Major Recommendations

- · 'Green Revolution' should be the only choice for the society to attain sustainable environment
- Dissemination of the techniques, materials and methodologies for the Green building should be popularized on a wider scale.
- Strong operational relationship and close networking should be maintained with premier R&D, standardization and academic institutions and technology-promotion organizations.
- Development of technologies having potential for commercialization and transfer of technology for wide scale field application should be encouraged.
- Regulatory Mechanism should be strict enough to inculcate the concepts of Green Buildings and more of 'Habitat Green' than only building 'Green'.
- · Change in lifestyle and awareness about the "Green Building" is required for growth of "Green Building" concept.
- Assisting manufacturers of building materials in their upgradation and modernisation plans.
- · Improving the policy regime for sustained growth of cost-effective building materials, production and availability.
- Promotion of production units of building materials/components based on Flyash, Redmud, Phosphogypsum, agricultural residues and other wastes and by-products.
- Modernisation of small scale and village level building materials production units in rural and urban areas and support through policy measures.
- · Setting up institutional framework for promotion of CDM investments and relevant activities to encourage Carbon Trading.
- Creating public awareness to modify lifestyles to conserve resources of water and reduce waste, also to support and promote policies and strategies for practical implementations.
- NGOs, Media, Scientific Community and policy makers should work together to generate awareness among masses.
- The outcome of this Workshop should be visualized and propagated at various levels viz., local level, district level, state level, national level by involving Universities, Colleges, Schools, Local administration and key officials working in the field of environmental sustainability through organizing seminars, conferences, symposia and various awareness/ action-based programs.

Dr. Dhiraj Kr. Singh

Co-convenor & Co-organizing Secretary Chairman SEARCH Foundation, New Delhi



For further details, please contact:



SEARCH Foundation

An ISO 9001: 2008 Certified Organisation

(A YOUTH INITIATIVE FOR EMPOWERMWNT & ENVIRONMENTAL SUSTAINABILITY)

Head Office: F - 375, Sec - 63, NOIDA - 201 301
Ph. No.: 0120 - 4044630, 4044660, Fax: 0120 - 2406519
E-mail: info@search-foundation.com, search_foundation@yahoo.com
Regd. Office: 1102A, 11th Floor, Devika Tower, Nehru Place, New Delhi - 110 019

Ph. No.: 011 - 40740100, Fax: 011 - 26441761 **Website**: www.search-foundation.com



Brief Report on

FIRST NATIONAL WORKSHOP-CUM-CONFERENCE IN THE SERIES ON

"GREEN BUILDINGS: FOSTERING SUSTAINABLE DEVELOPMENT & ENVIRONMENTAL CLEARANCE"

December 10, 2009 India International Centre (IIC), 40, Max Mueller Marg, New Delhi - 110 003



"We have responsibility to look after our planet. It is our only home". The Dalai Lama



(Introduction)

Buildings consume major part of energy in construction and their maintenance. Thus their adverse impact on the natural environment is of very higher order. Building sector is a part of infrastructure and it has been identified as being responsible for about 25-40 % of energy consumption, 30-40 % of material resource consumption, 30-40 % of waste production and 30-40 % of the greenhouse gases released globally. Additionally, estimates reveal that about 30 percent of newly built or renovated buildings suffer from "sick building syndrome", exposing occupants to unhealthy environmental conditions. "Green building" concept is therefore being promoted as the foremost strategy to ensure the sustainable infrastructural development. Going "Green" means becoming more conscious about our roles and responsibilities in mitigating the adverse impacts on natural environment.

As a sequel to our highly successful National Workshop-cum-Conference on "Green Buildings: Striding towards Environment Protection and Clearance" (held on 18-19th April, 2008), it has been planned to organize a series of 6 - National Workshops to promote and popularize the concepts and implementation of such buildings on a wide scale for ensuring 'Sustainable Environment'.

Indian Green Building Council has established Leadership in Energy and Environmental Design (LEED) Green Building rating system. Apart from LEED, TERI has developed a tool known as "GRIHA" (Green Rating for Integrated Habitat Assessment) for measuring and rating a building's environmental performance in the context of India's varied climate and building practices.

Objectives

- To create national, multi-stakeholders task force imbibed with achieving a vision for green building in India.
- · To support the creation of a set of principles and planning tools for green building.
- To set clear targets to achieve the fast adoption of green building in India, including high targets for carbon-neutral or net zero-energy buildings, together with effective performance monitoring to track progress towards these targets.
- To garner ongoing or new support for green building, including efforts to promote private sector investment and proper valuation methods
- To increase knowledge of green buildings through R&D, capacity building, and the use of labels and disclosures on green building performance.
- To facilitate a fast track Environmental Clearance (EC) process with effective solutions to the problems faced by the clients and the authorities during EC process.

Overview of First National Workshop-cum-conference

Key points discussed during the Workshop are:

- Two G's (Green and Growth) go together and are not conflicting.
- To put fully coordinated and concentrated efforts to make perceptible impacts towards environmental preservation, conservation and restoration through 'Green Habitat'.
- The Climate Change and Global Warming in the contemporary world are causing catastrophic effects and need to addressed urgently.
- Innovative energy saving building techniques like providing roof insulation with fiber glass, cavity brick wall with insulation, shading on roof, double glass for windows should be adopted.
- Green Buildings facilitates smoother and faster process of Environmental Clearance, as the Environmental Clearances required by the Union Ministry of Environment and Forests lay down a procedure, so that minimum environmental depletion takes place during the construction of large buildings.
- Carbon Trading Opportunities for Green Buildings under CDM (Clean Development Mechanism).

Participants |

- Officials of MoEF, Govt. of India
- Officials of Central Pollution Control Board
- Chairmen and Members of various EACs of MoEF. Gol
- Chairmen and Members of States SEACs and SEIAAs
- Officials of Dept. of Environment, GOI and Govt. of NCR Delhi
- Planning Commission experts, corporate bigwigs
- Builders, Architects, Contractors, Scientist, Environmentalist, NGOs, Research Scholars, Community Leaders, Policy makers and Regulators, etc.

Technical Sessions

Session I : Dynamics of Green Buildings

Chaired by: Mr. Subroto Banerjee, IAS (Retd.), Chairman, SEIAA,

Govt. of Madhya Pradesh

Session II : Understanding the process of Environmental Clearance

Chaired by: Dr. Paritosh Tyagi, Chairman, Expert Appraisal Committee,

MoEF. Govt. of India

Session III : Green Buildings: Opportunities & Barriers

Chaired by: Shri K. S. Bhoria, Chairman, SEIAA, Govt. of Haryana

Session IV : Valedictory Session

Chaired by: Dr. B. Padmanabhamurty, Vice Chairman, SEAC, Govt. of Haryana

This event had the blessings and support of eminent authorities and luminaries actively involved in the propagation of the concepts of sustainable development and preservation of environment. We place on record our thankful gratitude to the following dignitaries:

- Dr. Prem C. Jain, Chairman, Indian Green Building Council (IGBC)
- Dr. Kirit Parikh, Chairman, Integrated Research and Action for
- · Development & Former Member, Planning Commission, Govt. of India
- Shri Paritosh Tyagi, Chairman, EAC, Ministry of Environment
 & Forest (MoEF), GoI
- · Shri Bharat Bhushan, Director, MoEF, Gol
- Dr. S. K. Bhargav, Chairman, State Expert Appraisal Committee (SEAC), U.P.
- Shri K. S. Bhoria, Chairman, State Environment Impact Assessment Authority (SEIAA), Haryana
- Prof. B. Padmanabhamurty, Vice Chairman, SEAC, Haryana
- · Dr. P. K. Behra, Scientist, Central Pollution Control Board
- Shri Subroto Banerjee, IAS (Retd.), Chairman, State Environment

 Impact Assessment Authority (SEIAA), Goyt, of Bhopal
- Prof. R. Kumar, Rector, Jawaharlal Nehru University, New Delhi
- · Shri R. N. Malik, Member, SEIAA, Haryana
- Er. Jayanta Kumar Bhattacharyya, Scientist E-II, NEERI, Mumbai
- Dr. V. Bakthavatsalam, Chairman, SEIAA, Andhra Pradesh
- Shri K. K. Goswami, Member, SEAC, Madhya Pradesh
- Shri Sivakishan Nandyala, CEO, GRIHA Secretariat (TERI), Delhi
- Dr. Krishna Gopal, Vice Chairman, SEAC, Govt. of Uttar Pradesh
- Shri Sibasis Mohapatra, Engineer Green Building, Confederation of Indian Industry, Hyderabad
- Shri Ashish Rakheja, Chief Operating Officer,
 Spectral Services Consultants Pvt. Ltd., Noida
- Shri Niranjan Khatri, General Manager (Environment),
- ITC Green Centre, Gurgaon
- Prof. Ranjit Mitra, Director,
- School of Planning and Architecture, Delhi
- Ms. Sheetal Rakheja, Partner, Design & Development, New Delhi
- Shri G.M. Pillai, I.A.S., Director General,
- World Institute for Sustainable Energy, Pune
- Shri Karan Grover, Architect, Karan Grover & Associates, Vadodara
- Dr. Vishal Garg, Asst. Prof. & Head, Center for IT in Building Science,
 IIT, Hyderabad
- Shri Shahrukh Mistry, Architect, Mistry Architects, Bangalore
- Shri Sudipta Das, Partner Risk Advisory Services,
- Ernst & Young Pvt. Ltd., Kolkata
- Shri M. Selvarasu, Partner, LEAD Consultancy Services, Bangalore
- Shri Ankoor Sanghvi, Architect, Ankoor Sanghvi & Architects, Rajkot
- Shri Shishir Joshipura, Exec. Vice President, Thermax Limited, Pund

