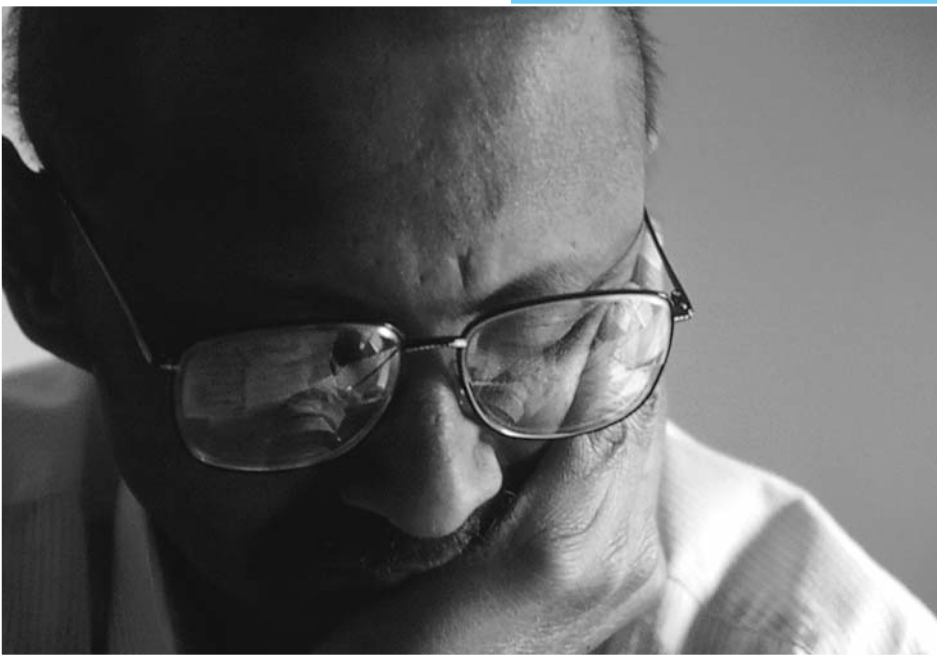


Anil Agarwal Dialogue:

Energy Access and
Renewable Energy

Jacaranda Hall
India Habitat Centre
New Delhi
27-28 February, 2014





“ I have never been worried about the earth. I'm worried about human beings. I was trying to understand what India is all about, what India's people are all about. And that is how I stumbled upon the earth. I realised that they have a deep relationship with the earth, and that is why earth became important to me.

”

Anil Agarwal was the founder-director of the Centre for Science and Environment. Agarwal spent his lifetime advocating policies that involve people in natural resource management and learn from India's traditions.

Agarwal graduated as an engineer in 1970, but gave up a career in technology to become a science journalist. He joined Delhi's *Hindustan Times* as a science correspondent in 1973 and a year later discovered India's most evocative environmental movement - Chipko Movement. In 1980, Agarwal founded the Centre for Science and Environment to analyse and study the relationship between environment and development and create public consciousness about the need for sustainable development.

In 1982, the Centre published the pioneering Citizens' report on State of India's Environment which provided an overview of the level of environmental degradation and its impact on people in India. The then Prime Minister Rajiv Gandhi asked Agarwal to address his Council of Ministers on the state of India's environment. This was the first time that the Council of Ministers discussed environment.

Agarwal has more than 20 books to his credit. His reports have helped Indian decision-makers understand the importance of involving people in environmental conservation and natural resource management. In 1990, Agarwal, co-authored a paper 'Global Warming in an Unequal World' which led to global debate and had a considerable impact on the G-77 position in the negotiations leading up to the Framework Convention on Climate Change.

In 1992, Agarwal started *Down to Earth*, a news magazine on environment which brings news that challenges readers to think about sustainable development. It inspires and encourages them to become environment-friendly.

The government of India presented Agarwal, Padma Shri and Padma Bhushan.

O V E R V I E W



Day 1 – 27th February, 2014

The dialogue will begin with speakers presenting perspectives on the issue of energy access and deliberating why India has failed to provide the targeted one unit of electricity per day to every household and clean cooking fuel to its rural population.

Inaugural session will be followed by discussions on the need for clean cooking fuel. About 700 million people rely on biomass for cooking at present. Participants at the discussions will deliberate on meeting cooking energy needs through clean cookstoves, biogas models and rural distribution of LPG.

According to the Census of India, about 33 per cent of households in the country do not have any access to electricity. The next session will discuss the viability of decentralised models through proper regulatory and policy interventions. Micro and mini-grids will play a significant role in ensuring reliable electricity supply to rural households and even enable tail-end generation when the grid reaches these places.

The sessions will culminate with a panel discussion on the need for a roadmap to address sustainable energy access.

Day 2 – 28th February, 2014

On the second day, we move forward to the broader issues of meeting the unmet energy demand in the country through renewable energy. Central Electricity Authority estimated a power shortage of 6.7 per cent in 2013-14 which translates into 70 billion units. The first session will review whether renewable energy can meet the country's growing energy demand.

This will be followed by a panel discussion on the concerns on Jawaharlal Nehru National Solar Mission (JNNSM). The second phase of JNNSM was delayed by almost a year, and states are now being asked to contribute the lion's share of the target. The questions we will ask are: is it time for reforming the JNNSM? Or does it need to tread a new path?

The second half of the day will focus on how wind power can be sustained on a long-term basis. Although the 12th Five-Year Plan estimated 3,000 MW of wind power installations per year, achievements in the first two years are far below targets due to various policy issues and other hurdles.

We will conclude the dialogue by releasing CSE's book, "State of Renewable Energy – A Citizen's Report".

PROGRAMME SCHEDULE

Day 1 - February 27, 2014

Registration:	9.30 AM – 10.00 AM
Challenge of Energy Access in India:	10.00 AM – 11.30 AM
Chief Guest:	B K Chaturvedi – Member, Planning Commission
Opening Remarks:	Sunita Narain – Director General, Centre for Science and Environment
Panelists:	Satish Balram Agnihotri – Secretary, Ministry of New and Renewable Energy Ajay Shankar – Member Secretary, National Manufacturing Competitiveness Council
Open Discussion	11.00 AM – 11.30 AM

Tea Break - 11.30 AM – 12.00 PM

Universal Access to Clean Cooking Fuel:	12.00 PM – 1.30 PM
Chairperson:	Deepak Gupta – Director General, National Solar Energy Federation of India
Speakers:	Anumita Roychowdhury – Executive Director, Centre for Science and Environment Atma Ram Shukla – President, Biogas Forum of India Priyadarshini Karve – Director, Samuchit Enviro Tech Mouhsine Serrar – Founder and CEO, Prakti Design Lab *Neeraj Mittal, – Joint Secretary, (Marketing division) Ministry of Petroleum and Natural Gas
Open Discussion	1.00 PM – 1.30 PM

Lunch - 1.30 PM – 2.30 PM

Ensuring Electricity Access through Decentralised Distributed Systems: 2.30 PM to 4.00 PM	
Chairperson:	Gireesh B Pradhan – Chairman, Central Electricity Regulatory Commission
Speakers:	Chandra Bhushan – Deputy Director General, Centre for Science and Environment Anshuman Lath – Co-Founder, Gram Oorja Jyoti Dar – Director, Kuvam Energy Naresh Joshi – Retd Chairman, Aryavart Gramin Bank *KS Popli – Director (Technical), IREDA
Open Discussion	3.30 PM – 4.00 PM

Tea Break - 4.00 PM – 4.30 PM

Roadmap for Sustainable Energy Access in India: 4.30 PM – 6.00 PM	
Moderator:	Sunita Narain – Director General, Centre for Science and Environment
Presentation:	Shirish Sinha – Senior Thematic Advisor – Climate Change, Swiss Agency for Development and Cooperation
Panelists:	T. L. Sankar – Hon. Visiting Professor, Administrative Staff College Sushil Kumar Lohani – Executive Director, Rural Electrification Corporation Saurabh Kumar – Managing Director, Energy Efficiency Services Limited *Pramod Deo – Ex-Chairman, Central Electricity Regulatory Commission
Open Discussion	5.30 PM – 6.00 PM

Day 2 - February 28, 2014

Registration:	9.30 AM – 10.00 AM
Scaling Up Renewable Energy in India:	10.00 AM – 11.30 AM
Opening Remarks:	Nayanjyoti Goswami – Programme Director, Centre for Science and Environment
Speakers:	Nikolaus Supersberger – Deputy Director, Indo-German Energy Programme, GIZ Praveen Saxena – Advisor, Ministry of New and Renewable Energy Usha Ramachandra – Professor and Energy Area Chairperson, Administrative Staff College Raghunath Mahapatra – Vice President & Head - Strategy, Welspun Energy
Open Discussion	11.00 AM - 11.30 AM

Tea Break - 11.30 AM – 12.00 PM

Time to Rethink National Solar Mission?:	12.00 PM – 1.30 PM
Moderator:	Chandra Bhushan – Deputy Director General, Centre for Science and Environment
Panelists:	Tarun Kapoor – Joint Secretary, Ministry of New and Renewable Energy Ashwin Gambhir – Senior Research Associate, Prayas Energy Group Jasmeet Khurana – Head-Market Intelligence, Bridge to India Harish Ahuja – President, Strategy & Corporate Affairs, Hindustan Powerprojects Private Limited
Open Discussion	1.00 PM – 1.30 PM

Lunch - 1.30 PM – 2.30 PM

Propelling Sustainable Development of Wind Power:	2.30 PM – 4.00 PM
Chairperson:	Sunita Narain – Director General, Centre for Science and Environment
Speakers:	Kanchan Kumar Agrawal – Programme Officer, Centre for Science and Environment Alok Srivastava – Joint Secretary, Ministry of New and Renewable Energy Chintan Shah – President, SBD & Corporate Affairs, Suzlon Energy Sumant Sinha – Founder & Chairman, Renew Power Ranjit Bharvirkar – Advisor, Regulatory Assistance Project
Open Discussion	3.30 PM – 4.00 PM

Tea Break - 4.00 PM – 4.30 PM

State of Renewable Energy Book Release and Way Ahead:	4.30 PM – 6.00 PM
Chief Guest:	Farooq Abdullah, Minister, Ministry of New and Renewable Energy

* To be confirmed

SPEAKERS



Ajay Shankar

National Manufacturing Competitiveness Council

Ajay Shankar is the Member Secretary, National Manufacturing Competitiveness Council. He retired as Secretary, Department of Industrial Policy & Promotion in the Commerce and Industry Ministry in December, 2009. As the Joint Secretary/Additional Secretary in the Ministry of Power, he was one of the authors of the Electricity Act, 2003. He also conceived the Rajiv Gandhi Gramin Vidyutikaran Yojana for rural electrification.



Alok Srivastava

Ministry of New and Renewable Energy

Alok Srivastava is Joint Secretary in Ministry of New and Renewable Energy since June 2012. Prior to joining MNRE, he worked in various government departments including public health engineering and archeology & museums. He has handled a variety of projects with United Nations Development Programme and World Bank.



Anshuman Lath

Gram Oorja

Anshuman Lath is the co-founder and Director of Gram Oorja Solutions Private Limited. Gram Oorja has been working in decentralised renewable energy systems since 2008. It focuses on community-based applications including micro-grids for electricity and cooking. He earlier worked as a consultant for the small-scale sector and in rural development projects.



Anumita Roychowdhury

Centre for Science and Environment

Anumita Roychowdhury is in charge of research and advocacy programme on sustainable cities and urban mobility at Centre for Science and Environment. Over the past two decades, she has worked extensively to build up the Centre's policy advocacy programme on clean air, public health security and sustainable mobility.



Ashwin Gambhir

Prayas Energy Group

Ashwin Gambhir is a Senior Research Associate at Prayas Energy Group and has been working on renewable energy policy and regulatory issues and on Indian climate policy, especially with regard to mitigation. He also has a keen interest in rural energy use, energy externalities, depletion of fossil energy reserves and the social and environmental sustainability of energy systems.

Atma Ram Shukla
Biogas Forum of India



Atma Ram Shukla superannuated as Advisor (Bio-energy) in the Ministry of New and Renewable Energy in September, 2011 after working for the ministry for about 29 years. He has about 42 years of experience in policy; planning; developing national level Renewable Energy R&D and technology demonstration projects and dissemination programmes and their implementation.

B K Chaturvedi
Planning Commission



B K Chaturvedi was appointed by the Union Government as Member (Energy), Planning Commission in June, 2007. He has been Secretary to the Government of India in several Ministries, including Finance, Human Resource Development (which includes Higher Education, Technical Education and Elementary Education) and Petroleum & Natural Gas for more than six years.

Chandra Bhushan
Centre for Science and Environment



Chandra Bhushan is the Deputy Director General of Centre for Science and Environment (CSE). He has been associated with CSE since 1997. He heads the Industry-Environment, Pollution Monitoring Laboratory, Food Safety and Toxins, Renewable Energy, Climate Change Policy and Advocacy and Training teams at CSE.

Chintan Shah
Suzlon Energy



Chintan Shah is President, Suzlon Energy. He has worked in the field of renewable energy for more than 18 years. Prior to Suzlon he worked in the renewable energy division of TERI. His expertise lies in understanding the policy and regulatory frameworks, tariff estimation, financing, designing and implementation of wind farm projects.

Deepak Gupta
National Solar Energy Federation of India



Deepak Gupta is the Director General of the National Solar Energy Federation of India. He retired as Secretary, Ministry of New & Renewable Energy. He was associated with Ministry of Health & Family Welfare from 1998 to 2008 and spent a year with the World Health Organization in Delhi as Adviser in 2004.

Farooq Abdullah
Ministry of New and Renewable Energy



Farooq Abdullah is the Union Cabinet Minister, New and Renewable Energy. An M.B.B.S by qualification, he has been associated with public service since he was first elected to the Lok Sabha in 1982. He has been part of Jammu & Kashmir Legislative Assembly for five terms and two terms each in the Lok Sabha and the Rajya Sabha.

Gireesh B Pradhan
Central Regulatory Electricity Commission



Gireesh Pradhan is the Chairman of Central Electricity Regulatory Commission. He has worked at the Ministries of Food and Civil Supplies, Home Affairs and Power. He took over charge of the Ministry of New and Renewable Energy in October 2011 and was actively involved in development of the Jawaharlal Nehru National Solar Mission (JNNSM).



Harish Ahuja

Hindustan Powerprojects Private Limited

Harish Ahuja is President (Strategy & Corporate Affairs), Hindustan Power Project Ltd (Erstwhile Moser Baer Projects). Prior to joining Moser Baer Projects, he was Director (Finance & Law) in Joint Electricity Regulatory Commission for Union Territories & State of Goa, Ministry of Power. He is author of "*Reforming Power sector Reforms: Multiple conflicts, Democratic Solution*".



Jasmeet Khurana

Bridge to India

Jasmeet Khurana heads the Market Intelligence team at Bridge to India. He is responsible for the research, publication and consulting projects undertaken by the company. Prior to joining Bridge to India, he was Managing Director, Headway Solar, a solar consulting firm. An engineer by background, Khurana did his certification in photovoltaics from Stanford University.



Jyoti Dar

Kuvam Energy

As the founder director of Kuvam Energy Pvt. Ltd, Jyoti Dar has spent the past five years to reduce India's dependence on coal and fossil fuels through use of solar PV energy. She has worked in business management and banking, with clients including the US Government and leading multinational companies.



Kanchan Kumar Agrawal

Centre for Science and Environment

Kanchan Agrawal is Programme Officer, Renewable Energy Programme at Centre for Science and Environment (CSE). He has been with CSE for more than three years working on issues concerning renewable energy sector, particularly wind power. Prior to joining CSE, he had a brief stint with Hindalco Industries, Aditya Birla Group.



Mouhsine Serrar

Prakti Design Lab

Mouhsine Serrar founded Prakti Design Lab in Puducherry, India. The company has provided clean-burning, fuel-efficient cookstoves to around 250,000 people in India, Nepal, and Haiti . Prior to that, he worked in product design as a senior mechanical engineer and consultant for companies including Motorola, Pitney Bowes, Intel, Boeing, and others for more than 10 years.



Naresh K Joshi

Aryavart Gramin Bank

Naresh Joshi is retired General Manager, Bank Of India. His work as the Founder Chairman of Lucknow's Aryavart Gramin Bank (a unit of Bank Of India) won him and the bank the prestigious Ashden International Award in 2008 for sustainable energy.



Nayan Goswami

Centre for Science and Environment

Nayan Goswami is the Programme Director for Renewable Energy in Centre for Science and Environment (CSE). He has over 17 years of experience in the areas of renewable energy and energy efficiency, working in various organisations like International Copper Association, Reliance Energy, ABB Limited, GE Power Controls and Siemens.

Nikolaus Supersberger
GiZ



Nikolaus Supersberger is Deputy Director, Indo-German Energy Programme with GiZ. Having began his career at the German think-tank Wuppertal Institute for Climate, Environment, Energy, he worked in energy system analysis and energy scenario modelling, concentrating on the integration of renewable energies and energy efficiency into traditional supply and demand structures.

Praveen Saxena
Ministry of New and Renewable Energy



Praveen Saxena is Advisor in the Ministry of New and Renewable Energy where he is in-charge of Small Hydro Power Programme. He joined the ministry in 1983 and was responsible for various renewable energy programmes such as Solar Photovoltaics, Wind Energy, Rural energy programmes and policy planning of renewable energy. Saxena has over 40 research publications in International and National Journals.

Priyadarshini Karve
Samuchit Enviro Tech



Priyadarshini Karve is Managing Director, Samuchit Enviro Tech. While working with Appropriate Rural Technology Institute (ARTI) she invented a number of improved biomass burning cooking devices, to reduce smoke in kitchen and dependence on firewood. She is co-editor of '*Shaikshanik Sandarbh*' a Marathi language bi-monthly on Science and Education.

Raghunath Mahapatra
Welspun Energy



Raghunath Mahapatra is the head of strategy at Welspun Energy. Over the past 23 years, he has worked in industry and in consulting organisations. He is an electrical engineer by training and MBA in finance and strategy from XLRI, Jamshedpur and ENPC School of International Management in France, where he was a French Government scholar

Ranjit Bhavirkar
Regulatory Assistance Project



Ranjit Bhavirkar is an independent expert working as an advisor with the Regulatory Assistance Project since 2013. He has conducted research and policy analysis since 1997 and has provided technical assistance to policymakers and stakeholders in both India and the US. He also worked for six years at Lawrence Berkeley National Laboratory (LBNL) in Berkeley CA.

Satish Balram Agnihotri
Ministry of New and Renewable Energy



Satish Agnihotri is the Secretary in Ministry of New and Renewable Energy. As Director General (Acquisition) in the Ministry of Defence of the Government of India, he managed the entire capital acquisition programmes and addressed a wide range of policy, commercial and operational issues. He also worked with UNICEF, Kolkata as Consultant on Child Nutrition and Health.

Saurabh Kumar
Energy Efficiency Services Limited (EESL)



Saurabh Kumar was appointed Managing Director, EESL by the Ministry of Power in May 2013. He has worked in various capacities in Income Tax Department, Ministry of Power and Bureau of Energy Efficiency (BEE). He proceeded on a UN Deputation to Bangkok for the last 2 years and was handling environmental issues in Asia – Pacific region.



Shirish Sinha

Swiss Agency for Development and Cooperation

Shirish Sinha works with the Swiss Agency for Development and Cooperation (SDC) on their India programme as Senior Thematic Advisor – Climate Change. He has over 19 years of experience in rural energy, climate resilient development and energy/climate policy. In 2012, he was awarded Ph D in Public Policy from the University of Twente, the Netherlands for his dissertation 'In Pursuit of a Light Bulb and a Smokeless Kitchen'.



Sumant Sinha

Renew Power

Sumant Sinha is the Founder, Chairman and CEO of ReNew Power Ventures Pvt. Ltd. He is also currently the Chairman of the National Renewable Energy Committee of Confederation of Indian Industry. Prior to this venture, he was worked with Suzlon Energy, and the Aditya Birla Group.



Sunita Narain

Centre for Science and Environment

Sunita Narain has been with the Centre for Science and Environment (CSE) since 1982. She is currently the director general of the Centre and the director of the Society for Environmental Communications and publisher of the fortnightly magazine, Down To Earth. She is a writer and environmentalist, who uses knowledge for change.



Sushil Kumar Lohani

Rural Electrification Corporation

Sushil Lohani is working with Rural Electrification Corporation on deputation as Executive Director, RGGVY Division (Rajiv Gandhi Grameen Vidyutikaran Yojana). It is a flagship programme of Ministry of Power for providing access to electricity to all households in the country.



Tarun Kapoor

Ministry of New and Renewable Energy

Tarun Kapoor is the Joint Secretary in Ministry of New and Renewable Energy and is responsible for policy and programmes for promotion of renewable energy in the country. He has been involved in development of India's largest hydropower house, headed a power transmission company and worked as head of Department of Energy at state level.



T L Sankar

Administrative Staff College of India

T L Sankar served as Principal, Administrative Staff College of India (ASCI), Hyderabad for over seven years and continues to be Honorary Visiting Professor (Energy Policy) in ASCI. He has worked in Planning Commission as India's first Energy Advisor and headed many committees. He is now involved in the Studies on Energy Security for India and for the South Asia Region.



Usha Ramachandra

Administrative Staff College of India

Usha Ramachandra, Professor and Area Chairperson of Energy Area, ASCI, is Doctorate in Economics from Central University, Hyderabad. She joined the faculty in 1998 and got involved in several of ASCI's training programmes and consulting assignments in the power sector. She provides inputs on regulation, restructuring and reforming power sector for ASCI's other programmes.



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