







MOHUA-AFD
Swachhata Startup Challenge

# **TOP 30 STARTUPS**







#### **Ecosystem Partners:**













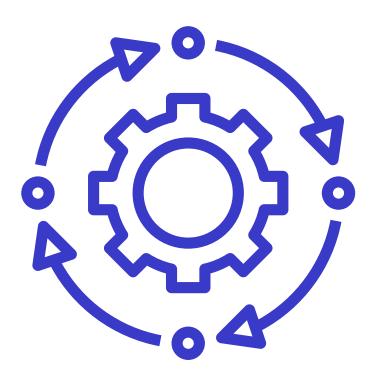




#### MOHUA-AFD **Swachhata Startup Challenge**

### **TOP 30 STARTUPS**

Reimagining India's Waste Management Ecosystem



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### **Swachhata Startup Challenge**

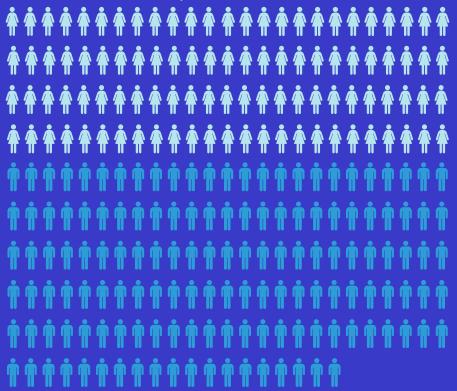
We received an overwhelming response with a total of 244\* applications for the Swachhata Startup Challenge. The application pool was diverse, innovative and unique. Each application was evaluated basis a wide range of parameters including but not limited to the following:

- Uniqueness & potential of the solution to solve the challenge in focus
- Robustness of the startup model
- · Potential for scalability
- Social Impact and Measurability

Furthermore, the applications were analysed to derive insights for a <u>comprehensive and</u> holistic understanding. Below is a summary of the analyses:

#### A total of 244\* unique applications received

100 women-led startups



<sup>\*</sup>Considering applications received for Swachhata Startup Challenge & eligible applicants of Swachh Technology Challenge



#### 30 startups shortlisted for the Pitching Session



**16** Zero Dump startups



5 Social Inclusion startups



4 Plastic Waste startups



Transparency startups

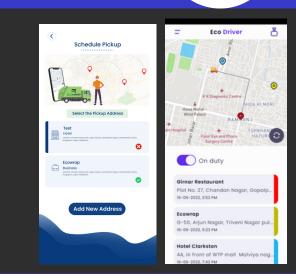
# **Ecowrap**

#### The Challenge

The absence of waste segregation at the source leads to many problems in the treatment of solid waste. Once different types of waste get mixed together, contamination increases and the waste loses its natural and monetary properties.

Ecowrap is solving this issue by segregating waste at the source and creating livelihoods for women via the upcycling of waste.





#### **The Service**

Ecowrap helps waste generators like hotels, restaurants, cafes, (HORECA) etc. by providing training and infrastructure for segregation of waste at the source.

#### **Key Services:**



Free Dustbins



Waste Pickup



Waste Audit Report

### **Impact**

**24K** 

metric tons of solid waste to be managed in a year 30K

metric tons of GHG emissions to be removed

#### Contact



Jaipur, Rajasthan





Angraj Swami in CEO

Angraj holds a B.Sc (Physics Hons) from Delhi University and has 8 years of experience in Waste Management.



Ajay Buri in

Ajay holds a B.Tech from IIT KGP and has 6 years of experience in Tech & Product development.



Manoj Sabu in CMO

Manoj holds an M.Tech from Rajasthan Technical University and has 12 years of experience in BD. Previously, he worked as a Regional Head at Genpact.



Chandrakant Swami

**CWHO** 

Chandrakant holds a B.Sc from Delhi University and has 6 years of experience in the Hyper Logistics Space.

SOCIAL INCLUSION

# **Mudita & Radhesh**



#### The Challenge

Tons of butchery chicken waste often get dumped into water bodies, causing environmental pollution, and ecological and health hazards.

Mudita and Radhesh is tackling this problem by converting chicken waste into wool, which is then turned into clothes and accessories. They also generate sustainable livelihoods for women in remote tribal areas.



#### **The Product**

Handloom Cloth, made from Butchery Chicken Waste (BCW), which is turned into clothes and accessories by tribal women and local village artisans.

#### **Key Features:**



Reduces Environmental Pollution



Reduces Health Hazards



Generates sustainable livelihoods

### **Impact**

47M

kg of CO2e recycled and recovered 340

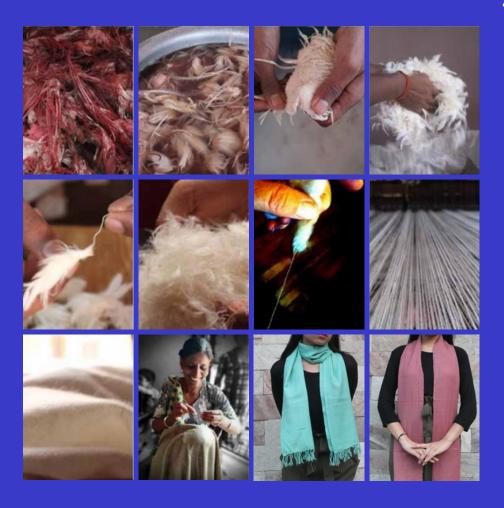
days of livelihood provided to 1L tribal women annually

#### Contact

≥ mudita.radhesh05@gmail.com

**4** 6377611021

Jaipur, Rajasthan





Radhesh Agrahari in Owner, Inventor

Radhesh is a Textile Designer and has completed his Design Education from NIIFT Mohali and IICD Jaipur. He was awarded the Design Excellence Award (2019) for industrial design, Aegis Graham Bell Award (2019), Future of Design Award (2020), German Design Award (2021), and the CIIE Design Excellence Award (2019).

TRANSPARENCY

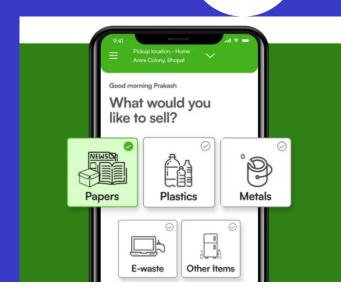
# The Kabadiwala



#### The Challenge

Landfills are spreading across India at a fast pace, making it more complex each day to manage the waste management value chain.

Kabadiwala's SAAS-based platform is integrating the fragmented waste industry into one platform to organize the supply chain - transforming the linear economy into a circular economy.



### **The Service**

A technology platform that allows users to sell and schedule free pickup of over 40 different categories of recyclable wastes.

#### **Key Features:**



SaaS-based platform



Door-to-door free pickup service



40+ recyclables

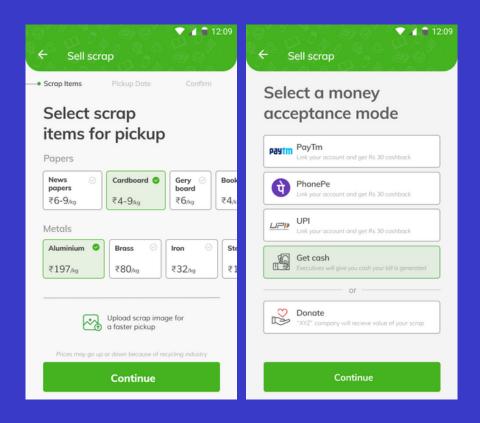
### **Impact**

400

tons of waste recycled per month 83K

trees saved through their recycling

- anurag@thekabadiwala.com
- **9**993717196,
- Madhya Pradesh





Anurag Asati in Co-founder

Anurag is an IT Engineer from Bhopal with 8 years of experience in the waste management sector. He is a Brand Ambassador of Madhya Pradesh, a software engineer by qualification, and a social engineer by passion.



Kavindra Raghuwanshi in

Co-founder

Kavindra has 10+ years of experience in IT and is working to organize the unorganized waste management sector with technology.

PLASTIC WASTE

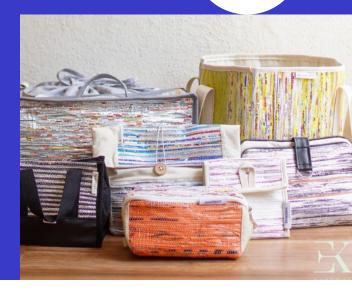
### **Ecokaari**

# ecokaari

#### The Challenge

Ecokaari Private Limited is working towards the conservation of the environment by reducing the amount of waste plastic that ends up in the landfills and oceans.

They also aim to provide job opportunities to individuals from less privileged backgrounds to learn and acquire new skills.



#### **The Product**

Upcycling waste plastic into bags and wrappers using a unique process of Handloom weaving. This is done using a traditional Charkha and Handloom, to make premium handcrafted items.

#### **Key Products:**



Handcrafted Handbags



Handcrafted Office Decor



Handcrafted Home Decor

### **Impact**

16.8L

plastic bags recycled people employed

- □ nandan@ecokaari.org
   □
- 9702422111
- **Pune**, Maharashtra





**S Nandan Bhat** in CEO, Founder

Nandan Bhat has over a decade of experience working in Business Development and Procurement sectors of reputed companies like Tata Telecom, Sony, Future Group and Sify. He has expertise in managing projects, large teams and market relations.

# **PadCare Labs**



#### The Challenge

Sanitary waste generated throughout the year ends up in urban landfills, where they take a minimum of 800 years to decompose.

PadCare Labs aims to bring positive changes in the sanitary waste disposal system with a broader vision of safeguarding women and waste-pickers. They also aim to reduce its adverse impact on the environment.



#### The Product

PadCare is an automated hygiene management system that generates harmless, recyclable output out of used sanitary napkins.

#### **Key Features:**



Patent-pending technology



**Pathogenic** lock



Cellulose, plastic produced as byproducts

### **Impact**

recycled

sanitary pads carbon emissions mitigated

- com 7678647899
- Mumbai, Maharashtra





Ajinkya Dhariya in Founder, CEO

Ajinkya is a Mechanical Engineer and Sanitation Entrepreneur. He is a product enthusiast and loves to solve consumer centric problems with a design thinking approach. His efforts were recognized by WIPO, TBC, WSSCC, UnLTD India, Dassault, UK- Royal Engineering Academy and the Government of India. PLASTIC WASTE

# Celligo Natural Fibres



### The Challenge

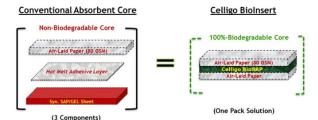
Over one billion noncompostable sanitary pads make their way into urban sewerage systems, landfills, rural fields and water bodies in India every month.

Celligo Natural Fibres is addressing this issue by producing a biodegradable alternative for Synthetic Super-Absorbent Polymers (SAP) used in sanitary pads.

#### One Pack Solutions with Cellligo Bio-Inserts

Celligo Bio-Insert contains Celligo BioSAP layer sandwiched between air-laid cellulosic layers.

Tri-layer design provide one pack solution to pad convertors by minimizing layers and process step.

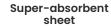


#### **The Product**

Celligo Bio-Insert is a biodegradable alternative for Synthetic Super-Absorbent Polymers (SAP) used in sanitary pads.

#### **Key Features:**







Following international standards



Biodegradable

### **Impact**

Celligo's vision is to produce and supply Celligo biopads at a low cost to students and working women in rural India. They will target 200+ schools and colleges in the next 2 years.

- ĭ sabapathy009@gmail.com
- **\$800984309**
- O Delhi





### Sabapathy Sankarpandi in CEO

Sabapathy's aim is to develop green technology to produce sustainable and biodegradable materials. He holds a Diploma and a B.Tech in Polymer Technology and an M.Tech in Poymer Science and Technology. He has also been awarded a Ph.D from IIT Delhi.



**Prof. A. K. Ghosh** Professor

Prof. Ghosh is a Professor of Polymer Science & Engineering at IIT Delhi and a Fellow of National Academy of Sciences, India. He obtained an M.Tech degree in Chemical Engineering from IIT, Kanpur, India and a Ph.D. in Chemical Engineering from the State University of New York at Buffalo.

# **RCube Recycling**



#### The Challenge

Waste printer cartridges, an untouched segment of e-waste, makes up 12% of the total e-waste generated globally.

RCube Recycling Pvt Ltd, an MPCB authorized ewaste dismantler, is working towards recycling waste printer cartridges in India, thereby contributing towards reducing e-waste and imports of digital printing products.



#### **The Product**

An innovative recycling process that ensures printer cartridges are 100% recycled without creating any waste in the process.

#### **Key Products:**



Zero waste within process



Innovative process



Ensures 100% recycling of cartridge

### **Impact**

9L

kgs of printer cartridge waste recycled 5L

kgs of plastic diverted from landfills

- info@rcuberecycling.com

  info@rcuberecycl
- 918369684193
- Mumbai, Maharashtra





Ravi Ravariya in CEO

Ravi completed his graduation and post-graduation from M. L. Dahanukar College of Commerce. He has 6 years of experience in Refurbishable Product Development and 4 years of experience in Production Process Management.



Mahesh Ravariya in COO

Mahesh completed his graduation from Rizvi College of Engineering. He has 6 years of experience in Refurbishable Product Development and 4 years of experience in Production Process Management

**Bintix Waste** 

Research

### The Challenge

Current methods of waste collection, with poor data and documentation, are at the root of hazardous, environmentally unsafe practices and poor quality of life for waste workers. To combat these problems, Bintix Waste Research Private Limited is working on the ability to trace waste from source to end-point.



#### **Why Bintix?**



Get Paid for your waste We pay a per kg price for all your dry waste



Zero Waste to Landfill

Guaranteed recycling for every kg of dry waste picked up



**Green Guarantee** All recyclables sent to Certified recyclers



Convenience Scheduled pickup at vour door step



Compliance Compliance with latest regulations on solid waste management



**Accurate Weight** All our collectors use digital weigh scale

#### **Key Environmental Metrics**



#### The Product

Technology platform, developed in-house, that tracks collection, weighing, sorting and recycling of dry waste coming from each household.

#### **Key Features:**



Individualized dashboards for households



**OR-coded** bags for tracking



**Ensures zero** contact with waste for safety

### **Impact**

MT dry waste diverted from reachina landfills

individuals employed across 7 cities

#### Contact



**O** Hyderabad, Telangana

#### **Pickup Process**



#### **Waste Collection Bags**

6 barcoded recyclable bags are provided to every household every month. Bags are linked to individual household. DO NOT lend, borrow or exchange the bags!



#### **Weekly Pickup**

Bintix picks up dry-waste bags weekly on a designated day



#### Sorting & Processing

The waste is segregated at the warehouse and sent to Certified Recyclers

### **Founding Team**



#### Dr. Jayanarayan Kulathingal in

Co-founder, Director

Dr. Jayanarayan holds an M.S. (Pharm) Biotechnology from National Institute of Pharmaceutical Education and Research, (NIPER) Punjab. He has also completed a Ph.D. in Pharmaceutical Drug resistance and a Post-Doctoral Fellowship in Neuroscience.



#### Roshan Miranda in

Co-founder, Director

Roshan is an internationally published author with a Ph.D in Developmental biology and Genetics. He holds a Masters degree and a Bachelor degree in Pharmacy and has experience in market entry, product placement, process/service optimization and M&A due diligence.



#### Udit Patidar in

Co-founder, Principal Product Manager
Udit holds an MS in Electrical Engineering from the Royal
Institute of Technology (KTH), an MBA from Cornell
University (Product Management focus), and a PhD in

Computer Science from the University of Houston.

**TRANPARENCY** 

# KNP Arises Green

Energy

### The Challenge

Discarded cooking oil, that is used multiple times, can cause health issues such as acidity, obesity, heart disease, diabetes and even cancer.

KNP Arises Green Energy Pvt Ltd is building a marketplace for the disposal of used cooking oil. It then converts the used oil into biodiesel to promote a greener and pollution-free environment.



#### **The Product**

A platform for hotels, restaurants, kitchens, industries and other food businesses to dispose of their used cooking oil in a traceable and effective manner.

#### **Key Features:**



User friendly platform



Transparency in waste oil movement



Real-time information

### **Impact**

2.5M 3M

litres of oil collected till date

kgs of CO2 Emission saved

- □ arises.org@gmail.com
- 9983635111
- **O** Jaipur, Rajasthan





Sushil Vaishnav in Co-founder, CEO

Sushil holds a B.Tech in Food Technology and an MBA in Operations from Symbiosis Pune. He has previously worked in International Procurement, Logistics, Warehousing, Demand Planning, Cold Chain Management, ERP Implementation and Business Development.



Kirti Vaishnav in Co-founder, COO

Kirti holds a B.E In Electronics and Telecommunications and has over 10 years experience in Project Management, Supply Chain, Tech Development and Data Science. She has worked with companies like Knight Frank, ZTE and Gourmet Full.

### **MuddleArt**

# muddleart textile waste management

#### The Challenge

Up to 25% of fabric is lost in the cutting & manufacturing process of textile & related products. While 100% of all waste fabric can be reutilized via recycling or upcycling, this does not happen due to difficulties faced in waste management. MuddleArt provides customised solutions for managing preconsumer textile waste through an accountable & traceable waste management system.

Transformation of the waste into a product or application of higher value





#### **The Product**

An eco-circular model that increases the value of waste by sorting pre-consumer textile waste into recyclables and up-cyclables.

#### **Key Features:**







Eco-circular model



Traceable system

### **Impact**

1.8K 2.1K

MT of waste processed

people provided with dignified livelihoods

- sanjay@muddleart.com
  9560686101
- **O** Delhi

#### MuddeArt Process

Sourcing waste from textile & apparel manufacturers Sorting Into Recyclable & Up-cyclable categories

Channelizing to Recyclers, Upcyclers, Designers & Artisans.











### **Founding Team**



Sanjay Chauhan in Co-founder, CEO

Sanjay has Master degrees in Social Work (IGNOU) & Philosophy (Annamalai University). His work experience has been spread over a variety of areas such as development, retail, and waste management. Sanjay's vision is not only to create ventures out of textile waste but also to integrate informal workers and acknowledge their contribution towards a circular economy.

# MiniMines Cleantech

### The Challenge

Thousands of tons of batteries are discarded due to their short life span. These batteries have the potential to supply base materials for at least 60% of indigenous cell manufacture. The primary technologies for recycling LIBS available on the market are neither sustainable nor cost effective, and produce a lot of solid waste and hazardous gases.









Image of Li-ion batteries collected

Shredded battery material.

Current laboratory scale set-up available







#### **The Product**

MiniMines plans to transform the lithium-ion battery supply chain by offering large-scale sources of these domestic materials produced from recycled batteries and supplemented with sustainably mined material.

Large-scale source of materials

#### **Key Features:**



Sustainably mined materials



Materials produced from recycled batteries

### **Impact**

By recycling 30,000 tons of spent batteries, MiniMines can provide approximately 2000 tons of Li metal, 2000 tons of Cobalt, 1200 tons of Nickel, and 1500 tons of Manganese.

- **5** 7903347483
- **9** Jaipur, Rajasthan



#### UNIFIED METHOD

Simple process to recycle all types of Li-lon batteries



#### **COST EFFECTIVE**

Flexible model based on economies of scale



### IP FOR RECYCLING IP FOR RECYCLING

IP development to gain competitive advantage

### **Founding Team**



### **Anupam Kumar in**Founding Director

Anupam graduated from the Birla Institute of Technology, Mesra in Chemical and Polymer Engineering. He is an experienced professional in the field of Cleantech Solutions and Management.



### Arvind Bhardwaj in Founding Director

Arvind has a B.Tech. in Nano-Biotechnology and an M.Tech. in Nanotechnology from the University of Rajasthan, Jaipur. He has worked in lead qualifications, R&D Management and product development in the technology industry for several years.

### **Aloe Ecell**



#### The Challenge

Conventional batteries produced in India are not eco-friendly or nonhazardous.

Aloe E-cell is combatting this problem with ecofriendly batteriesreplacing toxic and hazardous chemicals of conventional batteries with herbal electrolyte. They are also working to track, collect and recycle used batteries into fértilizers.



#### The Product

Aloe E-cell has developed aloe vera batteries, an eco-friendly alternative to traditional batteries. They are also working towards collecting and recycling used dry cell batteries which end up in landfills.

#### **Key Features:**



**Eco-friendly batteries** 



Non-hazardous batteries



Reduces Environmental **Pollution** 

### **Impact**

82% 71.6%

batteries reduced

landfills caused environmental due to dry cell pollution caused due to battery usage reduced

- ™ nimisha.varma@aloeecell.com
- **8052237937**
- **O Kanpur**, Uttar Pradesh





Nimisha Varma in Co-founder

Nimisha is an Engineering Graduate from RTU, Kota and an Engineering postgraduate from IIIT Bengaluru. She has been awarded the Iconic Women entrepreneur award 2019 by CWE, Women Achievers award 2020, Women Transforming India award 2021 by NITI AYOG for her work.



Naveen Suman in Co-founder

Naveen is a civil engineering graduate from Rajasthan Technical University and a Certified Product Architect from AUTODESK. He has 6 years of experience in the startup ecosystem. **PLASTIC WASTE** 

### Uneako

#### uneako Sharing Sustainable Happiness

#### The Challenge

The use of single-use plastic, waste generation, indiscriminate use of resources, lack of employment, water & electricity wastage are causing damage to society and the environment.

Uneako is working to solve these problems by creating eco-friendly products



Make planet happy

#### **The Product**

A range of eco-friendly, non-plastic, climatepositive products created by employing the help of marginalized communities

#### **Key Products:**



Bamboo toothbrushes



Bamboo speakers



Plantable pens and pencils

### **Impact**

tons of CO2 emission reduced

litres of water saved

- uneako2018@gmail.com
- **9650575205**







**Ankit Tripathi** in Founder

Ankit studied mechanical engineering at NIET. Together with his brother Atul Tripathi, he envisioned the concept of UNEAKO, where they decided to come up with unique alternatives for plastic to maintain the sustainability of our environment in the long term.

# **Angirus**

#### The Challenge

The Brick Industry has become the second-largest source of air pollution in the country. It consumes and degrades a large amount of soil, fuel and water.

Angirus Ind Pvt Ltd provides an eco-friendly and sustainable technology to make bricks and paver blocks using major waste generated in the country.





#### **The Product**

An innovative technology that combines plastic and other wastes to make lightweight, dampproof, and durable bricks and paver blocks.

#### **Key Features:**







Saves up to 20% brickwork cost



Zero carbon footprint

### **Impact**

50 200

Kg of plastic tons of industrial waste recycled waste recycled

- **8949008532**
- **9** Jaipur, Rajasthan





Kunjpreet Arora in Co-founder, CEO

Kunjpreet is a civil engineer graduate turned entrepreneur. She comes from a construction business background with two years of experience in technology development and market research.



Naveen Suman in Co-founder, CTO

Lokesh is a Civil engineer, a designer and now an entrepreneur. He comes with two years of work experience from a project management consultancy where he worked on several major projects with L&T contractors and a few other renowned developers of the Country.

**Quality Decor** 

**Dzines** 

### The Challenge

60% of scrap tyres are illegally dumped or burnt in Indiá.

**Quality Decor Dzines Pvt** Ltd has converted thousand tons of scrap tyres and saved tons of harmful toxic gases from entering into the environment.





#### The Product

Conversion and recycling of rubber tyres that are manufactured into high utility products and sold via Amazon and the company website.

#### **Key Products:**



Furniture & planters



Bags



**Rubber Tiles** 

### **Impact**

tons of scrap tyres processed

tons of toxic gases saved from entering the environment

- vaishali@dedzines.com
- **8800405678**
- O Kanpur, Uttar Pradesh





Vaishali Biyani in Co-founder Vaishali holds a B.c from Rajasthan University and has completed 14 years of work experience.



Ankur Mehrotra in
Operations Head
Ankur holds an MBA from Symbiosis, Pune and has completed 10 years of work experience.

SOCIAL INCLUSION

# Genrobotic Innovations

### The Challenge

Existing machines used for cleaning waste in manholes and sewers require human entry at some level.

Genrobotic Innovations has developed Bandicoot, the world's first robotic Scavenger, using Robotics & AI, which ensures total exemption from human entry to help eliminate the decade-old practice of manual scavenging.





### **The Product**

Bandicoot is a robotic scavenger that is engineered to clean any type of sewer manholes, without human intervention. It can get into sewer holes and scoop out materials that cause clogging and lead to overflow.

Uses Robotics & Al

#### **Key Features:**



Total exemption from human entry



Eliminates manual scavenging

### **Impact**

20%

of manual scavenging could be eliminated by one robot

- **\** 9037582571
- **© Ernakulam,** Kerala





Vimal Govind MK in MD, CEO

Vimal graduated in Mechanical engineering and has 5 years of experience in the Field of Robotics. He was awarded the 'Emerging Entrepreneur of the Year' by TiE Kerala in 2020.



Rashid K in COO

Rashid has a B.Tech. (focused in Computer Science and Engineering) and an MBA. His previous stint prior to entrepreneurship was with Tata Consultancy Services as a software engineer.



Arun George in Chief Administrative Officer

Arun graduated in Electrical and Electronics Engineering. He has 6 years of experience in the field of Robotics and is passionate about working of electrical systems.



Nikhil N P in CWHO

Nikhil has pursued a degree in Mechanical Engineering. He has 2+ years of experience from Tata group as Innovation Engineer in SAP ABAP and in Robotic innovation technologies.

### **GreenJams**



### The Challenge

45% of global carbon emissions come from the built environment and 2 billion tons of crop residues are burnt annually around the world.

GreenJams makes carbon-negative building materials out of crop residues and industrial byproducts to prevent burning of crop residues.



### **The Product**

Agrocrete - a first of its kind building material is made of crop residues and industrial by-products - to replace conventional clay bricks and AAC blocks.

#### **Key Features:**



25% improved energy efficiency



50% cheaper construction cost



350% higher thermal insulation

### **Impact**

8.5

tonnes of carbon dioxide captured **25** 

tonnes of carbon dioxide emissions prevented

- tarun@greenjams.org
- **5** 9591170791
- 🛇 Vijayawada, Andhra Pradesh





Tarun Jami in Founder, CEO

Tarun holds bachelor's and master's degrees in civil engineering and environmental sciences. He is also currently pursuing a PhD in civil engineering from CSIR-Central Building Research Institute, Roorkee and RMIT University, Melbourne. He is also an INK Fellow, Forbes 30 Under 30 and Meaningful Business 100 listee.

**TRANSPARENCY** 

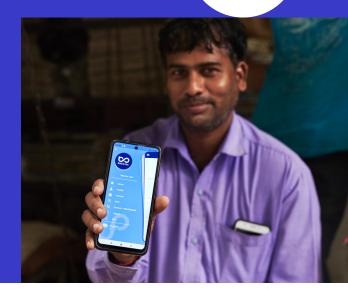
### **ReCircle**

## ReCircle Recover. Recycle. Rethink

### The Challenge

ReCircle (Swachh Sustainable Solutions Pvt Ltd)'s digital platform allows businesses that use plastic in their packaging to neutralize their footprint while complying with plastic waste management rules.

This will ensure that plastic is processed through registered entities and informal sector is formalized by aiding them with gap funding.



### **The Product**

An ethical and traceable reverse supply chain for plastics that partners with informal waste collectors and uses technology to track the material they send for recycling.

#### **Key Features:**



Ethical reverse supply chain



Tracks materials with technology



Offers plastic/EPR credits

### **Impact**

10.5M 2.2K

Kgs of material recovered

informal sector workers' lives impacted

- ĭ rahul@recircle.in
- 9769672111
- Mumbai, Maharashtra





Rahul Nainani in Founder, CEO

Rahul is a social entrepreneur with a finance background and a keen interest in policy & circular economy. He completed his graduation in Accounting & Finance and has cleared all 3 levels of CFA. He is the winner of the Social Impact Leader in Recycling 2022 – Business World, the Young Achievers Award 2021 – India Achievers Forum and many other awards.

**ZERO DUMP** 

### **JalSevak Solutions**



### The Challenge

JalSevak Solutions solves sewage disposal problems by recycling household greywater for use in toilet flushing and gardening.

They provide on-site decentralized treatment of greywater at a household level through a solution that is affordable, scalable and sustainable.



### The Product

JalSevak Solutions recycles wastewater from bathrooms, sinks, cloth washing and dish-washing and uses it for the purpose of flushing toilets and urinals.

#### **Key Features:**



Sustainable solution



Low installation & maintenance costs



Minimal operatina cost

### **Impact**

20K 20K

litres of greywater recycled every day

fresh water saved

- abhijit.sathe@jalsevak.in
- 9930125888
- Pune, Maharashtra





**Dr. Abhijit Sathe in** 

Abhijit is a Mechanical Engineering professional. He received a Bachelor degree in Mechanical Engineering from Shivaji University in 1999, an M.Tech from IIT Madras in 2001 and a PhD from Purdue University in 2008. Abhijit's core competencies are thermodynamics, heat transfer, refrigeration and air conditioning, renewable energy and liquid cooling.

### Trashback India

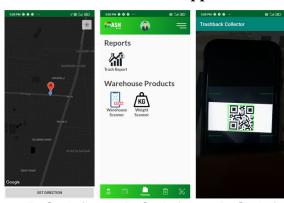


### The Challenge

With changing consumption patterns and rapid economic growth, it is estimated that urban municipal solid waste generation will increase to 165 million tonnes in 2030.

Trashback aims to improve every link in the household waste management supply chain - from the regular collection of waste to segregation and processing of organic waste.

#### **Trashback Collector Application**



#### **The Product**

Web and mobile applications providing ondemand waste collection and recycling services for different waste types (food, biodegradable, scrap, electronics, debris etc.)

#### **Key Features:**



On-demand collection and recycling



Web application



Mobile application

### **Impact**

Trashback's microsegregation process can lead to 95% segregation of waste creating a zero landfill model.

- 9861067399
- O Cuttack, Odisha







**Dev Nanda in** CEO

Dev holds an MBA in International Management of Resources and Environment from TU Bergakademie, and a B.Tech in Electrical Engineering from KIIT University, Bhubaneswar. He also has 4 years of experience as a Software Developer and Project Manager in MNCs (Cognizant) and fintech startups.



**Bishal Panda** 

Bishal studied at the Silicon Institute of Technology (MCA). He has more than 7 years of experience in various startups and MNC's (Deloitte) as a Software Developer.



Sumit Patel

Sumit holds a B.Tech from KIIT University. He has more than 3 years of experience in operations and management of a Start-Up (ExamKaffee).

SOCIAL INCLUSION

**JALODBUST** 

# Cherries Engineering

& Innovation

### The Challenge

Around 2 million manual scavengers need solutions for mechanization and 40 million toilet-pits are emptied in India every year (estimated for Manual Scavenging in toilets alone).

Cherries Engineering and Innovation India Pvt. Ltd. is addressing the challenge of manual scavenging through innovative products.



### **The Product**

JALODBUST Pride is portable, multi-functional Sanitation Service Equipment which pumps high density fecal and sanitary sludge from leachpits, septic tanks and manholes.

### Key Features:



Batterypowered



Decloggs sanitary systems



Multifunctional device

### **Impact**

Cherries Engineering and Innovation India aims to impact manual scavengers in the country by providing them with mechanization solutions.

- ĭ rakesh@jalodbust.com
- 919480094320
- **O Bangalore,** Karnataka





Rakesh Kasba in CEO

Rakesh holds a B.E. (Civil), an MBA in Operations
Management, a Post Grad Certificate in Project
Management and a Post Grad Diploma in Financial
Management. He has a total of 33 years' of work
experience and his areas of work are Strategic Planning,
Project Management, Execution, Nature activism.

**SOCIAL INCLUSION** 

### Spruce Up Industries

### The Challenge

India has vast amounts of garbage dumps lying near tourist places, markets, highways etc. Workers cleaning these sites have to manually pick garbage up with their hands which is an unsafe practice. Spruce Up's road cleaning machines make it possible for them to hygienically and safely remove garbage from roads, along with digital tracking.





### **The Product**

Unique garbage suction machines called Jatayu with which Safai Karmacharis can pick several tons of garbage in a contactless and safe way. This entire activity can further be digitally tracked and monitored.

#### **Key Features:**



Contactless & safe waste management



Digital tracking



State of the art machines

### **Impact**

15K

tons of waste collected and diverted for segregation & treatment 400+

individuals provided with safe employment

- □ abhishek.shelar@spruceup.in
- 9769304876
- Pune, Maharashtra





Abhishek Shelar in Co-founder, CEO

Abhishek graduated from IIT Bombay where he was awarded the Undergraduate Research Award for his work in finding a low-cost method for manufacturing Titanium Dental Implants. He also holds an M.Tech Ed from Harvard University.



Sumedh Bhoj in Co-founder, CRO

Sumedh graduated with a bachelor's in international business from MIT-WPU and ventured into Real Estate and Finance. He also hold an MBA in Logistics and Supply Chain Management from S.P. Jain School of Global Management.

**PLASTIC WASTE** 

Green Delight Innovations —

#### GreenDelight Innovations Private Limited

### The Challenge

1,13,000 tons of sanitary napkins is disposed every year and the number of women using sanitary napkins is growing.

Green Delight Innovations Private Limited is trying to address the problem of plastic in sanitary pads. They produce sanitary pads that are completely made of plant fibers and are free from plastic.



### **The Product**

Organic feminine hygiene products made from KENAF with no plastics and chemicals - a win-win solution for both women's personal hygiene and the environment.

#### **Key Features:**



Organic products



Free from plastic



Free from chemicals

### **Impact**

35L

tons of waste collected and diverted for segregation & treatment

- ĭ nivi1606@gmail.com
- **9**566826636
- O Coimbatore, Tamil Nadu





Niveda Ravikumar in Co-founder, Director

Niveda is a first generation entrepreneur and holds a B.Tech in Fashion Technology and an M.Tech in Apparel Technology from Kumaraguru College of Technology, Coimbatore.



**Gowtham S**Co-founder, MD

Gowtham is a first generation entrepreneur and holds a B.tech fashion technology from Kumaraguru College of Technology, Coimbatore. He also has 1.5 years of experience as research associate in Kumaraguru College, Coimbatore. **ZERO DUMP** 

### **Strawcture Eco**



### The Challenge

Strawcture Eco develops innovative, commercially viable products to mitigate the continuous depletion of natural resources.

It also integrates agriwaste streams in the value chain which support the livelihood of farmers.



### **The Product**

100% bio-based composite panels made from agriresidue to reduce the embodied carbon footprint of the built environment.

#### **Key Features:**



Reduces carbon footprint



Proprietary binding adhesive



Made from Agri-residue

### **Impact**

**9K** 

metric tonnes

150

carpenters provided with help to transition to green jobs

- shriti\_pandey@strawcture.com
  7607776756
- **O Kanpur,** Uttar Pradesh





Shriti Pandey in Founder, CEO

Shriti holds a Master's in Construction Management from New York University and a B.Tech in Civil Engineering . She is a Forbes 30U30 Asia 2021 Honoree. She is also a TedX Speaker and a United Nations Social Impact Challenge Award Winner in August 2018 in New York City. **SOCIAL INCLUSION** 

### **ARC-Robotics**

arc Robotics

### The Challenge

ARC-Robotics is solving the problem of manual scavenging.

Their 3-dimensional cleaning facility can be used to clean clogged pipes and sewer lines without any human intervention.



### **The Product**

Krait is a light weight and affordable robot integrated with multiple accessories to perform cleaning tasks without any human intervention.

#### **Key Features:**



No human intervention required



Cleans clogged pipes and sewer lines



Lightweight & affordable

### **Impact**

Krait aims to help eradicate the problem of manual scavenging, and help create dignified jobs in the waste sector.

- arcrobotics.indore@gmail.com
  7772923962
- **O Gwalior,** Madhya Pradesh





Rahul Vishvakerma in CEO

Rahul completed his education in Mechanical Engineering from Sangvi Institute of Engineering. He has 4+ years of experience in Design & Development and has worked as a production manager at CoproBattries, and a robotic production manager and robotic fixture developer at Metal Profile.



**Shubham Vishvakerma** in Software Developer

Shubham holds a Bachelors of Computer Application from DAVV Indore. He has 3+ Years of experience in Software Development, Embedded System Design and IoT. He has worked as the CTO at Thearc.in

**ZERO DUMP** 

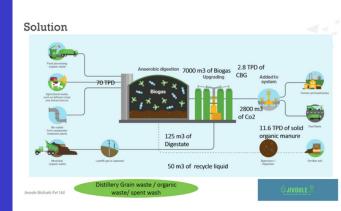
### **Jivoule Biofuels**



### The Challenge

Huge amount of waste is produced in India everyday.

Jivoule Biofuels transforms wet waste, organic waste, biodegradable waste, biomass waste, Agri waste, etc. into Biomethane or Compressed Bio Gas (CBG) or Renewable Natural Gas (RNG).



### **The Product**

CBG or biomethane, a clean, green, and renewable fuel that can be used as transport fuel, industrial fuel and cooking fuel.

#### **Key Features:**



Renewable fuel



Can be used as transport fuel



Can be used as cooking fuel

### **Impact**

Jivoule Biofuels aims to process 23800 tonnes of biodegradable waste, mitigating 2094 tonnes of CO2 emissions and creating 25 green jobs.

- chandrasekhar.nandigama@jivoule.com
- 918142909004
- **O** Hyderabad, Telangana





N Chandrasekhar in Founder, CEO

N Chandrasekhar holds MS in Chemical Engineering from the Missouri Institute of Science and Technology, USA and is Project Management and Lean Six Sigma certified. He has extensive experience in Chemical Manufacturing, Process Engineering and Quality Management.

# **Recycler India**

### SALTECH OF

### The Challenge

Globally, only 8% of plastics are recycled; the rest are landfilled, incinerated, or dumped into oceans. This is because traditional recycling cannot create valuable products from disposable packaging; single-use packaging loses 95% of its value after its first use.

Recycler India is working to convert this waste into high-performance composite building materials.



### **The Product**

A patented "Advance Recycling Technology" which transforms single-use plastics, construction & demolition, and industrial waste into high-performance composite building materials.

#### **Key Features:**



Carbon negative



**Affordable** 



Industrial IOT integrated

### **Impact**

120

MT of plastic waste recycled 330

MTCO2E of GHG emissions reduced

- aditya.shukla@saltech.co.in
- **4** 7405898105
- Ahmedabad, Gujarat





Aditya Shukla Co-founder, CEO

Aditya has a bachelor's degree in mechanical engineering from Gujarat Technological University. Prior to Saltech, he had working experience as a product developer in Sickle Innovations Private Limited.



Sudhir Shukla in Co-founder, CTO

Sudhir is a problem solver by heart and a Mechanical Engineer by education. Interested in Machines, he chose to learn CNC machine operation, Product Designing on SolidWorks and AutoCAD.

### **WeVOIS Labs**



### The Challenge

Due to a lack of monitoring and operations tools, municipalities have no control over the contract worker who is involved in waste collection - they are unable check if the workers stuck to their pick-up schedules and dumping procedures.

WeVOIS Labs is collaborating with ULBs, and supporting local government authorities to solve this problem in city waste management.



### **The Product**

An automated IoT-based efficient door-to-door waste collection services which include operations and real-time monitoring of waste collection vehicles.

#### **Key Features:**



Real-time monitoring



Door-to-door waste pickup



IOT-based service

### **Impact**

**1M** 

100%

USD revenue generated

retention rate

- □ abhishek@wevois.com
- 91 8077084247
- O Jaipur, Rajasthan





**Abhishek Gupta** Co-founder, CEO

Abhishek has a Bachelor of Technology in Mechanical Engineering from IIIT Jabalpur and a Post Graduate Diploma in Advance Business Analytics from Indian Institute of Management, Ahmedabad. For more than 5 years, he has been a social entrepreneur, designer, and technology leader, usually all at once.



**Abhinav Vashistha** 

Co-founder, CTO

Abhinav is an Acumen Fellow, Royal Academy of Engineering Leadership in Innovation Fellow, and holds a Bachelor's degree in Mechanical Engineering from IIIT, Jabalpur. Abhinav has won several prestigious awards and grants for his innovations and holds a couple of valuable patents.

**TRANSPARENCY** 

# Citygen Technology



### The Challenge

There is a lack of trust and traceability for source segregation and waste raw material amongst stakeholders in the waste supply chain.

There is also revenue leakage in waste collection taxes and municipal taxes across urban local bodies.



### **The Product**

India's First Full-Stack Waste Management Operating System to track daily Door-to-Door Waste Collection service, source segregation traceability, and tracing the amount and type of waste collected at the source.

#### **Key Features:**



Full-stack solution



Data driven



For all stakeholders

### **Impact**

18K

USD revenue generated

- □ citygenerp@gmail.com
- **91-8235639783**
- **O Kanpur,** Uttar Pradesh





Saurabh Suman in Co-founder, CEO

Saurabh is a B. Tech Graduate in Mechanical Engineering from IIT ISM Dhanbad. He has worked across and managed more than 7 Municipal Corporations across Jharkhand by providing them handholding on how to manage Door-Door Waste Collection.



**Kapil Suhane in**Co-founder, CPO

Kapil is a graduate in Petroleum Engineering from IIT ISM Dhanbad. He has been at the forefront of Product Development and Business Development across multiple startups. **ZERO DUMP** 

Nellikka Complete Solutions

# The Past of City

### The Challenge

Nellikka Complete
Solutions is working on
waste segregation,
monitoring and
management in a
scientific manner using
digitization. Using their tool,
an entire residential and
commercial area under an
Urban Local Body can be
mapped digitally by the
waste collecting team.



#### **The Product**

An IT integrated waste management tool to monitor and manage waste generation, collection, reusage and scientific disposal.

#### **Key Features:**



Waste generation details



Provides user fee collection details



Waste collection details

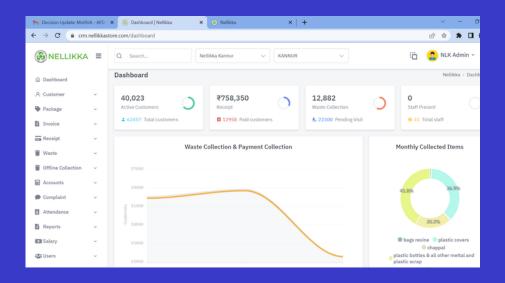
### **Impact**

8

11.6K

Urban Local Bodies and panchayats households covered

- ĭ fahad6268@gmail.com
- **© Ernakulam,** Kerala





**Nijin Narayanan** Founder

Nijin holds a diploma in Electronics and communication. He has four years of work experience with Reliance communications as a webworld express manager. He has also worked in Abu Dhabi, UAE as an operation manager in the logistics sector.



**Fahad Muhammed** 

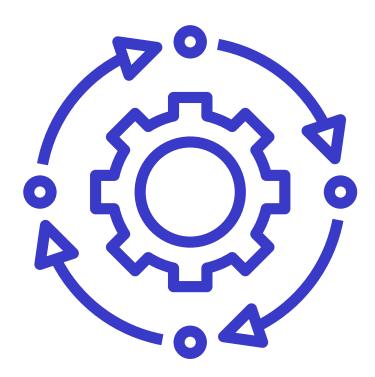
**Founder** 

Fahad holds a diploma in Electronics and communication. He has four years of work experience with Reliance communications as a webworld express manager. He has also worked in Abu Dhabi, UAE as an operation manager in the logistics sector.

#### MOHUA-AFD **Swachhata Startup Challenge**

### **PROMISING APPLICANTS**

from the Swacchata Startup Challenge



#### **Plastic Waste**

magnomer

#### Magnomer Industries Pvt. Ltd.

Produces printable inks that helps magnetically sort packaging elements such as labels away from bottles, transforming nonrecyclable packaging into recycle-friendly options



#### **HVA Chemical Solution Pvt. Ltd.**

Produces GX solid fuel, a fuel made by recycling LLDPE, LTPE, PP, and single-use plastics from waste yards. It emits 80% less CO2 than traditional solid fuels.



#### Cresa GreenTech Pvt. Ltd.

Is developing the world's only hot water soluble sanitary napkins and a digital bin, which will be installed in public toilets and washrooms to detect water-soluble pads.



#### **Recity Network Pvt. Ltd.**

Developed a digital platform, Waste Intelligence (WI), to create end-to-end traceability of plastics from source to recycling.



#### Zerund Manufacturing Pvt. Ltd.

Produces a light-weight, cost-efficient, earthquake & fire resistant brick that not just only saves time & money but also the environment.



#### **Baeru Environmental Service**

Offers a waste management app that helps monitor segregation at source during door-to-door waste collection and flow of materials.



#### Anabio Technologies Pvt. Ltd.

Have developed a biodegradable sanitary pad that dissolves and disintegrates when flushed.

#### CONTACT:

- in Vishal Salian, Head Of Innovation
- 7977585894
- info@magnomer.com
- www.magnomer.com

#### CONTACT:

- in Anbarasan. V, Founder
- **\$903828660**
- jaiganeshmathivanan@gmail.com
- www.hvaenergysolution.com

#### CONTACT:

- in Sarika Pathak, Founder & CEO
- **&** 8767049374
- sarika.kulkarni11@gmail.com
- www.cresagreentech.com

#### CONTACT:

- in Meha Lahiri, Co-founder, COO, CFO
- 9952120591
- meha.lahiri@recity.in
- m recity.in

#### CONTACT:

- in David Gogoi, Head of PR & Marketing
- 7002218935
- david.gogoi13@gmail.com
- www.zerund.com

#### CONTACT:

- in Divya Hegde, Director
- **1349696122**
- divya@baeru.in
- www.baeru.in

- in Mithun Shah, Founder, CEO
- 9442954144
- mithun.shah@anabio.in
- m www.anabio.in

#### **Plastic Waste**



#### Shudh-Labh Solutions Pvt. Ltd.

Produces solutions focused on decentralized processing of waste. They have designed, developed, and implemented low-cost aerobic composting solutions for communities.



- in Ramanan Natarajan, CEO
- 9880710830
- iramanan@sudh-labh.in
- mww.shudh-labh.in



#### Samudhyoga Waste Chakra

One of the few pyrolysis firms in the country to focus on automation and controls and develop an intelligence system by collecting data points using SCADA.

#### CONTACT:

- in Keshav Kumar, CEO
- 9790936504
- wastechakra@gmail.com
- www.wastechakra.com



#### **Naturepro Creators LLP**

Processes non-degradable plastic waste to generate renewable fuel. There is a negligible amount of emissions from their process in contrast to cement kilns where plastic waste is incinerated in huge quantities.

#### CONTACT:

- in Seema Sagar Bagal, Plant Head
- 9881176998
- www.natureprocreators.com



#### **Bare Necessities Zero Waste Solutions**

Provides alternatives to single-use plastic by manufacturing and selling zero-waste alternatives made by women-run manufacturing teams.

#### CONTACT:

- in Sahar Mansoor, Founder, CEO
- 9740326425
- info@barenecessities.in
- barenecessities.in



#### **PLASKON Plastics Eco Circular Pvt. Ltd.**

Offers integrated digital technology that connects waste generators, collectors, processors, recyclers through an ecosystem of digital cloud-based solutions.

#### CONTACT:

- in Ajith PK, CEO
- 9042729896
- □ ajithpk@plaskon.in
- plaskon.in



#### APChemi Pvt. Ltd.

Offers end-to-end expertise in producing high-quality liquids from post-consumer plastic waste, from plastic segregation, shredding, washing, and oil purification.

#### CONTACT:

- in Suhas Dixit, Director
- 9930205577
- suhas.dixit@apchemi.com
- www.apchemi.com

### APChemi

### Gruvala Construction & Infrastructure OPC Pvt. Ltd.

Pre-processes, post-processes, and recycles wastes into affordable, durable, attractive, lightweight, and eco-friendly speed breakers.

- in Varun Ramesh Salunkhe, Director
- 9168277684
- varunsalunkhe@gmail.com

#### **Social Inclusion**



#### **Jaivik Manure Private Limited**

Produces an organic fertilizer-making machine that converts agriculture, animal, and organic waste into organic fertilizer for small and marginal farmers.



#### **Humus Biosystems LLP**

Uses decentralized wastewater treatment plants for treating wastewater generated in public toilet complexes. They aim to use surveillance cameras for monitoring treatment plant operations.



#### **E&P Community Farms**

Produces a black soldier fly larvae-based waste processing unit which can process waste at the source, eliminating any need for waste transportation.



#### Scrapbuk Services Pvt. Ltd

Provides a free online service to sell waste, and users get paid for it. Users can also spend the earned money to get essential items and vouchers.

#### BreatheGreen India Pvt Ltd

Produces a spray-on daily cover for waste landfill areas that forms a thin layer of biodegradable cover, to solve problems of wind-blown litter, foul smell, disease spread, scavenging, fire hazard, etc.



#### AdMyBin

AdMyBin provides a fixture with a bin every 75-100mtrs on principal and market places. The Adbins installed are cleared daily and washed every 15 days to maintain hygiene.



#### Solinas Integrity Private Limited

Produces a septic tank cleaning robot to homogenize the sludge in the septic tank and pump it out without any manual intervention.

#### CONTACT:

- in Madhuri Das Adhikari, Director
- 8917290800
- jaivikmanure@gmail.com
- www.jaivikcart.com

#### CONTACT:

- in Vasanth Ramesh, Founder, CEO
- 9791858658
- vasanth@humusbiosystems.in
- www.humusbiosystems.in

#### CONTACT:

- in Saeel Momin, Founder
- 9146169956
- saeel.momin@gmail.com
- ep-farms.com

#### CONTACT:

- in Sukant Gupta, CEO, Founder
- 7814300366
- sukantgupta26@gmail.com
- scrapbuk.com

#### CONTACT:

- in Durga Mishra, Managing Partner
- **\** 7205164007
- info@lizardgrip.in

#### CONTACT:

- in Ankit Agarwal, Co-Founder
- 9831009691
- ankit@admybin.com
- admybin.com

- in Divanshu Kumar, CEO
- 9087864370
- divanshu@solinas.in
- m www.solinas.in

### Transparency



#### Vital Carbon

Produces an end-to-end waste management solution that uses blockchain to track key performance indicators and optimize waste management operations.



- in Shiva Bhaskar, CEO, Co Founder
- **1042155862**
- bhaskar@vitalcarbon.net
- trashnet.co



#### **ZWC Solutions Private Limited**

Offers a platform that solves the challenge of inefficient source segregation and provides real-time data for authorities to plan and manage infrastructure and resources efficiently.

#### CONTACT:

- in Tarak Nandan Sahay, CEO
- **8870610172**
- tarak@yesfullcircle.in
- yesfullcircle.in



#### Kira Pioneers Pvt Ltd

Provides a platform for their customers to sell their waste online. The platform works as a door-step service method.

#### CONTACT:

- in Sudeep Saxena, Founder
- **\$573028727**
- sudeep2@gmail.com
- www.rosuni.com



#### Repair My Mobile

Provides an online marketplace for mobile e-waste recycling. Repair technicians can sell or buy e-waste from other registered technicians or recyclers using this platform.

#### CONTACT:

- in Sidhartha Vijay, Co-Founder
- 8446123434
- sidharthavijay@gmail.com
- www.RepairMyMobile.co



#### **Workmap Systems**

Tracks goods flow across supply-chain via material transfers, engages consumers for waste segregation and accountability, brings attribution for pre and post-consumer waste and reduces waste in landfills

#### CONTACT:

- in Kenny Thomas, Business Head
- 9892218007
- social@getworkmap.com
- www.workmap.co



#### Nimble Vision Pvt Ltd

Produces a smart sewage monitor and management solution that can be retrofit to make existing waste & sewage infrastructure smart.

#### CONTACT:

- in Chinnayya Math, CEO
- 9535271529
- ceo@nimblevision.io
- nimblevision.io



Nimble Vision

#### Infinite Cercle Private Limited

Produces a Blockchain enabling tool to ensure the data is not tampered with and showcases end-to-end traceability.

- in Divya Shetty, COO, Founder
- 9080349915
- divya@cerclex.com
- www.cerclex.com

#### Vill Food Nodes India Pvt Ltd

They are developing, licensing, and leasing an IoT-enabled affordable bioreactor-based technology for economically feasible alternative protein and biodiesel in an industrial environment

#### CONTACT:

- in Arun Kumar Das, Co-founder
- 9937115558
- arundas.biswa@gmail.com

## **Zero Dump**



#### **EcoSattva Environmental Solutions**

Produced a web-based application for solid waste management called BOTRAM, which enables real-time data collection, reporting, and analysis of waste-related data centrally and efficiently.

#### CONTACT:

- in Nikhil Jognand, APM
- 9970737177
- nikhil@carpeindia.org
- www.carpeindia.org



#### **Agnys Waste Management**

Produces a solar-based smart in-vessel composter that standardizes physicochemical parameters like shredding, mixing, aerobic nature, temperature, odor minimization, etc.

#### CONTACT:

- in Hari Shankar, Founder
- 8960619145
- agnyswaste@gmail.com
- www.agnys.in



#### Anshaj Smart Waste Management

Produces an innovative and optimized system that automatically segregates waste to avoid manual segregation.

#### CONTACT:

- in Ashish Singh, Director
- 9996587049
- ashish221singh@gmail.com
- www.anshaj.in



#### **Malhari Projects**

Is developing a low-cost Infrared Continuous Pyrolysis System, which can directly convert any type of solid waste to air, with low energy consumption and low emissions of dioxins.

#### CONTACT:

- in Mihir Dixit, Founder
- 8140222477
- mihirdixit@rocketmail.com
- www.malhariprojects.com



#### Pelican Kenterra

Developed and patented composting inoculums in India. Researches, develops and delivers sustainable waste management solutions by continuously improvising and progressively adding value.

#### CONTACT:

- in Dr Manoj Narayanan, Director
- 9961787333
- manoj@kenterra.in
- kenterra.in



#### Klimrus Sustainable Solutions

Developed an automatic model that converts wet waste into fertilizer in a few days using solar energy.

#### CONTACT:

- in Rutvick Pedamkar, MD
- 9930396032
- rutvick@klimrus.com
- m www.klimrus.in

## **Zero Dump**



#### **WE The Recycling Company**

Conducts pan India awareness campaigns and collection drives and provide all clients EPR support, data destruction facility, and green certificates.

#### CONTACT:

- in Payal Nandurkar, Founder
- 9326227667
- payal.n@wetherecycling.com
- www.wetherecycling.com



#### Pehel Smart Solutions Pvt. Ltd.

Uses the processes of anaerobic digestion and chlorination to decompose oral waste, including tobacco and saliva, and conversion of oral expectorant into clean and reusable water.

#### CONTACT:

- in Aakriti Jain, Co-founder
- 9165186869
- aakritijain.asfpl@gmail.com
- ekpehel.in



#### **3R ZEROWASTE PVT LIMITED**

Developed a mobile application and QR Code-based collection of waste for proper reporting and analysis.

#### CONTACT:

- in Shiv Rao Challa, CEO
- **1093198828**
- www.0waste.co.in

#### Urban Darzi Pvt. Ltd

URBAN DARZI

Upcycling pre & post-consumer textile waste, wood, single-use plastic, and household waste into everyday lifestyle products.

#### CONTACT:

- in Akshit Bangar, Founder
- 9936336111
- akshit@urbandarzi.in
- www.urbandarzi.in



#### **Bhairav Renderers**

Fabricates in-house machines to recycle even putrefied slaughterhouse waste into byproducts.

#### CONTACT:

- in S B Kumar, Managing Partner
- 9442254334
- bhairavrenderers@gmail.com
- bhairavrenderers.wixsite.com/ website



#### Greengine Environmental Technologies

Have developed an incentive-based digital waste management model, where the collection is done in a segregated manner at the source.

#### CONTACT:

- Nitin Srivastava, Founder
- 9740939799
- info@greengine.co.in
- www.greengine.co.in



#### **Bessler Foundation**

Are developing an electric-powered vehicle for collecting cow dung from around Varanasi and mixing the same while moving around the city.

#### CONTACT:

- in Nagendrapratap Singh, Director
- 8850578749
- n4nagendrap@gmail.com
- www.perpetualgravity.com

## **Zero Dump**

#### **Biosphere**

Are working on organic waste management by treating organic waste using Entemocomposting - Hermetia Illucens larvae (BSFL) to reduce its mass by 50 %- 90%.



#### **Reclaimed Wood Furnishings**

Curates sustainable products with the help of salvaged wood and materials.

#### CONTACT:

- in Anup TV, Managing Partner
- 9894408020
- anuptv@ymail.com

#### CONTACT:

- in Rajesh Pandey, Founder, Director,
- 6388492480
- ereclaimedwood@gmail.com
- www.ereclaimedwood.com

#### Grance



Have built a network of expert recycling partners to keep clothing from landfills. They collect, sort, and recycle used garments and linens.

#### CONTACT:

- in Prasanth, Managing Director
- 9701446844
- prasanthsd4@gmail.com
- www.grance.shop

## **External Jury Members**



**Prof. Rakesh Arrawatia**Associate Professor,
IRMA



Sampath Kumar CEO, TIDE Projects



**Meeta Narsinghani** Associate Partner, Circulate Capital



Maya Chandrasekaran Co-Founder & Partner, Green Artha



Bharti Gupta Ramola Board Member, Villgro



Saurabh Chaubey General Manager, IIT Mandi Catalyst



Wilma Rodrigues
Founder & CEO,
Sahas Foundation



**Dr. Shivaji Dhawad**Executive Director,
InFED, IIM NAGPUR



Suresh Dhaka CEO, IIM Udaipur Incubation Centre

## **External Jury Members**



KVS Choudary Municipal Commissioner, Bhopal Municipal Corporation



**Sweta Tiwari** Vice President - Venture Building, Alteria Capital



Navneet Kaushik Group Head (Projects) & Program Director (Startups), Technology Development Board, DST, Gol



Nikhil Agarwal
Foundation for Innovation
and Research in Science
and Technology, IIT Kanpur



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# Ministry of Housing and Urban Affairs Team

**Ministry of Housing and Urban Affairs** 



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**Sehrish Hazarika** National PMU, Swachh Bharat Mission - Urban 2.0

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## **About Villgro**

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20.8M+

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