



# Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)  
Old Bombay Road, Gachi Bowli, Hyderabad, Telangana – 500032, India



## Center for Climate Change Division

Continuing Professional Development Program on

### **Water & Energy - Implications on Climate Change**

23 – 25 Jan. 2017, ESCI Campus, Hyderabad



(An ISO 9001:2008 Certified, AICTE & CEA Recognized Institution)

## Introduction

Since the dawn of the modern era water & energy resources played pivotal role in changing the path of human development. They are reciprocally and mutually linked. Large quantities of water is needed to produce hydropower and power plant cooling. Interestingly energy is needed for drinking water supplies, waste waters treatment and discharge. Further, depletion of ground water levels escalates the energy demand. Consequent, water – energy nexus has direct bearing on “Climate Change”. Fact is energy consumption in water supply and waste waters treatment accounts for more than 70% of operational costs.

Present situation calls for a fresh approach and appropriate methods to tackle the growing challenges in energy concerns in water sector and develop climate resilient systems. This requires the development of a new line of thinking, which integrates the advancement in science and technology, and the knowledge and skills embedded therein.

## Objectives

1. Understand water - energy & climate change connectivity
2. Ascertain present status of energy demand in water sector.
3. Escalating energy demand and implications on climate change.
4. Understand alternate technology interventions in addressing energy reduction, including Biotechnology approaches.
5. Enhance the capacity of participants in developing integrated approaches through multidisciplinary strategies.



## Course Coverage

- Historical Perspectives on Urban Lakes
- Energy - Water Supply Systems
- Energy - Waste Water Treatment
- Energy – Ground Water Pumping
- Energy - Lift Irrigation
- Energy & Water - Implications on Climate Change
- Problems, Issues & Challenges
- Efficient Water Pumping Systems
- Alternate Energy Approaches
- Integrated Technology – Bio Engineering Approaches
- System's Approach and Management Perspectives

## Methodology

Adapted methodology is interactive and participatory. Lecture sessions will be supported with audio visual systems. Case studies will be placed for debate and facilitates sharing of experiences.

## Target Participants

Middle level executives and city planner / town planner from municipal corporations, urban development authority, municipal administration and urban development and municipal water supply, NGOs and any individual interested in the concept can participate. Architects, Faculty and Consultants etc. will find the training useful.

## Benefit to Participants

- Understanding the implications of climate change in water sector. .
- Awareness on various management & technological interventions in water supply and waste waters treatment.
- Learning from success Stories through case studies and develop new perspectives to transform their own cities.
- Enhanced knowledge in climate mitigation and energy reduction approaches.
- Enhanced knowledge on cost effective strategies.

## Course Director

B.V.Subba Rao, Adviser – Center for Climate Change, ESCI

Mr. Rao, an expert in integrated resource management. Member, Climate Reality, associated with several training institutes and organized workshops on Water, Energy and Climate Change. Participated in five UN conferences and 12 international conferences. He has more than 38 years of professional experience both domestic and international. Conducted series of urban environment management systems workshops in association with RUDO [USAID].

## Resource Persons

The faculty consists of experts from National Research Institutions, faculty from IIT, National Institute of Hydrology and other reputed academic institutions and industry besides that from ESCI.

## Programme Venue, Dates & Timings

**Venue** : Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachi Bowli, Hyderabad. 500032. Telangana, India.

**Dates** : 23 – 25 Jan. 2017

**Timings** : On the first day Registration will commence at 0900 hrs. On all other days the programme timings will be from 0945 - 1715 hrs with breaks in between for tea and lunch.

## Course Fee

Rs. 16,500/- (**Residential**) + 15% Service Tax per participant. Fee includes, course material, course kit, twin-sharing/single AC accommodation as per availability, breakfast, lunch, dinner, tea / coffee and snacks during the actual days of training program.

## Discounts

- ❖ **Non-Residential Fee** : 10% discount on course fee is allowed for non-residential participants.
- ❖ **Group Discount** : Additional 10% discount for three or more participants, if sponsored by the same organization.

**(All discounts are applicable only if the fee is received at ESCI before the commencement of the programme)**

**Service Tax as applicable (FY 2016-17 @ 15%)** is to be paid extra over and above the training fee, as training is also brought under the purview of Service Tax in Finance Bill 2010. **PAN Card No** AAATT3439Q; **Service Tax registration No** AAATT3439QST008. (Under commercial training or coaching services- Clause 65 (105) (ZZC) of Finance act 1994)

Programme fee is to be paid in favour of "IE (I) - Engineering Staff College of India" in the form of demand draft payable at Hyderabad at par cheques payable at any Bank Branches.

Alternatively the payment may be made by **Electronic Fund Transfer (EFT)** to ESCI - SB A/c No. 10007111201 with The SBI, PBB, Rajbhavan Road Branch, Khairatabad, Hyderabad-500004 by RTG's/ NIFT/IFSC/ Code No. SBIN 0004159 – MICR No.500002075. **While using EFT / Draft method of payment, kindly forward a covering letter giving details on the name of the participant/s, Title and the programme schedule or our invoice reference for proper accounting.**

## Registration

Online registration shall be available on ESCI website : [www.escihyd.org](http://www.escihyd.org)

To register, manually please send your nominations giving details of name, designation, contact address, email address, mobiles no, telephone and fax number of the participant / organization along with the details of mode of payment of fee and addressed to :

Mr. B.Govardhan  
Program Manager  
Center for Climate Change,  
Engineering Staff College of India,  
Old Bombay Road, Gachi bowli  
Hyderabad, Telangana – 500032,

Mobile : 09948269193 / Land Line : 040 – 66304155  
Fax : 040 – 66304103 / 23000336,  
E- mail : [ccc@escihyd.org](mailto:ccc@escihyd.org)

**Registration Last Date** : 16 Jan. 2017

## Certificate

A certificate of participation will be awarded to each participant on conclusion of the programme.

## General Instructions

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of outstation participants, ESCI will facilitate pick-up and drop from Airport / Railway Stations / Bus Stations, if travel plans are received at least 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participant directly to the Cab.
- ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in 1200 hrs) and one day after conclusion (Check-out 1200 hrs) of the program duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation)
- Well-developed Information Centre and Internet facilities are available to the participants.

