



VOL.6

THE CLIMATE SOLVER

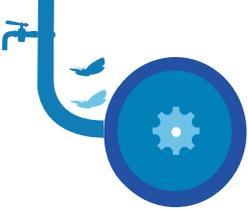
E-NEWSLETTER



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.

Supported by
John D. and Catherine T. MacArthur Foundation





9 STARTUPS SHOWCASE INNOVATIVE IDEAS SOLVING GLOBAL CLIMATE-RELATED CHALLENGES AT THE CLIMATE SOLVER DEMO DAY 2020

In March 2020, WWF-India hosted the Climate Solver Demo Day in New Delhi, in association with TIE Delhi-NCR, with support from John D. and Catherine T. MacArthur Foundation. The Demo Day was the culmination of months of intense business incubation support to cleantech startups under WWF's Climate Solver initiative, and a chance for them to showcase their cutting-edge innovative technologies addressing some of the biggest climate-related challenges. The event witnessed a unique gathering of energy focused startups along with domain experts, investors, government institutions, corporates, academia and media.

The startups who pitched this year included Ricron Panels, Battery Pool, A2P, Rays Enserv, Zodhya Tech, Strawcture, Navgathi, Aegeous Technologies and Enelyf Ventures. Presented to eminent audience representing Bharat Innovation Fund, Indian Angel Network, Sangam Ventures, Samunnati Capital, cKers Finance, and domain leaders representing TIFAC, Department of Science and Technology, AGNii, Invest India, UNIDO, CII, Villgro and many more,



Snippets from
the climate solver
demo day held in
New Delhi



the pitch presentations also delved on how these startups are creating significant business impact for their consumers whilst solving pressing environmental challenges.

The event also featured a special address by Mr Pramod Bhasin, Founder-Asha Impact, Chairman-Clix Capital, and Board Member-TiE Delhi-NCR, who spoke about the evolving cleantech startup ecosystem and provided interesting tips for entrepreneurs to keep in mind while pursuing their passion and pitching their innovations. Ms Ruchira Shukla, South Asia Regional Lead, Venture Capital, International Finance

Corporation, World Bank Group, was also present at the event and provided insights into the cleantech funding landscape in the country.

This initiative furthers Climate Solver's mission of enabling cleantech innovators in India by providing them with a platform where they can access funding, networking, and mentorship opportunities whilst also strengthening the Indian cleantech startup ecosystem.

Read the full PR [here](#) and event proceedings [here](#).



SEE WHAT OUR INNOVATORS AND THE INVESTOR COMMUNITY HAVE TO SAY ABOUT THE CLIMATE SOLVER DEMO DAY:

“The demo day experience was really exciting and special considering all the big industry and media people were present. The most important take away was the validation we received from the business and academic community. We truly felt that we are on a path that brings value to the society. The encouragement was tremendous. We have started interacting with few funds already and hoping to take things further.”

Rahul Chaudhary

Director, Deeya Panel Products

“The Climate Solver Demo Day was overall well organized. It enabled us to pitch in front of some serious set of investors. It has also been helpful in interacting with government officials including AGNIL, DST and TIFAC.”

Mr Ashok Suyal,
Founder, Rays Enserv

“Excellent event! A good platform to connect new startups with funding agencies. Look forward to more such networking opportunities by WWF.”

Dr GV Raghunath Reddy,
Scientist-E, Technology Missions Division(Energy, Water & all Other), Department of Science and Technology. Government of India

“Very well organized. Got some good leads. WWF must keep on facilitating such networking opportunities. Keep up the good work.”

Mr Rohan Choukkar,
Associate-Venture Investing, Bharat Innovation Fund/CIIIE IIM Ahmedabad



ENHANCING SCALE AND IMPACT OF CLEANTECH INNOVATIONS

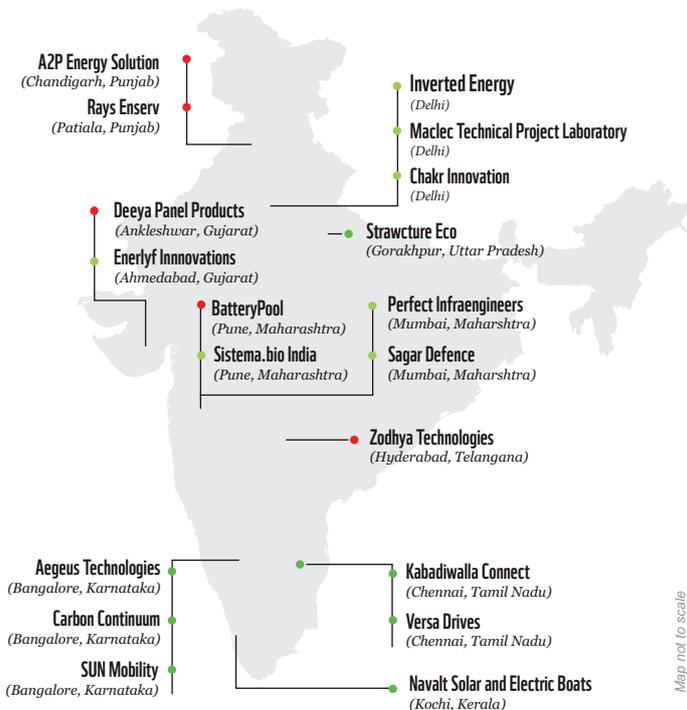
With an objective to support early and growth stage startups and SMEs through customized series of interventions in order to scale up their technology solutions and maximize impact creation, WWF-India in partnership with the Indian School of Business (ISB) DLabs launched the 2nd cohort of Climate Solver Accelerator Program in June 2019.



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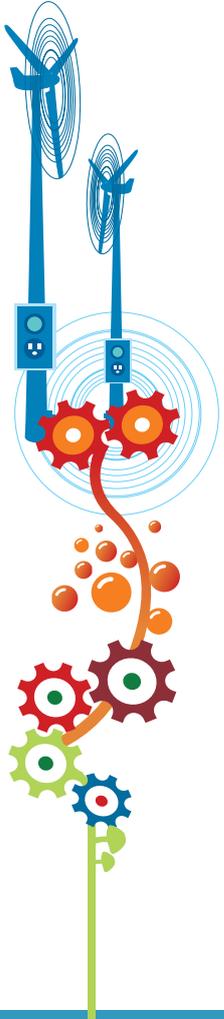
▲ Snippets from the immersion sessions under Climate Solver Business Accelerator and Capacity Development Programme

Ventures for Climate Solver Business Accelerator and Capacity Development Programme



● Business Accelerator Programme ● Capacity Development Programme

Map not to scale



A total of **19 promising ventures** from the Climate Solver applicant pool of 2018 were selected for the cohorts of Business Accelerator (BA) and Capacity Development Programme (CDP). This cohort of five early and fourteen growth stage clean energy SMEs and startups were supported to address technology, policy, market penetration and capacity needs, as well as broader generic capacity development support. The programmes supported entrepreneurs in business model validation through highly customized workshops, intensive engagement with domain specific mentors to understand the right product market fit, providing networking and industry connects, developing strategies for measuring and assessing the social impact created by their ventures as well as facilitating investments by refining their investment pitch decks and providing access to investors in the demo day.

VENTURE TESTIMONIALS

“One of the best accelerator programmes, especially for clean energy startups: the sessions are well designed from all the perspectives of entrepreneurship. This programme will always hold a key in our growth in the coming years.”

- A2P Energy

“Fantastic set of workshops and sessions for entrepreneurs at all stages of their journeys. BatteryPool has definitely benefited from the sessions especially in the context of putting things into perspective and setting our focus in the right direction. We may still not have hit upon the right business model but we know now what the loopholes are and what needs fixing.”

- BatteryPool

The sessions helped us in streamlining the leadership teams thought process by directing us towards shaping our business model aligned with the customers requirements. The limited number of startups in the cohort helped in deeper engagement with the mentors as well as the peers.”

- Zodhya Technologies

EXPANDED REGIONAL REACH OF CLIMATE SOLVER PLATFORM

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With an objective of broadening the reach of the Climate Solver platform, WWF-India partnered with TiE, The Indus Entrepreneur's Delhi-NCR and Bangalore chapter to hold Climate Solver regional workshops in Delhi and Bangalore on 21st and 24th January 2020 respectively. The workshops witnessed participation of over 150 representatives from SMEs and startups, incubation centres, foundations, venture capitalists, financial institutions, industry associations and other relevant stakeholders in the clean energy space. The panel discussions witnessed interesting insights from Mr Saurabh Srivastava,



Chairman Emeritus, TiE Delhi-NCR & Chairman, Indian Angel Network; Mr Rajan Anandan, President, TiE Delhi-NCR; Mr Kartik Chandrashekhar, Founder & CEO, Sangam Ventures and Ms Paridhi Mishra representing Chakr Innovation at the Delhi edition, as well as from Mr Shyam Menon, Co-Founder, Bharat Innovation fund and Infuse ventures; Mr Vijetha Shastry, Executive Director, TiE Bangalore Chapter; Prof Monto Mani, Professor, Indian Institute of Science and Mr Som Narayan, Co-Founder, Carbon Masters India at the Bangalore edition. The deliberations revolved around the role of incubators, academia, investors and financiers in accelerating cleantech innovation, the SME perspective as well as securing investment and scaling up.



◀ Snippets from the Climate Solver regional workshops held in Delhi (above) and Bangalore (on the left)

© WWF-India

BRINGING INDIAN CLIMATE INNOVATIONS TO THE FOREFRONT AT THE GLOBAL FORA

Climate Innovations by the startups and SMEs took centre stage during the event organized by **WWF-India** on 'Climate Innovation in the SME Sector in India' at the India Pavilion at UNFCCC COP 25, Madrid on 12 December 2019. The event aimed to showcase some of the success stories and innovative clean technology solutions by the Indian start-ups and SMEs, highlight the Indian government's focus on enabling innovation and entrepreneurship, and explore the role of international cooperation in accelerating innovative technologies for climate mitigation.

The event presented some of the success stories by Indian SME innovators followed by a panel discussion on 'Scaling-up climate innovations in the SME sector in India'.

The panel was chaired by Mr Upendra Tripathy, Director General, International Solar Alliance (ISA) with panelists being Mr Ajay Raghava, Deputy Director, Ministry of Environment, Forest and Climate Change, Government of India, Mr Kunal Upadhyay, CEO and Managing Partner, Bharat Innovation Fund, CIIE, Mr. Somanath Narayan, Co-Founder, Carbon Masters (and WWF's Climate Solver 2017 Awardee) and Mr Jay Hennessey, Project Leader - Mission Innovation's Net-Zero Compatible Innovations Initiative, RISE Research Institutes of Sweden. Some of the key points that emerged from the panel discussion emphasised on the need for development of enhanced networking opportunities amongst key stakeholders in the innovation ecosystem, including linkages to the global ecosystem; better financing options at different stages of growth of the SMEs; greater support for R&D, as well as technology validation and enhanced opportunities for outreach and visibility of the transformative solutions.



▲ Snippets from the WWF-India side event at the India Pavilion at UNFCCC COP 25 in Madrid



ONGOING STUDIES

Clean energy policy landscape in the SME sector in India

WWF India, in collaboration with cKinetics has initiated a study to map the policy and regulatory landscape across the different clean energy segments, with a focus on identifying the current state of support available to SMEs in different segments. The report aims to outline the successful policy measures as well as the existing gaps and challenges faced by various stakeholders in the cleantech ecosystem. It will also provide policy recommendations based on the viewpoints of various stakeholders that will help SMEs and startups grow in the clean energy space.

Low-carbon cooling solutions in buildings

In order to strengthen India's low carbon innovation ecosystem and promote climate- friendly cooling solutions in the building sector, WWF-India with its technical partner - PwC has embarked on a study to create a deeper understanding on low carbon cooling solutions in buildings. This study would help understand the need for sustainable cooling solutions in India, the opportunities and barriers for innovative low carbon cooling solutions in the country and chart out strategies to scale up these technologies.

Sustainable Space Heating Solutions in buildings in Himalayan Region

WWF-India is also working to strengthen sustainable space heating solutions in buildings in the Indian Himalayan region by promoting switch to sustainable heating solutions so as to reduce load on already scarce and valuable biomass. For this, WWF-India has partnered with TERI to undertake a study for mapping the space heating technologies in the Himalayan region, the associated barriers and opportunities, and the potential for adoption and scale up of innovative technologies.





RECOGNIZING CLIMATE INNOVATIONS THAT HAVE A POTENTIAL TO REDUCE GHG EMISSIONS BY 20 MILLION TONNES BY 2028



Three Indian SMEs that have developed innovative cleantech solutions were winners of the seventh edition of WWF India's Climate Solver Awards held during the 16th CII Global SME Business Summit on 24th September 2019.

Awarded by the Chief Guest, Sh. Ram Mohan Mishra, Additional Secretary & Development Commissioner, Ministry of Micro Small and Medium Enterprises, Govt. of India, the three ventures – Deeya Panel Products Pvt. Ltd., Altigreen Propulsion Labs Pvt. Ltd. and Maclec Technical Project Laboratory Pvt. Ltd. have been conferred with the Climate Solver awards under the GHG Reduction category.



Deeya Panel Products, Altigreen Propulsion Labs and Maclec Technical Project Laboratory receiving the Climate Solver award 2018, in the presence of Sh. Ram Mohan Mishra, Additional Secretary & Development Commissioner, Ministry of Micro Small and Medium Enterprises, Govt. of India, Smt. Alka Arora, Joint Secretary, Ministry of Micro Small and Medium Enterprises, Govt. of India, Mr Ravi Singh, Secretary General and CEO, WWF-India and Mr. V. Subramanian, Former Secretary, Ministry of New and Renewable Energy, Govt. of India.

Amongst the awardees this year, Deeya Panel Products was recognized for its one of a kind solution to tackle plastic waste. With their unique technology, they convert multi-layer plastics, that cannot be conventionally recycled, into low-cost and high quality building materials called Ricron Panels. These panels serve as a potential substitute to plywood, cement sheets and metal sheets, with applications across sectors such as industrial, housing, furnishing and civil construction.



Ricron Panels- Construction Panels using Waste Multilayer Plastics- Deeya Panel Products

Altigreen Propulsion Labs was awarded for its technology to create clean and affordable transportation. The venture has developed a low-cost retrofit system, known as HyPixi – that transforms fossil fuel-based vehicles into hybrid electrics, leading to reduction in fuel consumption and emissions by over 20%. Altigreen’s HyPixi is a retrofit product that can be installed in petrol/diesel cars, as well as Light Commercial Vehicles (LCVs).



HyPixi- Hybrid Retrofit System for Vehicles - Altigreen Propulsion Labs

Maclec Technical Project Laboratory has developed a simple, sustainable and indigenous hydropower innovation called Varun III. A surface-water based turbine system, Varun-III can harness power from even small water bodies such as irrigation canals, rivulets or streams with a velocity as low as 0.7 meter per second. It is a reliable, sustainable and environment friendly technology that can cater to 24x7 electricity demand and can be beneficial for rural electrification and development of remote areas situated close to perennial water bodies, such as rivers, canals and streams.



Surface Water Velocity Driven Hydrokinetic Turbine - Maclec Technical Project Laboratory

In addition to addressing the critical environmental challenges being faced in the country pertaining to plastic waste management, degradation of natural resources and air pollution, the global adoption of these technologies can substantially reduce GHG emissions by 20 million tonnes by 2028.

With this year’s edition, the number of Indian entrepreneurs on the Climate Solver Platform stands at 22 among the 115 global entrepreneurs on the platform.

CLIMATE SOLVER CATCH UP



Nominations for the 8th edition of Climate Solver awards closed on 31st January 2020, and received applications from across the country, the evaluation process of which is underway. In addition to the adjudged awardees, select ventures may be provided an opportunity to receive business development support, mentorship as well as connect with investor community, under the expanded initiative.

Native Angels Network leads investment in renewable energy firm Carbon Masters

Native Angel Network, an arm of Madurai-based Nativelad Foundation has recently invested in Bangalore-based startup Carbon Masters, which is also a 2018 Climate Solver awardee. The company has developed a bottled bio CNG (compressed natural gas) brand 'Carbonlites', which is made by converting organic waste into clean renewable energy that can displace LPG for commercial cooking in restaurants and hotels. This latest round of funding will help the company expand its operations and reach new markets. Read more [here](#).

IAN collaborates with Caspian Debt to support startup innovation in India

The Indian Angel Network (IAN) has announced a Memorandum of Understanding (MOU) with Caspian Debt, a provider of debt and equity capital, in an effort to promote diversified funding for startups and small businesses. In addition to supplying capital support, the two entities will conduct various events to improve awareness about various funding options and structures available to entrepreneurs and empower early-stage startups across the country. Read more [here](#).

TWITTERATI CORNER



WWF India @WWFINDIA
 #ClimateSolver is back! Calling all #SMEs & #Startups with innovative #technology that can lower carbon emissions or enhance #energy access to apply for the awards! More details here: bit.ly/2DQ4lz2



The Sollar India @sollarsindia
 WWF India is currently on a look-out for SME (Small and Medium Enterprise) that have developed technologies to reduce carbon emissions or enhance access to clean energy.

Apply now. Find out more at: climatesolverhub.wwfindia.org/innovator-regi...



TIE Delhi-NCR @TIEDelhi
 Join us on Jan 21 for a discussion on Accelerating Cleantech Innovation in India with @RajanAnandan, President TIE Delhi-NCR, @TheSaurabhSri, Kartik Chandrashekhar of @sangamvc, Paridhi Mishra @chakrinnovation In collab with @WWFINDIA. Register now bit.ly/2TxJfJB.



Launched in 2012, @WWFINDIA's Climate Solver initiative seeks to tackle the climate crisis collaborating with startups and #SMEs in the clean tech sector.



DLabs @ISB_DLabs - Aug 29, 2019
 #ISBCLabs kicking off Day 1 of our @WWFIndia Business Accelerator Program. #Cleantech Startups from across the country are working with us to scale their ventures through our #ClimateSolver Accelerator in partnership with WWF-India (New Delhi). #DesignThinking #startupsatISB



TIE Delhi-NCR @TIEDelhi - Mar 6
 "Put yourself in the shoes of your audience and make presentations as easy as possible" - Prasad Bhasin talking about what a crucial role presentations play in pitching ideas.
 @iscapital @sahaimpat @Genpact @WWFINDIA @ClimateSolver @geetikadady!





OTHER EVENTS AND INITIATIVES

- ▶ Applications are invited from organizations, communities, cities, businesses, universities, governments and others for the **2020 UN Global Climate Action Award**. Spearheaded by UN Climate Change's Momentum for Change initiative, the UN Global Climate Action Award shines a light on the most innovative, scalable and replicable examples of what people around the world are doing to tackle climate change. More details [here](#).
- ▶ **Mission Innovation (MI)** invites applications for developing the next generation of renewable energy technologies. Activities also might include energy materials, catalysts, enzymes, microorganisms, models, tools and equipment, as long as those are strictly connected to the energy conversion process. More details [here](#).
- ▶ **The Liveability Challenge** is welcoming proposals to make cities in the tropics sustainable and future-ready. Aimed to close the financing gap between the ideas that will make our cities better and the investments that will make these solutions a reality, the challenge is looking for the most innovative and ground-breaking solutions in Urban Food Production, Circular Packaging and Decarbonisation. The winner will secure up to S\$1 million in funding for project development. More details [here](#).
- ▶ The United Nations Environment Programme is on the hunt for the next **Young Champions of the Earth**. This award is a forward-looking prize designed to breathe life into the ambitions of brilliant young environmentalists aged 18 – 30. More details [here](#).
- ▶ **Google** invites applications for Class 4 of Google for Startups Accelerator India. Under this, it is looking for startups that use technology like AI/ML to solve systemic problems in India. More details [here](#).
- ▶ **MIT Climate CoLab** is looking for high-impact proposals on addressing climate change. Ten new contests are open on the platform, on a variety of climate-related sub-topics such as GHG reduction in buildings, transportation, waste management, agriculture sector, & more. Winners will get a chance to present their proposals in international conferences conducted by MIT and join the Climate CoLab winners' alumni. Know more [here](#).



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YEARS IN INDIA

Working to sustain the natural
world for people and wildlife

together possible - wwfindia.org