoltaics
- Biomass Conversion
- Steps taken to improve the energy efficiency,
- Technologies adapted
- Global best practices
- Carbon capture & storage
- Sequestration Technologies
- Green buildings
- Energy efficiency
- Nanotechnology in Energy sector
- Bio-inspired nanomaterial's and their applications
- Nano sorbents.
- Nanotechnology for sustainable energy production
- Air pollution
- Solid waste management
- Water supply and treatment
- Public health and the Environment
- Waste water Treatment
- Emerging pollutants
- Environmental data analysis and modelling
- Climate change
- Environmental planning
- Management and policies for cities and regions
- Advanced Oxidation processes (AOPs)
- Hydrology and water Resources management
- Soil contamination and remedification
- Clean energy and sustainability
- Ecology and Ecosystem management
- Marine environment and coastal management
- Biomonitoring
- Special Exhibit Bio Diversity on Western Ghats

**Papers are invited on the above themes**

Contact for Paper Presentation on / Poster

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BIRD'S EYE VIEW OF CONFERENCE VENUE





**The Coimbatore District Small Industries Association (CODISSIA)** established in 1969 with over 5200 industrial as well as institutional members is the organiser of this event. CODISSIA has the reputation of organising major fairs in the fields of Engineering, Agriculture, Building & Construction, Sub- Contracting etc., since the year 1988.

**Indian Institute of Technology Madras** is one among the foremost institutes of national importance in higher technological education, basic and applied research. IIT Madras is a residential institute with nearly 550 faculty, 8000 students and 1250 administrative & supporting staff and is a self-contained campus located in a beautiful wooded land of about 250 hectares. The Institute has sixteen academic departments and a few advanced research centres. IIT Madras has been Ranked as No.1 among technological institutions / universities in India by MHRD, Govt. of India

**ABOUT CONFERENCE** - Papers dealing with advancement in the area of Energy & Environment will be presented by eminent experts / researchers and scholars from institutions like IIT's, IISc, National Laboratories, National Institutes, R&D Establishments, Senior Officials from the Power / Renewable Energy / Environment sectors likely from the State & Central Government, PSUs like BHEL / NTPC / BARC, Private Energy Sector like Reliance / TATA / ESSAR, Environmental Industries.

**BENEFITS OF ATTENDING** - Conference on Energy and Environment a unique forum for the power and environmental industry and other Industries, with both the conference combined with an exhibition showcasing the latest technological developments. This unique event will attract senior decision makers, enabling you to make crucial contacts within the Indian and international power generation industry across all sectors - fossil fuels, and renewables.

Attending Conference on Energy and Environment allows you to:

- Explore business opportunities and meet new partners in dynamic surroundings
- Promote new products and services to the marketplace
- Raise your company profile and awareness within the Indian market
- Showcase your products and technologies and develop new customer bases
- Unrivalled platform to create new contacts and make lasting relationships with peers
- Access to the regions most influential decision makers over three days
- Stay ahead of your competition
- Meet other top industry professionals face to face

**Target Audience** - Conference on Energy and Environment attracts top regional and international speakers and delegates from across the entire power sector including:

- Policy-Makers from the Energy Sector
- Govt. Officials dealing with energy & environment industries
- R&D establishments
- Academic Institutions
- Energy Managers
- Independent Power Producers (IPPs)
- Urban Planners & Developers
- Energy and Engineering Consultants
- Environment Agencies
- Equipment manufacturers
- EPC Contractors
- Equipment Suppliers
- Technology Developers
- Operations & Maintenance Managers
- Project Financiers
- Venture Capitalists Power producers
- State Electricity Boards/ Power Utilities
- Steel manufacturers
- Sugar Mills
- Paper mills
- Equipment manufacturers
- Policy makers and regulators
- Consultants
- Technology providers
- Inspection agencies

#### Conference Participation Charges (Inclusive of Service Tax)

Delegate (2 Days)	₹ 5,000.00	ELEKTROTEC Exhibitors (2 Days)	₹ 4,000.00
Delegate (1 Day)	₹ 3,000.00	ELEKTROTEC Exhibitors (1 Day)	₹ 2,500.00
Utility / Government	₹ 4,500.00	Students	₹ 4,500.00

Three Delegates & above from one organisation (2 Days) ₹4,000 each

Early bird Discount 10% for Registration before 15.6.2016

We can assist you for arranging the accommodation as per your requirement

**The Host City - Coimbatore** - Coimbatore, the second largest city in Tamilnadu with more than 1 Million Small, Medium and Large Scale industries is an emerging economy with diversified interests Auto Components, Engineering Goods, Material handling, Pumps and Motors, Foundries, Textiles, Textile Machineries, Educational Institutions etc.

The entrepreneurial spirit of the business community, adaptation to new technology and the excellent work culture of the city is well known across the globe. Coimbatore has a reputation of offering customised and cost effective engineering solutions to national and international clients.

Rated as the 4th best city in India to do business as per the study done for CII by Indicus Analytics, Coimbatore is a hot destination for investments by leading national, international and multinational manufacturing corporates. Grooming itself as a major outsourcing hub for the engineering components across the globe, Coimbatore region boasts of ample skilled human resource pool and high levels of productivity. Well connected by Road, Rail and Air. Tours shall be arranged at additional cost..

For Registration

## ELEKTROTEC 2016

(An International Trade Fair on Electrical & Industrial Electronics)

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