

World Institute of Sustainable Energy



SUN



WIND



WATER

THE NEED AND GENESIS OF WISE

Development of renewable and sustainable energy is critical for ensuring sustainability of development and an energy secure future. Fossil fuel-based energy economy is predicted to be phased out in the next few decades. By 2050, 50% of all energy used by mankind will come from renewable sources of energy. But efforts in India towards developing this vital futuristic sector are inadequate. Some of the major problems faced by the renewable energy sector are lack of qualified manpower, scientific articulation of policy and legislative options, lack of awareness due to poor communication, etc. The need to create an institution that would play a holistic and critical role in shaping an energy secure and sustainable future gave rise to the establishment of the World Institute of Sustainable Energy (WISE).

The activities of WISE will provide a major impetus to the development of the renewable energy sector in India who would benefit from the trained pool of manpower, policy studies, research, consultancies, publications, etc., developed by WISE.

The institute has been registered as a not-for-profit Society and Trust under the Societies Registration Act, 1860, and the Bombay Public Trusts Act, 1950, and began functioning in Pune in June 2004. WISE is a financially autonomous institution and comprises some major and eminent stakeholders from the renewable energy sector as its founder members.

THE FOUNDER DIRECTOR GENERAL



G. M. Pillai

G M Pillai is a senior officer of the Indian Administrative Service with vast experience of development at national and international levels. He is a well known author and speaker in the area of environment and development. Prior to joining WISE as its founder Director General, Mr Pillai was Director General of the Maharashtra Energy Development Agency (MEDA), Pune, for a period of 4½ years. During his tenure in MEDA, he pioneered many path-breaking activities in the area of green power development. They include, establishment of 400 MW wind power projects, imposition of a green cess on conventional energy for creating a Rs.1000 crore fund to develop renewables, filing a petition before the Maharashtra Electricity Regulatory Commission (MERC) to impose the system of Renewable Portfolio Standards (RPS) in Maharashtra (first time in developing countries). His outstanding work in the area of wind power development in Maharashtra resulted in MEDA receiving the National Award in this field for 4 consecutive years, from 1999-2000 to 2002-2003. Mr Pillai has also been conferred with the SESI award for Business Leadership in renewable energy development in the country. Currently, he is also Member, Advisory Board on Wind Power, Government of India; and Member, Technical Committee, Renewable Energy Law for India. He has conceived and edited three important books published by WISE: *The New Energy Economy*, *Wind Power Development in India* and *A Solar Future for India*.

OBJECTIVES

- ✔ To be a premier outreach centre for communications, information and knowledge transfer in the fields of sustainable energy, energy conservation, and sustainable development.
- ✔ To function as an apex policy think tank, policy advocacy centre and consultancy provider in the field of sustainable development, especially in relation to sustainable energy and energy conservation.
- ✔ To conduct short-term and long-term academic and other training programmes in furtherance of the futuristic human resource needs of the emerging sustainable energy, energy conservation, and sustainable development sectors.
- ✔ To take up technical and other research in selected and specialised areas of vital importance for augmenting and accelerating sustainable development in a holistic manner, for a transition to a cleaner and greener world.
- ✔ To establish, maintain, and operate pilot projects, libraries, laboratories and prototype training centres, and hold seminars and training programmes in concordance and furtherance to these objectives.



FOCAL/KEY AREAS

Policy Research & Consultancy

Policy Research and Consultancy is the core area of WISE and is responsible for developing policy initiatives aimed at promoting sustainable economic and fiscal measures, by using environmental economic techniques and green theory, in concordance with the objectives of sustainable development. It is also responsible for the following:

- ✔ Conducting research, studies, surveys, etc., in all areas of sustainable energy, energy conservation, and sustainable development.
- ✔ Offering consultancy in various fields including fund management related to sustainable energy development for renewable energy nodal agencies, electricity regulatory commissions, and the industry.
- ✔ Working with all electricity regulatory commissions in India to provide institutional support to them in a holistic and systematic manner, thus facilitating transition to a sustainable energy economy.
- ✔ Developing innovative, legislative, regulatory, and legal models aimed at accelerating the transition to a clean, green, and sustainable economy.

Human Resource Development

Besides functioning as the apex institution in the fields of sustainable energy, energy conservation, and sustainable development, our human resource development activities focus on:

- ✔ Undertaking research, analysing and assessing personnel / human resource needs of the sustainable energy sector.
- ✔ Conducting short-term and long-term orientation and induction training programmes at various levels.



- ✔ Collaborating and networking with national and international institutes / universities, etc., for curriculum development, knowledge transfer, training of trainers, etc.

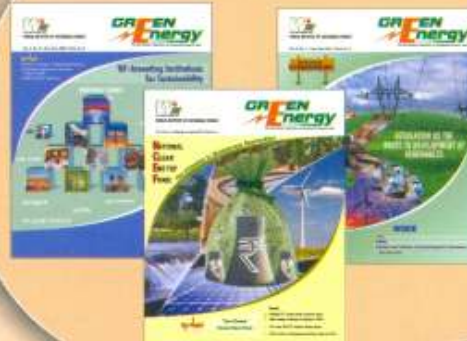
- ✔ Holding action-oriented national and international seminars / conferences / conclaves to promote sustainable energy.

- ✔ Providing training to renewable energy professionals in India.

Outreach and Communications

Outreach and Communications is the crucial link that connects WISE to the outside world. It endeavours to enrich the process of information and knowledge transfer about the advancements made in sustainable energy, energy conservation, and sustainable development, through the latest modes of communication. Focal areas are:

- ✔ Conceptualising, developing, printing and publishing journals / periodicals / pamphlets / books / research papers, etc., so as to meet the above objective.
- ✔ Documenting, compiling, and disseminating state-of-the-art and up-to-date information through the print and electronic media, on emerging new technologies, resources, products, and their application.
- ✔ Building a comprehensive and state-of-the-art information database on all aspects of sustainable energy, energy conservation, and sustainable development.



Our widely acclaimed bimonthly publication *Green Energy* is the only holistic publication on sustainable energy in India, and has a readership of over 50,000 individuals and organisations from the energy sector. Books published by WISE, namely *The New Energy Economy*, *Wind Power Development in India*, *The Solar Entrepreneur's Handbook*, *Power Drain*, and the forthcoming *A Solar Future for India* are unique, in that, they focus on developmental and technical issues relating to sustainable energy.

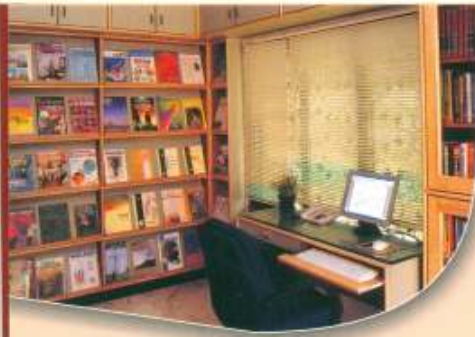
OUR CORE CENTRES

WISE is organised into different centres that function independently, yet work cohesively, in the true tradition of inter-disciplinary learning, team spirit, and knowledge sharing. These are:

- ✔ Centre for Wind Power
- ✔ Centre for Solar Energy
- ✔ Centre for Bio-Energy
- ✔ Centre for Climate and Sustainability Policy
- ✔ Centre for Renewable Regulation and Policy
- ✔ Centre for Human Resource Development
- ✔ Centre for Communications
- ✔ WISE Press

WISE is the only institution in India with such inter-disciplinary expertise, most essential for leading our country towards sustainability in the 21st century.





OUR RESOURCES

Infrastructure

WISE is equipped with state-of-the-art work environment which includes:

- ✔ Modern and well furnished conference cum training rooms with all modern audio-visual training aids.
- ✔ A holistic and futuristic library and documentation centre comprising a comprehensive collection of books, scientific journals, magazines and audio-visual aids on sustainable development and the sustainable energy sector.

Professional Competencies

WISE possesses some of the most talented, highly qualified, and technically proficient people as part of its workforce, each an expert in his/her respective field of specialisation. Together, they strive towards fulfilling one goal... **developing WISE into a premier and apex world class institution of sustainable energy.**

MAJOR INITIATIVES BY WISE

- ✔ Drafting of a *Model Renewable Energy Law for India* and its advocacy for adoption by Parliament. This effort gained national and international support, and in 2008, the Government of India decided to enact a Renewable Energy Law for India.
- ✔ Undertaking major public policy initiatives for introduction of Production Tax Credit and Renewable Energy Certificates, preparation of long term R.E. Vision Documents for various state governments, development of an innovative Solar Energy Policy for India, research into repowering of old wind farms in India, etc.
- ✔ Sensitising and training the media, financial institutions, and the academia across the country, to generate awareness among them about renewable energy, thus facilitating a conducive environment for its market expansion.
- ✔ Conducting the first ever study of *Human Resource Needs of the Renewable Energy Sector* upto 2015, and initiating various cutting-edge HR programmes for the renewable energy sector.
- ✔ Undertaking nation-wide field level research projects on *Comparative Public Cost of Conventional Electricity Generation in India*, quantifying externalities of commercial power generation, etc.
- ✔ Organising the national conference-cum-exhibition on 'wind power development in India' titled *Wind India*, India's premier conference-cum-exhibition on solar energy titled *Solar India*, *Climate Change India*, and *R.E. Regulation India*, which were extremely successful.

WISE is also involved in providing consultancy support to some major state electricity regulatory commissions, and various renewable energy industries and investors; preparing comprehensive renewable energy development plans for states like Puducherry; and assisting the Ministry of New and Renewable Energy, Govt. of India, in certain key areas of renewable energy development in India.





LOCATION



WISE is situated in the city of Pune, a centrally located bustling city in the state of Maharashtra, India. It is around 160 kms from Mumbai by road and is well connected to New Delhi and Mumbai, and all other big cities in India by air. The city is the centre of learning and has earned the title of 'Oxford of the East'. Pune is also the hub of industrial and commercial activity, with information technology forming a major focal area.

WISE is located in the serene and plush environments of Kalyani Nagar in Pune, an extremely sophisticated residential area and an upcoming hi-tech commercial centre comprising multinational corporations, IT institutions, etc. The office is centrally located, situated around 3 kms from the city airport and 3½ kms from the Pune railway station.



WORLD INSTITUTE OF SUSTAINABLE ENERGY

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