



**A report on the  
Pre-Launch Event of the 'Risk Sharing Facility for Waste Management Enterprises  
*The Claridges New Delhi, 12 August 2022***



Mr. Gaurav began by warmly welcoming all dignitaries and the participants. He explained that the NAMA Facility is a joint initiative by the following entities:

1. German Federal Ministry for Economic Affairs and Climate Action (BMWK)
2. UK's Department for Business, Energy & Industrial Strategy
3. The Danish Ministry of Climate, Energy and Utilities (KEFM)
4. The Ministry of Foreign Affairs of Denmark
5. The European Union
6. Children's Investment Fund Foundation (CIFF)

For the 'Waste Solutions for a Circular Economy in India' project, funding is being provided by BMWK and the EU. From the Indian side, the Ministry of Environment, Forest and Climate Change (MoEFCC) is the Nodal Ministry, and the Ministry of Housing and Urban Affairs (MoHUA) is the implementation partner ministry. The project was approved by the NAMA Facility<sup>1</sup> in September 2020 after a competitive selection process. He further stated that the NAMA Facility has annual rounds of competitions where projects from all over the world apply for funding and some of the most innovative and impactful projects get selected. The current project was shortlisted from 72 applicants in the first round of screening and was subsequently among the five final projects to be funded out of the shortlisted twelve. He briefly explained that the project has three components – technical assistance to selected cities, a grant funding mechanism for direct grants to cities, and the risk-sharing facility – which would be explained in detail later in the event.

He said that the risk-sharing facility (RSF) is an innovative financial instrument, a first-of-its-kind measure being piloted for the waste management sector in India. He expressed gratitude for the support and partnership of SIDBI (Small Industries Development Bank of India) in implementing the RSF. He explained that at the time of the event, the contract

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<sup>1</sup>The NAMA Facility supports developing countries and emerging economies that show an ambition to play a leading role in the field of climate protection. The Facility makes the necessary funding available for these countries to begin implementing their NAMAs (Nationally Appropriate Mitigation Actions). NAMAs are voluntary climate protection measures, which are embedded in these countries' national development plans. They are an important instrument for the achievement

between GIZ and SIDBI was ongoing, post which there would be some formalities to be completed with the Reserve Bank of India (RBI).

He stated that the purpose of the pre-launch event was to engage as a group with all the stakeholders, especially the waste sector entrepreneurs, and get their feedback regarding the design of the RSF as well as create a pipeline for the RSF once it is launched. He concluded by thanking all the attendees and expressing hope for a fruitful discussion among all stakeholders present at the event.

### **Special Address by Ms. Kamilla Kristensen Rai, Counsellor, Delegation of the European Union to India**

Ms. Rai began by expressing her pleasure in participating in the event and thanking all the other dignitaries and participants. She said that the EU and India have a strategic and close partnership. There is a common interest in sustainable development and agreement to further build and foster new synergies for joint contribution to a safer and greener world. This is in line with the 2030 Agenda of the UN Sustainable Development Goals and the Paris Agreement. She also said that the EU and India have a partnership for smart and sustainable urbanisation, agreed upon in 2017 at the EU-India Summit. She stated that the EU and MoHUA, GoI have agreed to step up their cooperation in developing smart and sustainable cities in India. This includes solid waste management and circular economy in the urban context.

She stated that increasing urbanisation, population growth, economic expansion, and changing consumption patterns are contributing to a mounting quantity of solid waste, which is a global challenge. She informed everyone that cities are responsible for 70% of the global CO<sub>2</sub> or GHG emissions through transport, buildings, energy, and solid waste. She also touched upon the Clean Energy and Climate Partnership between the EU and India, which was reconfirmed at the EU-India Summit 2017. She then mentioned the EU Green Deal (approved in 2020) – a set of policy initiatives with the aim of making the EU climate neutral by 2050. She then talked about the EU Global Gateway, a new strategy and a template for the EU to build more resilient partnerships with the rest of the world. She emphasised that for the EU to achieve its objectives, a partnership with India is essential.

She talked about the Waste Directive in the EU, which is a legal framework for treating and managing waste. It introduced an order of preference for waste management – called the waste hierarchy – which has five levels: prevention, preparing for reuse, recycling, energy recovery, and disposal. She stated that concentrating on the issue of solid waste management is important because proper management follows a low-carbon

circular economy approach, it can create significant economic value, and it can help avoid adverse environmental impacts. She then discussed two concepts that emerged from the India-EU forum held in May 2021: a) “suitable to context” – this is about the need to ‘think global and act local’, finding global solutions to local problems or context b) “togetherness” – to promote learning between cities, sectors, and stakeholders.

She concluded by expressing her happiness that the project is being funded by the EU and Germany and is being implemented by GIZ. She expressed her gratitude for the endorsement by MoEFCC and MoHUA along with the partnership with SIDBI.

### **Special Address by Dr. Antje Berger, Counsellor – Environment & Climate, Embassy of Germany in India**

Dr. Berger joined the event online. She began by welcoming the other dignitaries and thanking all the participants. She then passed on the regards of the new German Ambassador-designate to India and Bhutan, Dr. Philipp Ackermann, and mentioned that he is excited about the partnership with India in the fields of climate and energy. She congratulated MoEFCC, MoHUA, SIDBI, and GIZ for the innovative risk-sharing facility and formalising this financial instrument.

She stated that the negative effects of untreated waste can be seen everywhere. It contributed to air, water, and marine pollution, and GHG emissions leading to climate change, biodiversity loss, and adverse health impacts. She said that we need people with brilliant ideas, who turn their ideas into action to address the waste problem. Many ideas are lost due to a lack of funding or due to high financial risk. The RSF shall help to keep the ball going and serve as a safety net. She emphasised the urgent need for implementing low-carbon waste management solutions, producing alternatives to plastic products, waste segregation composting, biomethanation, recycling and upcycling, etc. Solutions such as these would help manage the issue of Municipal Solid Waste (MSW) while also contributing to climate change mitigation, job creation, and resource recovery and utilisation.

She explained how Germany started focusing on waste during the early seventies, moving from the disposal of waste to the prevention of waste by using the three Rs – reduce, reuse, and recycle. She mentioned the Circular Economy Act of Germany while stating that Acts are only successful if there is complete public participation. In Germany, for about 50 years, waste management has been a part of education, with children learning to segregate waste into 4-5 categories such as paper, glass, plastics, etc. There are also provisions to properly dispose of white waste. Decades of awareness and education have led to proper waste management becoming a habit.

She then discussed the deposit refund scheme or the bottle return system being implemented in Germany, wherein glass and plastic bottles of all sizes have a deposit paid (8-25 cents) while purchasing them, which is refunded when the empty bottle is returned. The glass bottles can be washed and refilled up to 50 times. The highest deposit of 25 cents on single-use plastic bottles discourages their use. It is further encouraged that citizens drink tap water instead of buying water bottles at all since the production of these bottles also has a certain carbon footprint. Dr. Berger, thus, stressed the importance of having a better quality of other services such as drinking water supply to help address the issue of waste management. She further elaborated that better transport, supply chains, storage facilities, etc. can help avoid the generation of waste.

She discussed the EU's Directive on single-use plastics and India's action regarding stopping the manufacture of certain single-use plastic items from 1 July 2022. She then explained how there are targets for recycling MSW across European nations – 55% by 2025, 60% by 2030, and 65% by 2035. Germany has surpassed the target already by reaching 67% recycling. She stated that the percentage of recycling cannot be the only indicator and instead avoiding the creation of waste should be given higher importance.

She continued by stating that the waste management industry in Germany is quite large with 2,00,000 people employed in approximately 3,00,000 companies with an annual turnover of approximately 40 billion euros. She also said that the German government is active globally in the prevention of waste creation, especially plastic waste. She stated that in the G7 and G20 presidencies the participant nations agreed on action against marine litter.

She stated that the German government supports partner nations with an amount of approximately 50 million euros to establish waste reduction and recycling technologies and that Germany is proud of its close cooperation with India. She praised the Swachh Bharat Mission and the 'Lifestyle for the Environment', i.e., the LiFE Movement announced by PM Modi. She said that with increasing urbanization

She stated that the German government supports partner nations with an amount of approximately 50 million euros to establish waste reduction and recycling technologies and that Germany is proud of its close cooperation with India. She praised the Swachh Bharat Mission and the "Lifestyle for the Environment", i.e., the LiFE Movement announced by PM Modi. She said that with increasing urbanisation, the waste quantities should not increase but rather decrease with the help of enabling policies, behavioural change, and increased producer responsibility. She emphasised the 3Rs of waste management and said that for the last R, i.e., recycling, investments are required to set up the required infrastructure. However, the waste management sector companies face

issues with funding due to perceived risks in the business models or due to high collateral requirements. She concluded by stating that she hopes the RSF helps with this, and that the German government is pleased that the NAMA Facility funding is being used for this innovative and first-of-its-kind initiative.

### **Special Address by Mr. Binay Kumar Jha, Director – Swachh Bharat Mission (SBM), MoHUA**

Mr. Jha began by welcoming all the dignitaries and participants. He discussed the Swachh Bharat Mission (SBM) which started in 2014, and the waste management scenario in India. An objective of the first phase of the mission was to make the country open defecation-free (ODF) and have 100% solid waste management. Currently, a target of processing 73% of the waste has been achieved. Before SBM was launched, only 26% of the waste was being processed. He stated that 1.5 lakh tonnes of waste are produced every day, and at present, we have the capacity for processing only 1 lakh tonnes. He stated that in SBM2.0 (started on 1 October 2021), a target to achieve 100% processing of waste has been set along with getting rid of all the legacy waste. He said that SBM2.0 has a fund of 1,41,600 crore rupees.

He further said that currently, in 2000 cities in India, there are 15 crore tonnes of legacy waste. This legacy waste occupies approximately 15,000 acres of valuable city land and a target has been set to rid of it by 2026. He also said that it has been proposed for all cities of India (~4500) to have material recovery facilities (MRFs) to deal with waste such as plastic waste. He continued by saying that there should be at least 10 public sector and at least 20-30 private sector big players in the waste management sector. Some small and medium-scale entrepreneurs exist but they face problems with funding. He suggested that each city should have about 5-6 waste sector entrepreneurs.

He went on by stressing the importance of segregation of waste at the source and how it is a vital part of the concept of a circular economy. MoHUA has also published a document that talked about the potential revenue from a circular economy, which was calculated to be about 30,000 crores per annum. He told how the NITI Aayog has constituted a committee for circular economy and MoHUA is one of the leading implementation partners. He then talked about integrating digital technologies with the current government missions and targets. In this context, he talked about the 'Swachhata Startup Challenge', the goal of which is to support some start-ups working at the nexus of technology and social innovation to solve India's waste management challenges. These start-ups shall receive seed money of 25 lakh rupees along with an opportunity to work with urban local bodies. He concluded by saying that the RSF shall be a positive step

towards creating entrepreneurship among private companies in the waste management sector.

**Keynote Address on 'Need for risk-sharing instruments & the state of SMEs in India' by Mr. Sivasubramanian Ramann, Chairman & Managing Director, SIDBI**

Mr. Ramann began by addressing the dignitaries and welcoming all the participants. He said that SIDBI has tremendous experience in working alongside finance and is a great mix of development work in conjunction with being a bank. He stated that the remit of SIDBI is to look into the interests of the MSME sector. He stated that the MSME sector is quite vast and goes beyond the listed companies. To give an idea, he said that there are about 1.4 crore entities that are GST registered.

He added that there are certain standards and rules that have been created in the EU and might soon be applicable to us as well. Eventually, when the standards become enforceable by law, the MSMEs might be hugely impacted and not know what to do. Hence, education and awareness are important. He stated that SIDBI does have a mandate to enhance awareness in the MSME sector. SIDBI has a pan-India presence (about 75 locations) and is suited to reach out to the various players and create a large impact.

He emphasised the need to foster behavioural change and create a huge change in the mindset of the general populace that everybody's waste is their own responsibility. He asked us to look at other nations which have been carrying out segregation at source and other best practices for quite some time now and think about the adoption of such practices in India as well. The practices need to become a matter of habit. Participation from the citizens can greatly help improve the waste management ecosystem.

He mentioned that SIDBI has a history of working with MoHUA, GIZ, the World Bank and many other notable partners. He concluded by saying that the issue of waste management seems daunting, considering the enormity of the country and the population. However, programmes such as these are a part of the solution, and we need to move forward on a larger scale. He finally said that India needs to attack the issues of waste management within the country and provide leadership for the same.

**The dignitaries were felicitated at this moment during the event.**

**Vote of Thanks to the dignitaries by Dr. R K Singh, Chief General Manager, SIDBI**

Dr. Singh began by wishing all the dignitaries present as well as the participants. He said that waste management is an important topic for SIDBI under their Green Agenda. He

stated it is heartening to see trust in SIDBI and their ability to turn disbelief into firm belief and work in previously uncharted territories successfully.

He said that SIDBI has a history of working with Germany (KfW - Kreditanstalt für Wiederaufbau or the Credit Institute for Reconstruction) since 1993. SIDBI has been doing a lot of green and innovative financing and has also been working repeatedly with GIZ since 2006. He continued by saying that SIDBI is assured in providing solutions for the value chain in the waste management sector. This is supported by the confidence shown by MoHUA in the recent project that they partnered in, i.e., Swachh Kashi Swavalambi Kashi. This project is a way for collecting plastic bottles through a public “vending machine”, setting up a recycling ecosystem for the plastic bottles, and formalising rag pickers.

He concluded by saying that SIDBI was excited to interact with the waste sector entrepreneurs at the event and get their input on the key challenges and potential solutions. The input of the stakeholders would be critical in redesigning the RSF, if required, and making it a success. He reassured the attendees that SIDBI is highly committed to the Green Agenda and greening the MSME ecosystem, for which “greening” the finance is important. There exists a dedicated vertical and team for the same.

## **TECHNICAL & COMMERCIAL SESSION**

### **Presentation on the ‘Waste Solutions for a Circular Economy in India’ Project by Mr. Jai Kumar Gaurav, Senior Advisor – Climate Change & Circular Economy, GIZ-India**

The presentation gave an overview of the ‘Waste Solutions for a Circular Economy’ project. Mr. Gaurav explained that NAMA stands for Nationally Appropriate Mitigation Actions and that in India one of the selected actions is waste management. A country can develop a NAMA project on its own or funding can be given by developed countries to developing countries. The NAMA Facility is a multi-donor pooled fund of about 100 million euros per year based in Germany. Annual competitions are held to select innovative projects.

He said that the ‘Waste Solutions for a Circular Economy’ project got approved in 2020 to 2025, with a budget of 17.3 million euros. MoEFCC is the nodal ministry and MoHUA is the implementation partner ministry. The overall target is to support the implementation and operation of a waste management processing capacity of 4500 TPD. Four technologies have been shortlisted – biomethanation, composting, recycling, and refuse-



derived fuels (RDF) for use in cement kilns. There are five NAMA Support Project (NSP) locations – Bengaluru, Patna, the state of Goa, Tiruchirappalli, and Varanasi.

He said that the aim of the project is to reduce 1.2 million tCO<sub>2</sub>e emissions through interventions during the project duration. He also explained the theory of change for the project consisting of three pillars/components and five outputs. The three components are technical assistance, the Risk Sharing Facility, and grant support (4.3 million euros given directly to cities).

Output 1 is supporting national and sub-national decision-makers in developing standard operating procedures (SOPs), standards, guidelines, and technical support for the waste management sector. This is mainly with MoHUA and some of the state missions. Output 2 is related to the grant funding mechanism and the RSF, wherein the financing aspects of the MSW management sector are addressed. Output 3 has two key areas. One is achieving segregation at the source by supporting NGOs in the five selected locations to spread awareness about segregation and create replicable models for segregation. The other is supporting the informal sector, enabling them to get formalised and reduce the conflict between the formal and informal sectors. The target is to support at least 500 informal sector workers and build their capacity. Output 4 is providing support to ULBs for purposes such as accessing SBM grants, tendering processes, etc. The target is to carry out training and capacity building for 500 ULB officials. Output 5 is supporting other stakeholders such as civil society organisations, citizens, etc. in promoting low-carbon waste management solutions like home composting. The awareness and IEC activities will benefit about 11 million citizens.

He concluded by stating that the RSF is a nationwide facility and can be accessed by entrepreneurs from anywhere in the country.

### **Presentation on the Details of the RSF and its Importance by Mr. Rajiv Kumar, General Manager, Green Climate Fund and Energy Cell, SIDBI**

Mr. Kumar began by stating that SIDBI has a Green Climate and Energy Efficiency Centre based in Delhi with a team of experts working towards “greening” the MSME sector. He gave an overview of SIDBI. It was set up under an Act of Parliament in 1990. Their mandate is to serve as a development financial institution to promote, finance, and develop the MSME sector along with coordinating with other relevant stakeholders in the space. The institution has a pan-India presence.

He explained that SIDBI serves its mandate mainly through indirect finance through public & private banks, non-banking financial institutions (NBFCs), microfinance institutions, etc. This forms a major chunk of their portfolio. SIDBI also provides direct

financing to MSMEs through green financing schemes. He then talked about the ten thousand crore fund being managed by SIDBI for the start-up ecosystem. He explained that SIDBI's mission Swavalamban is primarily for promoting mainstream entrepreneurship and creating sustainable livelihood opportunities. SIDBI is also working with MoHUA under the PM SVANidhi programme to provide loans to street vendors; loans to about 40 lakh street vendors have been provided to date.

He continued by stating that SIDBI has a 'Green Agenda' and that solid waste management is a topic of great interest under the agenda. SIDBI is also one of the accredited agencies of the Green Climate Fund. He explained that SIDBI has been very active in the space of facilitating MSMEs to have liquidity and for this purpose, they have created certain institutions such as the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE). Another example given by him was the Govt-created company National Credit Guarantee Trustee Company (NCGTC) which is managed by SIDBI. Through the work of these companies, it has been found that banks are more likely to grant a loan if such credit guarantees are available. This underlines the importance of the credit guarantee mechanism for creating increased liquidity or the development of certain sectors where financing is not readily available.

He gave another example of a risk-sharing facility (an ongoing project) being run with the support of the World Bank. It is a partial risk-sharing facility for energy efficiency and under it, the objective is to develop energy service companies (ESCOs) in the country. The benefit of this facility (up to 75% loan guarantee) is applicable to any energy efficiency project being undertaken by an ESCO. Through this project, SIDBI has also been able to encourage 14 lenders like SBI, HDFC, etc. to come forward and lend to such entrepreneurs.

All these examples illustrate how risk-sharing facilities provide a level of comfort and confidence to lenders and enable projects to get funding. Saying this, he moved on to talk about the proposed RSF. One of the aims of the proposed RSF is to remove the funding pain points for the waste sector. The proposed duration is five years. He explained that for an RSF, generally there is a 'TA' component in addition to the credit guarantee. The TA component translates to developmental or market-making activities. Under this RSF, GIZ shall undertake the TA activities in partnership with SIDBI, under guidance from MoEFCC & MoHUA. SIDBI shall empanel interested financial institutions after informing them about the project and creating awareness. The strong suit of SIDBI will be pre-screening the applicants using their financial and technical experts, which will make the banks more likely to finance the selected enterprises.

He went on to explain certain parameters/proposals of the RSF:

- Waste sector companies with an annual turnover of more than 25 crores shall be able to get a credit guarantee of up to 25% of the loan value.
- Waste sector companies with an annual turnover of less than 25 crores shall be able to get a credit guarantee of up to 50% of the loan value.

He concluded by saying that presently the size of the RSF is small as compared to the entirety of the waste management sector. However, the intention is to be able to show positive results and thus create a positive funding ecosystem. He also said that the purpose of the pre-launch event is to have a discussion with all the stakeholders and get inputs from the waste sector entrepreneurs in order to fine-tune the aspects of the RSF and make it a success.

## **Input on the Current Status of Financing and Expectations by Industry Representatives**

### **1. *Presentation by Mr. Mani Bajpai, CEO, Banyan Nation***

Banyan Nation is a plastic recycling and waste management company based in Hyderabad, Telangana. They work with informal recyclers and have a pan-India supply chain. They recycle HDPE bottles into bottles back again, thus helping brands use recycled plastic instead of virgin plastic in their products and packaging. Their clients include HUL and other FMCG brands.

Mr. Bajpai said that EPR regulations coupled with companies' own sustainability mandates have resulted in increased interest and activity in the field of plastic recycling in recent years. However, the quantum of venture capital (VC) and private equity (PE) funding available at present is insufficient to meet the overall demand and drive innovation. He stated this because the firms find the sector to be risky due to informal supply chains, concerns about policy enforcement, etc. He also said that many PE & VC firms lack the technical know-how to accurately judge the emerging technology and innovation in the sector.

He stated that the proposed RSF has great potential to facilitate access to global finance for waste sector SMEs and contribute to business growth and competition among them. The RSF could also help in the green economy transition by supporting emerging world-class technologies. He said the facility also has the potential to improve environmental standards, the reporting standards being used in India, and the creation of an integrated solution and market.

Another point he raised is the requirement of a new and relevant framework to evaluate and assess risk instead of the historical metrics and financials currently being used for the same. The traditional lending framework may not be suited to this burgeoning industry

and the emerging start-up space. The new framework could look at the cash flows, the innovation, and the order books. Using a lens based on the traditional lending system can be counter-productive for the RSF.

He also stated that personal guarantees are not suited to social entrepreneurs and corporate veil protection is required. Further, currency hedging raises the cost of funding which is not conducive to catalysing the entire industry. He concluded by reiterating the need to develop new frameworks to assess risk, circumvent problems of personal guarantees, and figure out a way to keep the interest rates relevant to the waste sector.

## ***2. Presentation by Mr. Ramakant Burman, MD & CEO, GreenTech Environ Management Pvt. Ltd.***

GreenTech Environ Management Pvt Ltd. is a waste management company (based in West Bengal) dealing primarily with biomedical waste. Their customers include hospitals, nursing homes, diagnostic centres, dental clinics, etc. The company has three CBMWTFs and 17 biomining plants in West Bengal, one biomining plant in Okhla, Delhi, and is carrying out MSW processing for the city of Varanasi (800 MT/day).

Mr. Burman said that certain tender amounts are so large that the partial credit guarantee (PCG) of 25% of the amount being provided by the RSF may not be sufficient. Certain tenders require bank guarantees, which banks provide against cash. This reduces the working capital available to entrepreneurs. Also, there are certain financial terms and conditions which prevent SMEs from participating in tenders despite having technical eligibility. In the end, he emphasised the need for viability gap funding to set up large-scale waste management projects.

## ***3. Presentation by Mr. Samir Jani, CFO, Nepra***

Nepra is a waste management and recycling company based in Ahmedabad, Gujarat, and specialising in municipal dry waste (including plastic). The company manages a waste quantum of ~560 TPD and has more than 800 people employed under it. It has three material recovery facilities (MRFs) in India.

Mr. Jani said that a lot of funding is needed for capital expenses of MRFs along with working capital. Also, the business/economic models for different types of waste management solutions may be completely different. In the case of MRFs, materials are sold from corporations, households, etc., and sold to recyclers. The composition of waste as well as the selling prices of the material can differ from day to day depending on several factors. He stated that this uniqueness of the business needs to be factored in while designing any financial instrument.

He emphasised the need for understanding the different business models in the sector, as explaining the business model to receive funding is a challenge. He suggested that the facility be active for 6-8 years instead of five years. He also said that foreign finance proves to be expensive and providing collateral against borrowed funds is a huge challenge. He concluded by saying that low interest rates would be beneficial and encourage borrowing from domestic banks.

#### **4. *Presentation by Mr. Arun Murugesh, Regional Director, Saahas Zero Waste***

Saahas Zero Waste provides end-to-end waste management services based on the principles of circular economy. They handle waste sustainably and responsibly for MNCs, tech parks, residential communities, and other bulk-generating organisations and institutions. The head office is in Bengaluru, and there are offices in multiple cities across India.

Mr. Murugesh said that MRFs form a crucial part of their supply chain and they have various social and environmental benefits. He discussed four pilot projects in rural Karnataka with decentralised MRFs that are commissioned by the state government and implemented by Saahas.

He said that these projects require a holistic approach in terms of awareness, mapping the supply chain upstream, and connecting with recyclers downstream. There is a need to establish a fully formal supply chain with abundant employment opportunities, especially for women.

He mentioned four streams for fund mobilisation to help scale up MRFs not only in rural areas but all over the country:

- The SBM fund at state level
- MNREGA, challenge fund, etc. at district, taluk and village level
- MP/MLA funds, special state funds
- PPP and CSR

He stated that these funds are still not enough to set up MRFs, with more funds needed for CAPEX. He concluded by saying that existing facilities like the Swachh Sankeerna units can be used to scale up into MRFs.

#### **5. *Presentation by Mr. Tarak Nandan Sahay, CEO, ZeroWaste Circular Solutions***

Zero Waste Circular Solutions is an international, tech-based, climate change, and circular economy company which started operations in India in 2020. It is Gurugram based.

Mr. Sahay began by stressing the importance of citizen participation to achieve effective waste management. He then expounded upon the concept of “Zero Waste Citizen” and the possibility of measuring/calculating individual contribution. The company has already enrolled more than forty thousand citizens and fifteen thousand students under this concept.

He said that access to funds is a big problem. This along with the fast-paced environment of start-ups without any proper support can lead to roadblocks. He also stated that waste needs to be renamed “misplaced resource” and a paradigm shift is needed. He concluded by saying that new entrepreneurs and start-ups which do not have a huge turnover yet or a long working experience need customised solutions to be able to grow and thrive.

#### **6. *Presentation by Mr. Rahul Khera, Founder, Balancing Bits***

Balancing Bits is Gurugram based social enterprise that provides waste management solutions through composting and biogas solutions to residential/commercial complexes, hotels, malls, etc.

Mr. Khera stated that even before finances, the framework and ecosystem is more important in the waste sector. There is a need of a hybrid of centralised and decentralised systems. He also stressed upon the importance of identifying the different players within the waste management sector and creating a detailed matrix for the RSF with information about segment of waste management, business model, financial model, and direct & indirect impacts. The various terms of the RSF (allocation of funds, interest rate, and collateral submission) should be determined by this matrix.

He added that there should be a safety net against government policies built into the RSF, so as to cushion the MSMEs against sudden and new policies impacting their business model. Finally, he concluded by saying that technology review should be another key factor considered by the RSF. There can be technologies that serve a similar purpose but have very different carbon footprints – low carbon technologies should be given preference.

#### **7. *Presentation by Mr. Ashish Kumar, Managing Director, Verbio***

Verbio is a German biofuel producer. The India office is in Chandigarh. They have recently commissioned Asia’s largest biomethanation unit in Sangrur, Punjab.

Mr. Kumar said that in the waste to energy sector, especially biofuels, it is beneficial to have the whole value-chain integrated with end-to-end operations. Reliance on third parties needs to be eliminated to reduce risk. He explained the challenge faced is that all the required machinery needs to be imported and this increases the overall cost. Also,

the aggregator model is not conducive to this sector. Another challenge is proper storage infrastructure for the feedstock to help maintain its quality. He also emphasised that we should look at solid waste not just as MSW but also include agricultural or agri-industrial waste.

He suggested carbon credits as a revenue stream to make business case viable. He concluded by saying that attractive low-cost green financing would be preferable over loans/grants till the time alternate revenue streams such as carbon credits get more structured. Interest subvention schemes like those for ethanol projects can be extended to such projects as well.

#### **8. *Presentation by Mr. Anurag Tiwari, Director, Rekart Innovations Pvt Ltd.***

Rekart Innovations Pvt Ltd. is a Producer Responsibility Organisation (PRO) working with a vision of managing waste in smart cities with a technology-enabled integrated approach. They provide end-to-end solutions. It is based in Gurugram.

Mr. Tiwari said that the enterprise started as a C2B solution, however, it proved to be not so viable in the long run (small ticket size, infrequent orders) and they shifted to working with urban local bodies (ULBs). Currently, the enterprise engages in handling MSW, plastic waste, operations of MRFs, e-waste, and biomining of legacy waste. They are working with more than 157 ULBs across India.

He explained the various projects and operations of the company and concluded by saying that the RSF will be pivotal in providing support to waste sector entrepreneurs and increasing their business.

#### **9. *Presentation by Mr. Vishal Banthia, CFO, Indo Enviro***

Indo Enviro is a Delhi-based waste management company. It is a 100% owned subsidiary of the Green Growth Equity Fund. It has acquired the entire waste management business of ILFS.

Mr. Banthia started by explaining the various projects and operations of the company such as the newly commissioned Asia's largest MSW to BioCNG plant in Indore, Madhya Pradesh. He also highlighted that apart from MSW, agri and/or agri-industrial waste should also be looked at seriously. Another type of waste that needs to be addressed is construction & demolition (C&D) waste.

He gave a few suggestions:

- SIDBI should also look at medium and large players in terms of helping with a corporate guarantee

- Waste to energy is not the only solution for waste management. C&D waste is also a vital sector.
- The benefits of priority sector lending are sometimes not passed onto the waste sector entrepreneurs. This should be rectified.

He concluded by saying that banks have an agro-based infrastructure fund. The projects which come under this bracket should be identified and this benefit should be leveraged.

#### **10. Presentation by Mr. Sanjay Mohite, DGM Projects & Strategy, Netel India**

Netel India is a part of Neterwala Group of Companies. It is based in Mumbai, Maharashtra. Their division NetelEco provides products and solutions towards decentralised solid waste management at localised or community levels.

Mr. Mohite started by thanking everyone present at the event and stated that the RSF would be highly beneficial to the smaller players. He discussed some of the operations and products of the company such as their automatic organic waste converter, biogas plants, etc.

He then provided statistics about the future increase in waste generation and GHG generation. He also shared the possible revenue generation through different waste streams – management & processing. He stressed that circular economy is essential to achieving the SDGs. He then went on to share the problems in processing various waste categories and said that these can be opportunities.

He suggested that each waste stream needs to be analysed and addressed, and proper formal value chains need to be established. He emphasised that the entry and active participation of the private sector in each of the waste streams is required along with policy level intervention.

He stressed upon the importance of segregation of waste. He also suggested territorial empanelment contracts (through a digital platform) for aggregators, transporters, recyclers, etc. in each of the waste streams would help increase transparency and accountability. The data would also be readily available in one place. He said that viability gap funding and green financing is also required along with PCG.

He suggested an implementation structure for the RSF which can be seen in his presentation. He concluded by saying that there should be district level RSF cells as well which can provide single-window clearance.

#### **11. Presentation by Mr. Kalpesh Thakker, Manager – Special Projects, Earth Recycler**



Earth Recycler is a Chennai based waste management company. They provide various customised waste management services and solutions ranging from integrated waste management, EPR, and biomining to awareness programmes on source segregation, collection, transportation, recycling, and scientific disposal of waste to ensure clean and hygienic surroundings.

Mr. Thakker explained some of the services and operations of the company. He said that it is important to ensure that the smallest fraction of the generated waste goes to landfills or for incineration.

He explained that the three main issues faced by them regarding financing are:

- Requirement of collateral against finance apart from the existing assets of the company.
- Bill discounting facilities are sometimes cumbersome and, in some cases, not available.
- Insistence by some corporates to contravene the rule for filing complaints against them for late payment of dues (i.e., beyond 45 days).

He concluded by saying that all these lead to cash flow issues and impacts the projects.

## ***12. Presentation by Mr. Rajesh Pahwa, Founder & CEO, 21 Century Polymers***

21 Century Polymers is a Delhi based waste management and plastic recycling company. Their services range from waste surveys, and education & training to material recovery centres and plastic recycling machinery.

Mr. Pahwa explained some of the operations of the services provided by the company. He then stressed that along with the segregation at source, the quality of the waste being provided by the consumer is also important. For instance, food product wrappers can be rinsed out and dried before discarding. This improves the quality of waste being received by the aggregators and recyclers, and saves resources down the value chain.

He went on to state that having recycling facilities and material recovery facilities in the same state reduce carbon emissions and transportation costs. This is beneficial to aggregators, as high transportation costs can impact their revenue. He said that plastic is not an issue, plastic litter is the culprit. Hence, the collection, aggregation, and recycling of waste needs to be made easier.

He concluded by expressing his confidence in SIDBI and the project providing a boost in the waste management sector. The support would be especially beneficial to aggregators and smaller players who do not have collateral.

### **13. Presentation by Mr. Shiv Rao Challa, Founder & CEO, 3R ZeroWaste Pvt Ltd.**

3R ZeroWaste Pvt Ltd. is a Gurugram-based small waste management enterprise which sets up integrated recycling units.

Mr. Challa began by giving some information about the company. He then suggested the following:

- More grants for Department for Promotion of Industry and Internal Trade (DIPP) approved MSMEs and start-ups working towards circular economy
- Working capital loans at subsidised rates with no collateral for small amounts up to 25 lakhs.
- Specific VC funds for circular economy start-ups.

He stressed the importance of policies to support start-ups and MSMEs. He shared statistics related to DIPP approved start-ups for the year 2022 – more than seventy-five thousand start-ups were registered, and waste management sector start-ups did not feature anywhere in the top ten categories. He reiterated that seed funding might encourage more start-ups and innovation.

He shared his concept of a four-bin decentralised segregation model – organic waste, paper & cardboard, plastic, and e-waste & metal. He also discussed the new pilot concept of “eco-coins” that would be a reward system for citizens for segregating waste properly as well as other “sustainable gestures” which they can record. Tie-ups with brands are under process to provide lucrative rewards to citizens as well as in the B2B segment. The concept is currently being piloted in certain premium societies in the NCR.

He concluded by saying that increased awareness and better infrastructure is required for better waste management. He also thanked GIZ & SIDBI for the innovative financial instrument being made available in the form of the RSF.

### **OPEN DISCUSSION**

A brief interactive open discussion took place after the presentations, where the waste sector entrepreneurs were able to get further clarity on the functioning of the RSF.

#### **Q. How will the RSF work? How can the waste sector enterprises (WSEs) leverage this opportunity?**

**A.** The RSF will help the WSEs in getting financing for their projects (subject to eligibility) after their projects have been evaluated and vetted by SIDBI. The WSEs need not approach the banks directly and run around. The process can be made easier for them. SIDBI also has a list of banks and NBFCs which are willing to fund such projects. Once the

bank process is completed and the loan is sanctioned, SIDBI shall provide a PCG for the same.

**Q. Is there a limit to the amount for which guarantee is being provided by SIDBI?**

**A.** There needs to be a minimum loan size of 10 lakh to avail the PCG facility, as of now. The upper cap for the loan amount is yet to be decided. Both the numbers can be finalised post joint discussions with all stakeholders. The RSF serves the purpose of reducing the asset coverage ratio (ACR) which is in the ratio 1.2:1 generally. The burden on the entrepreneur shall be lessened.

**Q. Does collateral need to be provided in the case of working capital loans?**

**A.** Current assets, raw materials, etc. are sometimes considered as assets. However, mostly assets are not tangible in working capital loan projects and the banks do not have much confidence in the assets being created. In such cases, collateral will have to be provided. However, the RSF can help by reducing the amount for the entrepreneurs by providing PCGs for 25% or 50% of the loan amount, as per the criteria established. And this is usually a first-time borrowing issue. Over time, with good track record and performance, the challenge is reduced and the bank gains confidence in the borrower. Also, risk perception may differ across banks and even across different branches/branch managers of the same bank.

**Q. Can loans be taken against future cash flows?**

**A.** This is not an established practice as of now. Some confidence may be established due to the long-term agreement in place which establishes the future cash flows. However, it is not prevalent. Usually, assets bought for the project become a part of the loan agreement with the bank.

**Q. By when will this RSF be implemented?**

**A.** The contract between GIZ & SIDBI is underway. Concurrently, the approval process with RBI shall take place. The launch can be estimated to be around October or November 2022.

**KEY TAKEAWAYS**

1. Citizen participation is very important for effective waste management.
2. Access to funds is a big challenge for waste sector entrepreneurs.
3. Partial credit guarantees may not be enough for certain tenders with very large amounts.

4. The requirement of a new and relevant framework to evaluate and assess risk in the waste sector.
5. The need to circumvent bank guarantees.
6. There should be an understanding of the different business models in the sector.
7. RSF should be run for 6-8 years.
8. Providing collateral is a challenge for many of the waste sector entrepreneurs.
9. Low rate of interest can encourage borrowing from domestic sources.
10. New companies and start-ups need to be encouraged and provided with customised solutions.
11. Creating a detailed matrix about the different enterprises that can be used by the RSF to determine fund allocation, interest rates, etc.
12. Solid waste is not limited to MSW and includes agri or agri-industrial waste as well or even C&D waste.
13. More government support should be given to the waste sector entrepreneurs.
14. Interest subvention schemes can prove beneficial.
15. Proper and formal value chains need to be established in the waste sector.
16. Funding and grants should also be looked at and not just PCGs.
17. Policies should include private partnership, MSMEs and start-ups while being formulated.
18. The RSF shall work to reduce the burden on the enterprises and provide a safety net.
19. There should be a cap for each category of entrepreneur/enterprise – micro, small, medium – in terms of the amount they can get as PCG so that a few big players do not utilise the complete fund and leave nothing for the smaller players.