

## Brief note on AISECC-

1. DJMIT , a self-financed Engineering institute located at Anand in Gujarat and working to serve students and people of proximate community to have quality education and employment by providing forward and backward linkages to achieve their potential and better livelihood.
2. Climate change is an emerging area of technology and science education and research all over the world. Most of the technological institutions have already initiated coursework and also separate centers for education and research in climate change. The climate change is a multidisciplinary subject and has mainly three broad areas of studies namely; mitigation adaptation and resilience. Climate change is also important for the local communities as they would be the vulnerable for any adverse effects of climate change.
3. DJMIT has therefore proposed to establish a '**AISECC** Centre of Excellence in Energy Efficiency and Climate Change' named '**Anand Institute for Studies in Energy efficiency and Climate Change**' (AISECC) under the aegis and patronage of promoting body , CENT. AISECC, in close collaboration with DJMIT, would initiate an academic activity for research studies in climate change which will enable better career opportunities the students and also, result in climate friendly sustainable development in the nearby areas. DJMIT will provide all logistics support and help to sustain its operations till it becomes self-sustainable growth center .

Dr Ajay Deshpande , a well-known domain expert in Climate change has kindly consented to lead and mentor the proposed AISECC as Mentor and Advisor (MA). Dr Deshpande who is Former Expert Member, National Green Tribunal, India comes with wide expertise and connect with field of environment and climate change . He is currently Member , Compliance Review Panel, Asian Development Bank, Manila, Philippines and also Adjunct Professor, Centre for Policy Studies, Indian Institute of Technology, Bombay.

### 4. AISECC Objectives:

- 5) To develop academic excellence in the field of energy efficiency and climate change for the graduate and postgraduate students, through specialized courses, project work and also, quality research work.
- 5) To develop association with national and international academic and research institutes for the research and technology development in energy, environment and climate change
- 5) To develop association with the government and private sector, including industries for research and technology development, assessment etc in energy efficiency and climate change.
- 5) Conduct sponsored and action research in the fields of energy efficiency and climate change
- 5) For organizing national and international seminars, exhibitions, workshops and training & capacity building programs to develop wide understanding among participating and networking partners.
- 5) Providing leadership for organizing international delegations and industrial visits to increase knowledge and understating level of various partners and better implementation of various project.

### 5. Areas of Interest for AISECC:

- a) Energy efficiency in industrial sectors including boilers, dryers and other equipment's, electrical machines and machinery, buildings and construction activities,
- b) Renewable energy, e-mobility, energy storages
- c) Climate Change mitigation, adaption and resilience studies and practices
- d) Technology evaluation, assessment and adoption as per local of Indian requirement.
- e) Climate friendly initiatives in rural areas, with focus on gender, agriculture and resource utilization and efficiency,
- f) Climate resilience structures and construction with more focus on national need of housing for economically weaker section.
- g) Research in Energy, climate and environment.
- h) Common heating / Air conditioning systems and heat recovery systems
- i) Green rating as per national and international guidelines with energy auditing of manufacturing and process industries.
- j) Public awareness and ICT activities
- k) Environmental audits, policy and governance; and urban environmental management
- l) Research, project and consultancy in all the above areas.

6. Proposed Action plan of AISECC:

- I. The focus in the first year would be on creating internal capacity within the AISECC by initiating research work and also creating a visibility at the state level through such research activities.
- II. Networking with the national and international institutions, organizations and companies working in the similar areas to increase the outreach and strength of the Centre of Excellence in long run.
- III. Organizing at least one National seminar in each semester for the first three years, that would give the AISECC and DJMIT visibility and also create a sufficient research opportunities and database for the students of graduate and postgraduate level.
- IV. At least one group of BTech students i.e. final year engineering students from civil, electrical and mechanical departments would have a project research on the issues related to energy efficiency and climate change. Similarly, at least two students from postgraduate courses of electrical and mechanical engineering would also be working on the areas within the domain of Energy Efficiency and climate change. They would be working with their Advisors and also if required external faculties identified suitably.
- V. AISECC would also require specific instrumentation and laboratories on a long-term basis. It is therefore necessary that suitable opportunities of funding including the DST, Indo-US science and technology Forum, State and Central government etc need to be explored for search research as well as instrumentation and also faculty development support.

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