Cities in Transition: From Waste Management to Circular City Economies

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01 – How big is the problem?



02 - WHY SHOULD WE CARE?



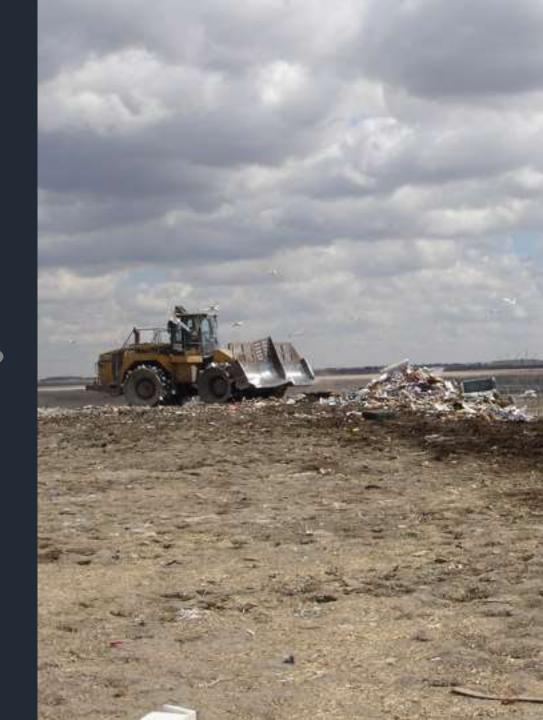
03 - WHAT ARE THE SOLUTIONS?



04 – How have others done it?



05 – How can I do it?



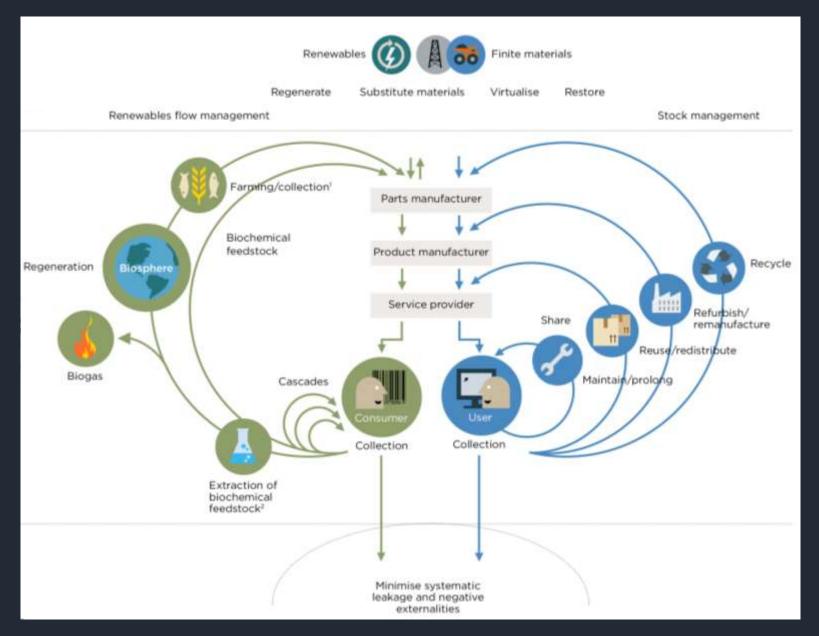
Introduction

- Waste represents inefficiency, which translates to economic loss and significant environment and health impacts. Cities spend millions of Euro collecting and managing waste and it is one of the largest items in city budgets. The current budget for the NY Department of Sanitation is more than \$1.6 billion Euro.
- Policies and programs to reduce the amount of waste generated are a priority, and turning waste that is generated into resource streams can generate revenues, create jobs and reduce impacts.
- Transitioning from traditional waste management to a circular city economy is a complex endeavor in which cities must navigate technology, political, economic, environmental, and socio-cultural aspects.
- In this session our panelists will exchange knowledge, best practices, technologies and innovative solutions to challenges facing cities as they transition to a circular city economy.

How big is the problem and why should we care?



Source: World Economic Forum. 2018. Circular Economy in Cities Evolving the model for a sustainable urban future



Circular economy aims to maximize material reuse and recycling and minimize consumption of finite resources and leakage of outputs to the environment.

"keep molecules in play..."

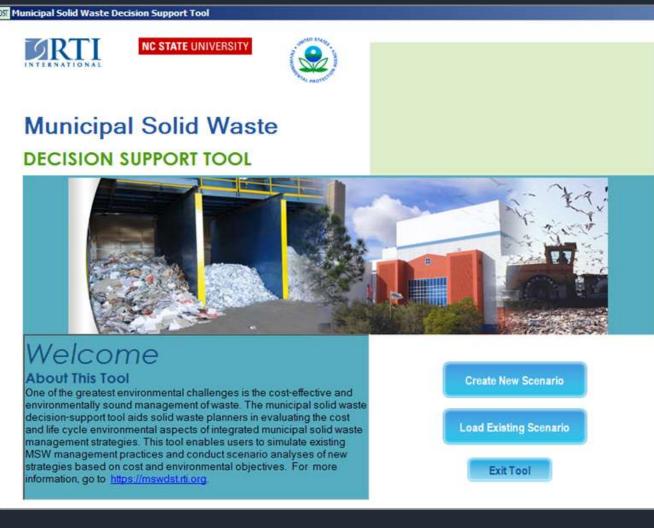


Keith Weitz has more than 25 years of waste and materials management experience at RTI International. Mr. Weitz works with governments, NGOs, industries and stakeholders to understand the opportunities and challenges that cities face as they strive to improve waste management and implement a circular economy.

Leads development of data and tools to support decisionmakers.

The MSW DST was built at the request of cities to help them to better understand tradeoffs and impacts with respect to cost, energy, and environmental Impacts





Panelists

- Catherine Allinson is director of Future Earth Ltd., an independent project management and engagement company specializing in the facilitation of urban sustainability and resource management, climate change mitigation and adaptation and human well-being for resilience. Catherine leads the UK Foreign and Commonwealth Office Smart Sustainable Cities initiative.
- Lisa Junghans is a climate finance and urban resilience expert at GIZ and currently working in the C40
 Cities Finance Facility, which facilitates access to finance for climate change mitigation and resilience
 projects in urban areas by translating cities' sustainability priorities into bankable investment proposals.
 Lisa has experience in the fields of urban planning, climate change adaptation and finance.
- Johannes Paul is a geologist and environmental engineer with more than 30 years of waste sector
 experience working for various public, private sector and academic institutions in Germany, Canada, USA
 and Asia and currently is advisor to the GIZ global Sustainable Waste Management and Circular Economy
 project. Johannes is involved in several research and development projects that relate to environmental
 policy and circular economy with focus on waste management, marine litter and sectoral climate
 mitigation.
- **Sunandan Tiwari** is Senior Program Manager of the Global Projects team at the ICLEI World Secretariat. Sunandan has more than 20 years of experience as an ecologist and development specialist across a spectrum of sectors straddling the urban and rural domains. Has worked extensively on urban climate change adaptation and resilience building, including climate financing, biodiversity management, and sustainable urban development issues.
- **Gwendolen White** is Chair of the City of Bloomington, Indiana, Commission on Sustainability and founder of Sustainability Within Reach LLC, a sustainability consulting firm specializing in sustainability reporting, sustainability strategy development, and assurance preparedness. She is a CPA, Global Reporting Initiative (GRI) Certified Trainer, and has experience in academia and public accounting. Gwen is author of *Sustainability Reporting: Getting Started, 2nd Edition,* published by Business Expert Press.

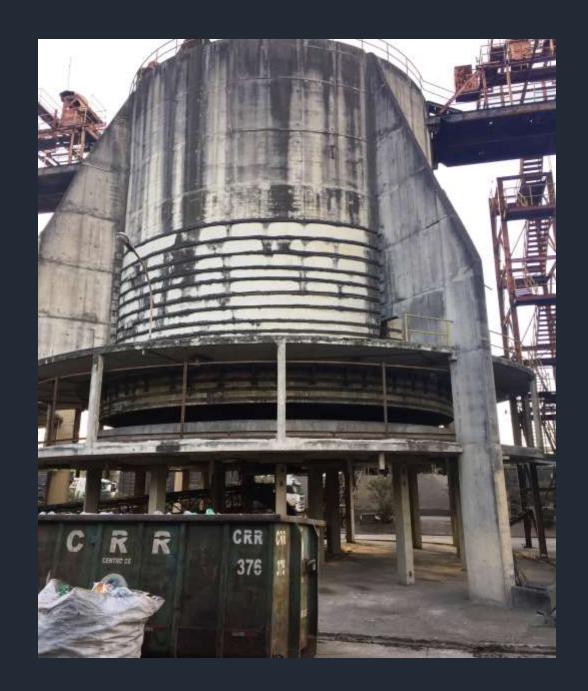


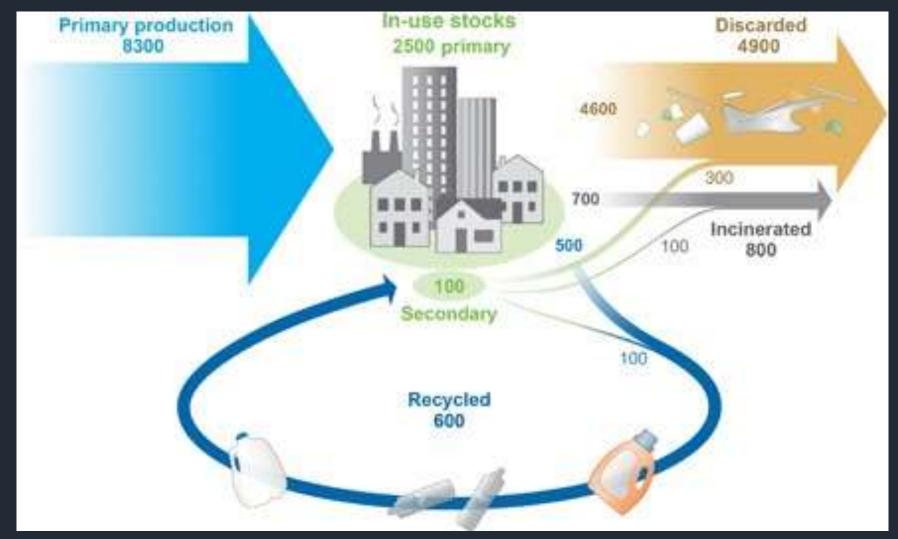




Technology alone will not get us to a circular economy. Technical solutions need to be coupled with viable and sustainable financial models, governance and institutional capacity, environmental protection, and sociocultural change.

Data and information available to city officials for making investment decisions is often limited and can be conflicting with respect to solutions, leading to project failures.





The fate of all plastics ever made (per 2015) shows a largely linear system of make-take-dispose.

How do we better close this loop?

Source: Geyer R, Jambeck JR., Law KL. (2017) Production, use, and fate of all plastics ever made. In Sci Adv.

















Plastics can be transformed into new products, but...

Ease of recycling for plastics waste

Easily melted and remolded multiple times without degradation of plastic quality

Less commonly recycled due to a limited but growing recycling market

Rarely recycled due to concerns around leaching

Rarely recycled due to a limited market

Some types of plastic are more easily recycled than others.















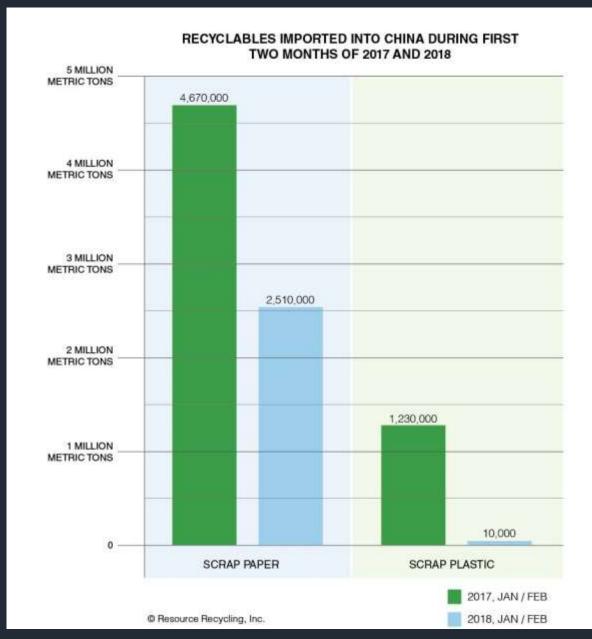








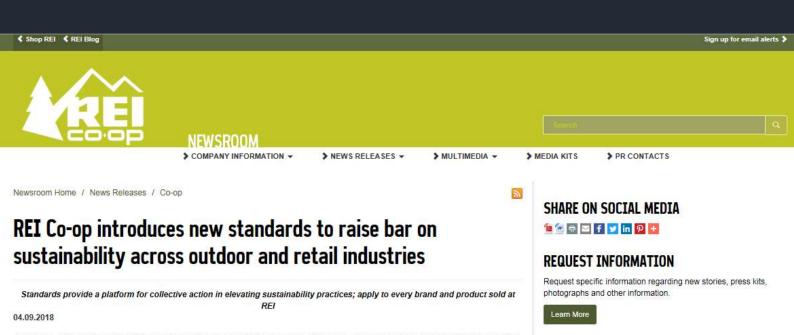




A major importer of recyclables, China has implemented import bans and stringent contamination requirements that many existing recycling programs and infrastructure are not designed to respond to.

The impact on recycling rates has been immediate and significant. How can the circular economy be made resilient?

Source: Resource Recycling News, 2018



SEATTLE – To elevate sustainability across the outdoor and retail industries, REI Co-op today debuted product sustainability standards that apply to each of the more than 1,000 brands sold at the co-op. The announcement, made as the co-op celebrates its 80th year, marks a major step forward in sustainability. REI's standards will make it easier for millions of outdoor enthusiasts to choose more sustainable products.

For 80 years REI has been a trusted outdoor brand, offering quality gear selected by knowledgeable, passionate staff. With the formalization of these standards, the co-op is making a promise to its customers that gear purchased at REI will not only perform, but supports better ways of doing business – to shape the future of a life outdoors.

"One of the most exciting things we've done in the past year was done completely behind the scenes," says REI CEO Jerry Stritzke. "We're collaborating with partners across industries to advance sustainable business practices, and as a result are completely changing the conversation around sustainability for the U.S. outdoor industry."

The REI Product Sustainability Standards outline the co-op's expectations for how brands manage key environmental, social and animal welfare impacts, building on work that REI has done over many years to advance sustainability within its own brands. The standards were shaped by input from dozens of partner brands of various sizes and product categories, and were informed by years of participation in the Outdoor Industry Association Sustainability Working Group and other key sustainability forums. This input helped to ensure the standards are feasible, address the most relevant topics and reflect best practices.

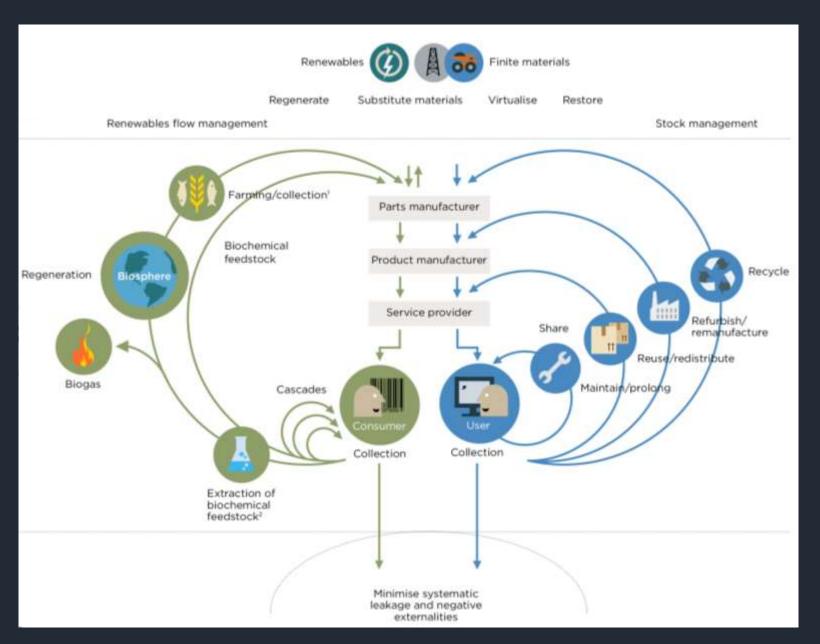
"This effort to advance sustainability across an entire vendor base is among the most comprehensive in the U.S. retail industry," says Adam Siegel, senior vice president of research, innovation and sustainability for the Retail Industry Leaders Association. "By going so broad with requirements for their suppliers and approaching this with such a spirit of collaboration, REI has not only moved their own operations forward, but they've raised the bar for the entire industry."

The standards, as well as resources designed to help brands deepen their own sustainability efforts, will be made available to any retailer that wishes to use them. Alongside the standards, REI is debuting a list of preferred sustainability attributes, highlighting brands and products that are manufactured according to social and sustainability best practices.

SEARCH Keywords: Search Advanced Search Tweets by @REI REI O "Do you want to sell your products at REI? Then be kind to the planet." @USAToday

Producers and retailers are making commitments that will reduce the amount of waste generated and increase the reusability and recyclability of their products.

What is our role as consumers?



Source: Ellen MacArthur Foundation

THANK YOU!

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