

# THE XYNTEO EXCHANGE/INDIA2022 02 APRIL 2019 WASTE TO VALUE STUDIO

THE  
XYNTEO  
EXCHANGE/  
INDIA2022  
APRIL  
2019



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HUGHES**  
a GE company

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Hindustan Unilever Limited

**CDC70**  
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# THE XYNTEO EXCHANGE/INDIA2022

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**Growth is a powerful force. Over the past few centuries, the existing growth model has catalysed enormous progress. It has been a force for good.**

But this growth model is no longer fit for our needs – or those of generations to come. In many ways it has become a destructive force, promoting short-term wins over long-term prosperity, desolating natural resources and widening exclusion.

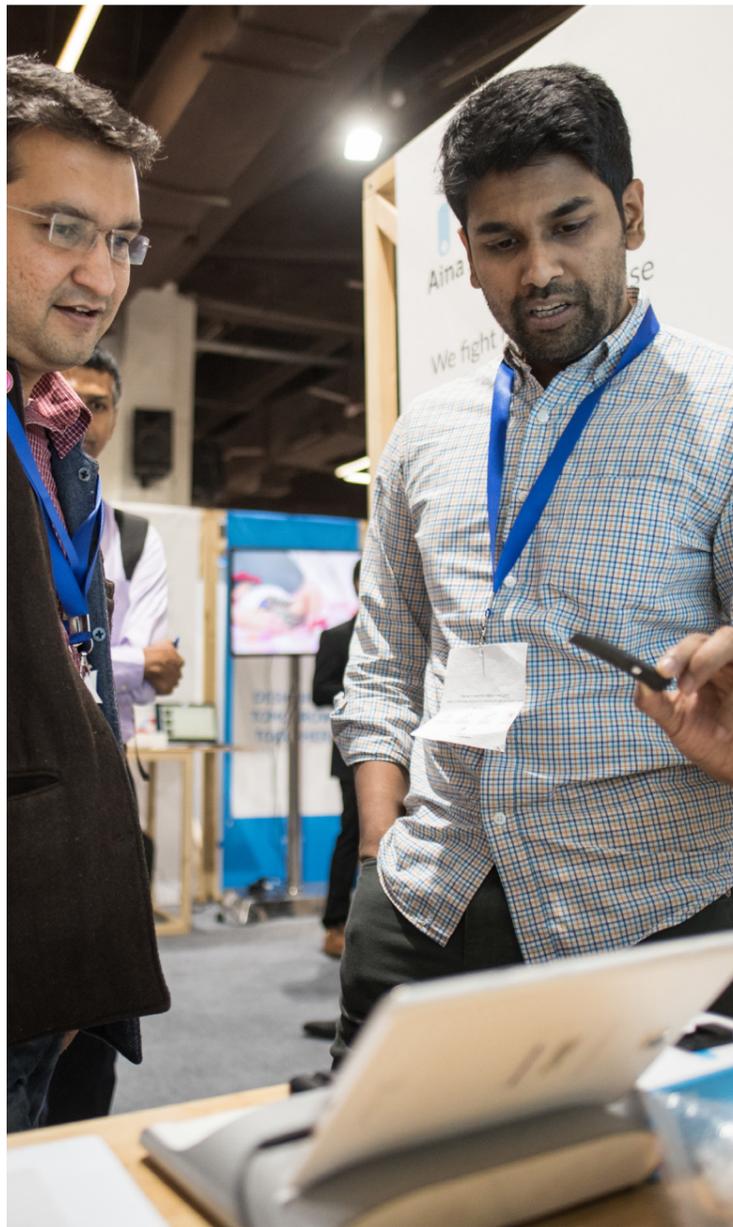
Occupying varied locations throughout the Nehru Centre, one of the most iconic buildings in Mumbai, the Xynteo Exchange/India2022 takes inspiration from a country that has the power to transform, at the same time as it undergoes its own transformation.

The Xynteo Exchange/India2022 is the annual gathering of the India2022 coalition. Launched in 2017 and powered by Xynteo, the India2022 coalition is a purpose-driven global business coalition committed to creating a new model of growth in India by 2022, the 75th year of India's independence. The Exchange is a platform to bring together leaders, capital, talent and ideas to accelerate commercial projects that can advance a new growth model. The first Exchange in 2018 brought together over 300 leaders from business, the start-up community, academia, research institutions, the arts and government.

On 02 April, over 400 leaders heard from India2022 partners – Baker Hughes, a GE Company; Hindalco, an Aditya Birla Group Company; Hindustan Unilever, Cjient, Tata Trusts, Shell and TechnipFMC about the exciting progress being made across the coalition's four impact tracks – Waste to Value, Energise, Healthcare and Sustainable Mining. We also announced the joining of two new partners – State Bank of India and WPP – at the 2019 Exchange.



**Subhashini Chandran**  
Managing Director, Xynteo India





# THE STUDIO

Building robust plastic waste value chains in Indian cities

At the heart of the Exchange was a series of Studios, where we brought leaders together to try to develop commercial solutions to human problems.

According to the Central Pollution Control Board (CPCB), 10,376 tonnes (40%) out of 25,940 tonnes of plastic waste generated every day remain uncollected. It is also estimated that 95% of the economic value of plastic packaging is lost after the first use.

Many types of plastic can be recycled and the materials recovered can be given a second life. However, this method is not fully utilised, due to:

- Difficulties with segregation of plastic waste at source, which leads to both low quantities and low quality of the waste
- Lack of robust channels and systems in place to collect segregated waste in cities
- Lack of technologies suitable to the Indian context, to recycle single use plastics
- Lack of flexible financing models to develop the enterprises catering to last mile waste collection, processing and recycling

Without a collaborative effort, this problem will continue to escalate. According to a study by the Ellen McArthur Foundation, adopting circular economy principles would result in annual benefits of US \$624 billion by 2050 for India. There is a dire need to move from scattered interventions and target to collective and holistic solutions that are a win-win for all the stakeholders across the value chain.



The Waste to Value Studio aims to turn the problem on its head by creating a collective journey towards opportunities to solve for these systemic challenges. The goal is to initiate collaborative thinking and discussion on how to build a robust waste sector in Indian cities that addresses the barriers to effective action.





# OUR PROBLEM STATEMENTS

## Problem 1: WASTE MANAGEMENT IN SLUMS

More than 40% of the population in Mumbai lives in slums and yet there is no formal waste collection system in the slums. With the slums being considered as illegal settlements, the municipality is not authorised to collect waste from these areas – however under the Swacch Bharat Abhiyan initiative by the central government, much of this is starting to change. The municipality is currently testing a couple of models under the Swaccha Mumbai Prabodhan Abhiyan (SMPA) to collect waste from slums, but segregation of waste continues to remain a major challenge due to space and system constraints.

### THE CHALLENGE

How do we build a system for sustainable waste management in slums?

## Problem 2: DEVELOPING INNOVATIVE RECYCLING TECHNOLOGIES

The lost value of plastic packaging is an estimated US \$80-120 billion a year opportunity globally. The time is ripe to disrupt the value chain by applying new technologies, processes and business models across packaging, consumption, collection, recycling, upcycling, repurposing and other key aspects of the value chain – specifically for types of plastic waste that have no value after single use. It is crucial that

multiple stakeholders across the plastic value chain collaborate to develop and pilot these technologies in an Indian context.

### THE CHALLENGE

How do we enable an ecosystem to pilot and introduce innovative recycling technologies?

## Problem 3: FINANCING ENTREPRENEURS IN WASTE MANAGEMENT

The key to investing in the development of the waste management sector is patient and flexible financing including a blend of grants, debt and equity. The waste management sector in India is ripe and ready to absorb support from such models / vehicles, eg pay for success, outcome-based financing.

### THE CHALLENGE

How do we encourage the creation of flexible financing mechanisms for waste systems?





# VOICES IN THE ROOM



“ This is a problem where like-minded people can come together. We are willing to work with every stakeholder including our competition to solve this. This is an issue that goes far beyond money, and it affects all our children. Hence, I urge that we take the next step into creating an economy that can turn waste into value.

**Pradeep Banerjee**  
Executive Director, Supply Chain  
Hindustan Unilever Limited

“ Financing in the sector is a challenge, and CDC Group is developing a strategy to address some of these gaps within the recycling, alternate plastics space.

**Ritu Kumar**  
Director, Environmental and Social Responsibility, CDC Group



“ It is ideal to work with an inclusive approach where the waste pickers and other stakeholders across the waste value chain are equal partners.

**Prabhjot Sodhi MBE**  
Head Circular Economy, United Nations Development Programme



“ The tension between growth, jobs and environment is what the government is trying to manage.

**Sudhir Shrivastava**  
Chairman, Maharashtra Pollution Control Board



# PROBLEM 01 WASTE MANAGEMENT IN SLUMS

## THE CHALLENGE

How might we build a system for sustainable waste management in slums?

### Challenges identified in the current system:

- Around half of Mumbai's population lives in its slums. Yet there is no formal waste collection mechanism which exists for these settlements
- Segregation of waste is a major challenge within slums due to lack of space for collection infrastructure and system constraints such as lack of adequate policy support
- Limited funds and focus on slums waste management from local government administration because of illegal settlements/non-recognised slums
- Waste pickers are only looked at as service providers and not as beneficiaries of waste ecosystem.

### Opportunities and ideas for a sustainable waste management model in slums:

- Any solution focused on creating a sustainable waste management solution in slums must focus on long-term behaviour change of communities
- It has been suggested that instead of focusing on waste management in isolation, it should be targeted along with other solutions for sanitation, hygiene and healthcare
- The appointment of a local ambassador from the slum community to drive such models is essential
- A model based on green credits incentivising responsible waste behaviour should be tested for slums. These credits can be converted into rewards such as discounts in retail shops.



## THE EXPERTS



**Seema Redkar**  
Consultant,  
Tata Trusts





## PROBLEM 02

# DEVELOPING INNOVATIVE RECYCLING TECHNOLOGIES

### THE CHALLENGE

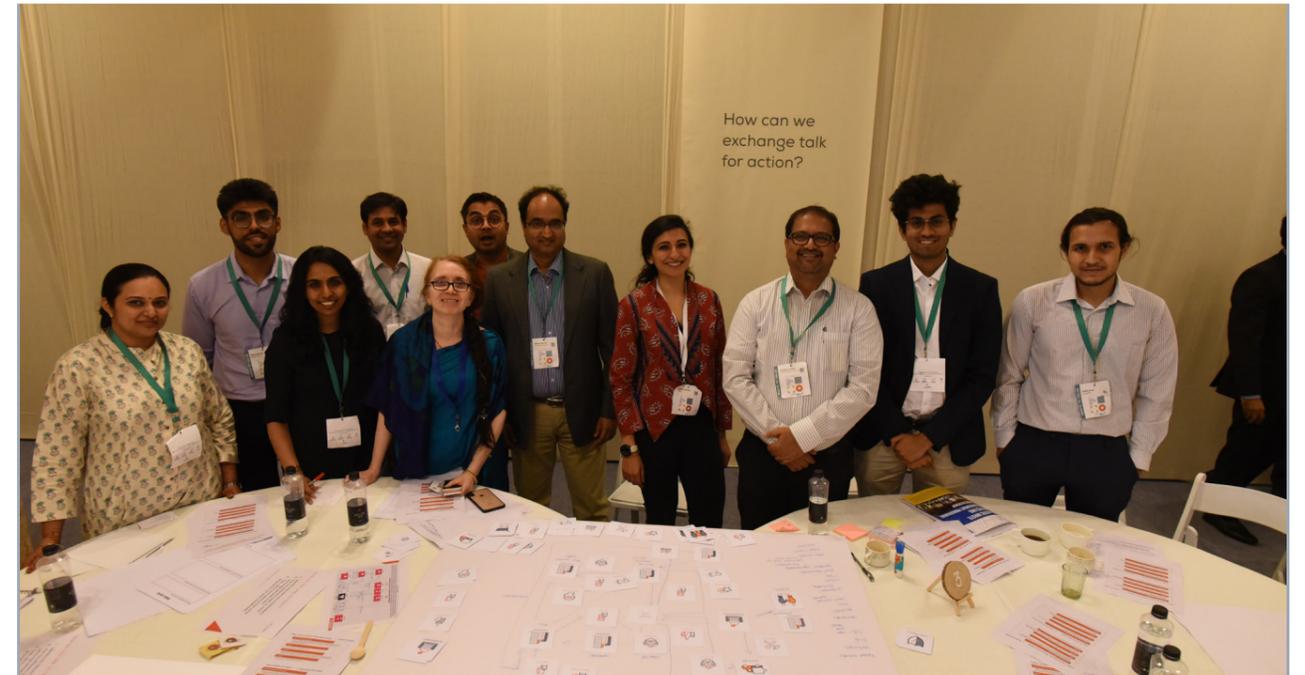
How do we enable an ecosystem to pilot and introduce innovative recycling technologies?

#### Challenges identified in the current system:

- The risks associated with investment in new recycling technologies, versus existing and proven technologies, are unevenly distributed
- Segregation at source by consumers is currently inefficient and is the key challenge; all the other downstream initiatives will not function unless this is addressed
- There is an absence of a market for high-value recycled products which is critical for commercial viability of innovative recycling technologies
- There is a shortage of formal channels and technologies for waste collection and management in the country
- The technologies that can process a wide range of mixed plastic waste and convert them to recycled material do not exist at present.

#### Opportunities and ideas for how to enable an ecosystem to pilot and introduce innovative recycling technologies:

- Greater collaboration between brand owners, technology providers and recyclers through a platform or intermediary that allows for recycling of all types of plastic waste
- Policy change that allows for recycled plastics to be used in food-grade products
- Fiscal incentives to use recycled plastics in packaging versus virgin plastics
- A minimum guaranteed buyback price for recycled plastic
- Incentives for segregation of waste at source
- Technologies that can recycle a diverse range of plastic waste.



### THE EXPERTS



**Saurabh Banerjee,**  
Manager – Business Development and Technology Sales, TechnipFMC



**Madhavi Purohit,**  
Packaging Sustainability Senior Manager, Hindustan Unilever





# PROBLEM 03 FINANCING ENTREPRENEURS IN WASTE MANAGEMENT

## THE CHALLENGE

How do we encourage the creation of flexible financing mechanisms for waste systems?

### Challenges identified in the current system:

- Investors are wary of devoting capital to the waste management sector due to a few key inherent risks including the high political and regulatory risk associated with the sector. While there are regulations related to waste management at the central level, the enforcement differs from state to state, leading to much uncertainty for investors and entrepreneurs
- Another major risk that investors are wary of is the widespread involvement of the informal and unauthorised sectors in waste collection
- Other risks that investors highlighted included:
  - Revenue assurance due to market uncertainty on prices/volumes
  - EBITDA consistency
  - Reliance on municipal bodies for monetisation
  - High risk of concept and execution failure at early stages of the venture due to the nascency of the sector

- Entrepreneurs need patient financing – grant or equity – but most importantly, investors that can support multiple pivots of the business model (addressing the risk of concept failure as above)
- Entrepreneurs in the sector need strong technical assistance/capacity building in robust execution of the business model, building teams and managing other risks in the sector. It is crucial to attracting investors in the waste management sector.

### Opportunities and ideas to encourage the creation of flexible financing mechanisms for waste systems:

- One of the key routes to unlock private sector funding in the waste management sector is to encourage pressure from Limited Partners (Investors in Venture Capital/Fund) to invest in the sector. During the past few years, investments in renewable energy have increased multi-fold in India due to a strategic shift from Limited Partners to invest in the sector, the same is required to happen for waste management
- Create a multi-stakeholder platform to connect waste management entrepreneurs in the sector with different stage investors, mentors, corporations and government. The platform could serve as a facilitator to provide technical assistance to entrepreneurs and connect early stage entrepreneurs in the sector to investors/corporates for mentorship support
- Creating an advance market commitment by aggregating a number of off-takers, specifically including waste to fuel technologies and/or recycled plastic, will support the business case for early-stage entrepreneurs.



## THE EXPERTS

**Sandeep Patel**  
CEO and Founder,  
Lets Recycle





## THE PEOPLE IN OUR STUDIO

We'd like to thank the following participants for their time, energy and creativity during our Studio at the Xynteo Exchange/India2022

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