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THE CLIMATE SOLVER E-NEWSLETTER

The Climate Solver e-newsletter is a bi-annual update of WWF-India's innovation initiatives as well as other significant news from the cleantech innovation ecosystem.

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WWF-INDIA'S CLIMATE SOLVER 2016 WINNERS FELICITATED

The Climate Solver 2016 winners were announced in WWF-India's fifth annual Climate Solver Awards ceremony held on 27th November 2017. The two Indian SMEs - Basil Energetics Private Limited and Atomberg Technologies Private Limited - were conferred with WWF-India's Climate Solver awards under the GHG reduction category.

The awards were presented by the Chief Guest, Sh. C. K. Mishra, Secretary, Ministry of Environment, Forest, and Climate Change, Govt. of India in the presence of Mr. Ravi Singh, Secretary General & CEO, WWF-India, Mr. V. Subramanian, Former Secretary, MNRE, Mr. Krishan Dhawan, CEO, Shakti Sustainable Energy Foundation and Ms. Seema Arora, Deputy Director General, CII-ITC Centre of Excellence for Sustainable Development.

With this year's edition, the number of Indian entrepreneurs on the Climate Solver Platform stands at 17 among the 100 honoured entrepreneurs recognized from around the world.



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In Pictures: Climate Solver Awards being received by:
Top: Basil Energetics; Bottom: Atomberg Technologies.

Basil Energetics emerged as the winner for its renewable energy based smart micro-grid that



Launch of the Report titled “Clean Energy Innovation Ecosystem in the SME sector in India”.

provides a complete decentralized energy solution for urban and rural areas. It offers a solution to manage green power in the form of a package which not only includes standalone solar panels, but also includes a range of innovative hybrid household electrical appliances such as a ceiling fan, LED lights, air conditioner, refrigerator etc. The demand and supply of electricity is managed by a smart micro-grid which leads to direct utilization of solar power to run hybrid equipments, thereby eliminating the need for conversion from DC to AC whilst being energy efficient. [Read more.](#)

The winning innovation by Atomberg Technologies is the energy efficient Gorilla ceiling fan which is based on Brushless Direct Current (BLDC) motor technology that consumes 65 per cent less electrical energy compared to conventional motor technologies. It serves as an excellent example of energy efficiency measures where technological intervention leads to substantial reduction of energy use without compromising on air delivery. [Read more.](#)

For detailed information about the winning technologies, read the [Factsheet here.](#)

WWF-India has partnered with the Confederation of Indian Industry (CII), New Ventures India, Centre for Innovation Incubation and Entrepreneurship (IIM Ahmedabad), Indian Angel Network, National Innovation Foundation and

Technology Development Board (Department of Science and Technology, Government of India) for the Climate Solver initiative.

The event also witnessed the release of a report titled “Clean Energy Innovation Ecosystem in the SME sector in India” jointly prepared by WWF-India and Okapi Research and Advisory. The report focuses on mapping the innovation ecosystem and analyses the challenges and opportunities that exist in the clean energy SME sector in India. [Read the full report here.](#)

A panel discussion was also held that converged views from multiple stakeholders, including representatives from the government, incubation centres, financial institutions, and climate solver SMEs to deliberate and discuss the way forward for accelerating clean energy innovation in the SME sector in India. The expert panelists were Dr. P.C. Maithani, Advisor, Ministry of New and Renewable Energy, Govt. of India, Mr. Sanjay Goyal, General Manager, SIDBI, Ms. Guneet Singh, Head-New Initiatives, Tata Cleantech Capital Ltd., Mr. Avnish Misra, CFO, Simpa Networks, Mr. Rohan Choukhar, Sr. Manager, CIIE- IIM Ahmedabad with Dr. Sejal Worah, Programme Director, WWF-India as the moderator.

Some of the ideas expressed in the panel discussion included:

- Capacity building of SMEs on packaging clean technology solutions and development of robust business plans that make it easier for financial institutions (both public and private) to consider them for financial support.
- Establishment of a national level information repository for registry of innovations & applications and availability of standardized particulars for the SMEs.
- Creating awareness among consumers in order to enable rapid acceptability of the innovative clean technologies developed by the SMEs.



WWF-INDIA'S CLIMATE SOLVER AWARDEES: SNEAK PEEK

Climate Solver Awardees 2016

Theme: Greenhouse Gas (GHG) Reduction

- Renewable Energy-based Smart Micro-grid using DC Appliances - Basil Energetics Pvt. Ltd.
- Gorilla Energy Efficient Ceiling Fans - Atomberg Technologies Pvt. Ltd.

Climate Solver Awardees 2015

Theme: Energy Access

- Prepaid DC Micro-grid (and USB stick based recharge) – BOOND Engineering & Development Pvt. Ltd.

Theme: Greenhouse Gas (GHG) Reduction

- Radiant Cooling Solution for Building Sector – Oorja Energy Engineering Services Pvt. Ltd.

Climate Solver Awardees 2014

Theme: Energy Access

- Progressive Purchase: Pay-as-you-go Pricing Model – Simpa Energy India Pvt. Ltd.
- Decentralised Energy Solutions for Underserved Households and Institutions – ONergy (Punam Energy Pvt. Ltd.)

Theme: Greenhouse Gas (GHG) Reduction

- BioUrja: Low Cost Dry Anaerobic Digester – GPS Renewables Pvt. Ltd.
- PLUGnCHILL: Phase Change Material (PCM) based Thermal Energy Storage Technology (for mobile cold storage) – Thermal Energy Service Solutions Pvt. Ltd. (TESSOL)

Climate Solver Awardees 2013

Theme: Energy Access

- Improved Biomass Cook Stoves – Envirofit India Pvt. Ltd.
- Low Cost Smart AC Solar Micro Grid – Naturetech Infrastructure Pvt. Ltd.

Theme: Greenhouse Gas (GHG) Reduction

- Decentralized Solar Thermal System for Industries – Aspiration Energy Pvt. Ltd.
- E Grid: A Low-Cost, Scalable Platform and Analytics for Demand Side Management – Ecolibrium Energy Pvt. Ltd.
- ARUN® Dish : Fresnel Paraboloid Solar Concentrator System – Clique Developments Ltd.

Climate Solver Awardees 2012

Theme: Energy Access

- Smart Microgrid– Gram Power (India) Pvt. Ltd.
- Paribesh Chula– Enfragy Solutions India Pvt. Ltd.

Theme: Greenhouse Gas (GHG) Reduction

- Air to Air Heat Exchanger for Cooling – Toro Cooling Systems Pvt. Ltd.
- Geothermal Building Cooling Systems – Green India Building Systems and Services Pvt. Ltd. (GIBSS)



CLIMATE SOLVER CATCH UP



CALL FOR
NOMINATIONS

CLIMATE SOLVER 2017

Nomination process for the 6th edition of Climate Solver Awards is now open. The last date for the application is 31st January 2018. [More details here.](#)



INDIAN SMEs AT COP23 -BONN, GERMANY

Indian SMEs showcased innovative Climate Solutions in an event jointly organized by WWF-India and UNIDO-India at the UN Climate Change Conference COP23- Bonn, Germany in November 2017. This event aimed to promote and showcase cleantech innovations by the SME sector as a solution for climate mitigation.

The event presented some of the success stories by Indian SME innovators followed by a panel discussion on 'Accelerating Cleantech Innovation in the SME sector in India'.

Two promising startups who are also WWF-India's Climate Solver Awardees presented their innovative technologies at the India Pavillion at the UN Climate Change Conference COP23- Bonn, Germany:

Climate Solver Awardee 2016 - Atomberg Technologies presented its innovative technology of energy efficient ceiling fans. [Read more.](#)

Climate Solver Awardee 2015 - Oorja Energy Engineering presented its radiant cooling solutions for the building sector. [Read more.](#)



ACCELERATE ENERGY SUMMIT IN SHANGHAI

The Accelerate Energy Summit held from October 31 – November 2, 2017 in Shanghai, brought together leading clean energy incubators and accelerators from all over the world, discussing strategies for supporting entrepreneurs leading the transition to a more sustainable global economy. The event was organized by New Energy Nexus, in collaboration with WWF's Climate Solver, EPRI Incubatenergy Network, the World Bank, and the Asia Development Bank. [Read more.](#)

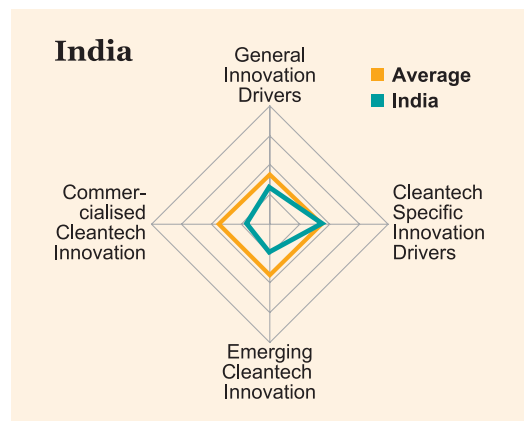


THE GLOBAL CLEANTECH INNOVATION INDEX 2017

A new report titled “The Global Cleantech Innovation Index 2017” prepared in partnership between UNIDO, WWF, Global Climate Facility and Cleantech Group was launched at an event hosted by WWF at the UN Climate Change Conference (COP23) in Bonn, Germany. The report investigates the innovation ecosystem for cleantech start-ups in various countries, including India.

Some key India findings are depicted as follows:

India’s performance in the indicator pillars, compared global average.



India’s strengths and weaknesses in key indicators

Relative Strengths	Relative Weaknesses
Strong culture of entrepreneurship	Low access to seed (and pre-seed) entrepreneurship support beyond friends and family network
Strong government entrepreneur support schemes	High barriers to entry in government-backed support schemes
Strong cleantech-specific government initiatives in support of startups	Lack of coordination between government-backed entrepreneur schemes at both state and federal level
Cleantech-friendly government policy agenda, with ambitious GHG emission targets and standards	Strong government support of a clean energy sector, but not as strong support for innovation in other clean technology sectors
Attractive destination for clean energy infrastructure investment	Risk averse growth capital investment market
Several innovation clusters and accelerators provide small loans and grants for start-ups	Start-ups fail to show commercial success due to a lack of domestic market demand

[Read the full report here.](#)

WHAT’S NEW IN CLEANTECH INNOVATION?

Three Indian energy startups - Smart Joules, Carbon Masters and Graviky Labs have been selected for Shell India’s #MaketheFuture Accelerator Programme 2017. [Read more.](#)

Karnataka Government sanctions grant of INR 40 lakh for three CleanTech startups under Elevate 100 programme. [Read more.](#)

Tata Power commissions India’s First Solar Carport. [Read more.](#)

Delhi-based Chakr Innovation has developed a way to curb pollution in a recyclable way. With its award-winning patented technology-Chakr Shield, it takes diesel soot from generators and converts it into inks and paints. [Read more.](#)



OTHER EVENTS & INITIATIVES

MIT Climate CoLab is looking for high-impact proposals on addressing climate change. Two contests are open on the platform, on Absorbing Climate Impacts and Circular Economy. Winners will be invited to MIT, join the Climate CoLab winners' alumni, and be eligible for seed funding and a chance to represent at the official launch event for GEO-6 during the Fourth UN Environment Assembly (UNEA-4) in March 2019 in Nairobi. [More details here.](#)

CII invites applications for the annual 'Innovation Challenge' competition under the Facility for Low Carbon Technology Deployment jointly implemented by UNIDO and BEE to identify innovative low carbon technologies and solutions to improve efficient end-use of energy and thereby, reduce GHG emissions in the long run. [Apply here.](#)



Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

www.wwfindia.org