

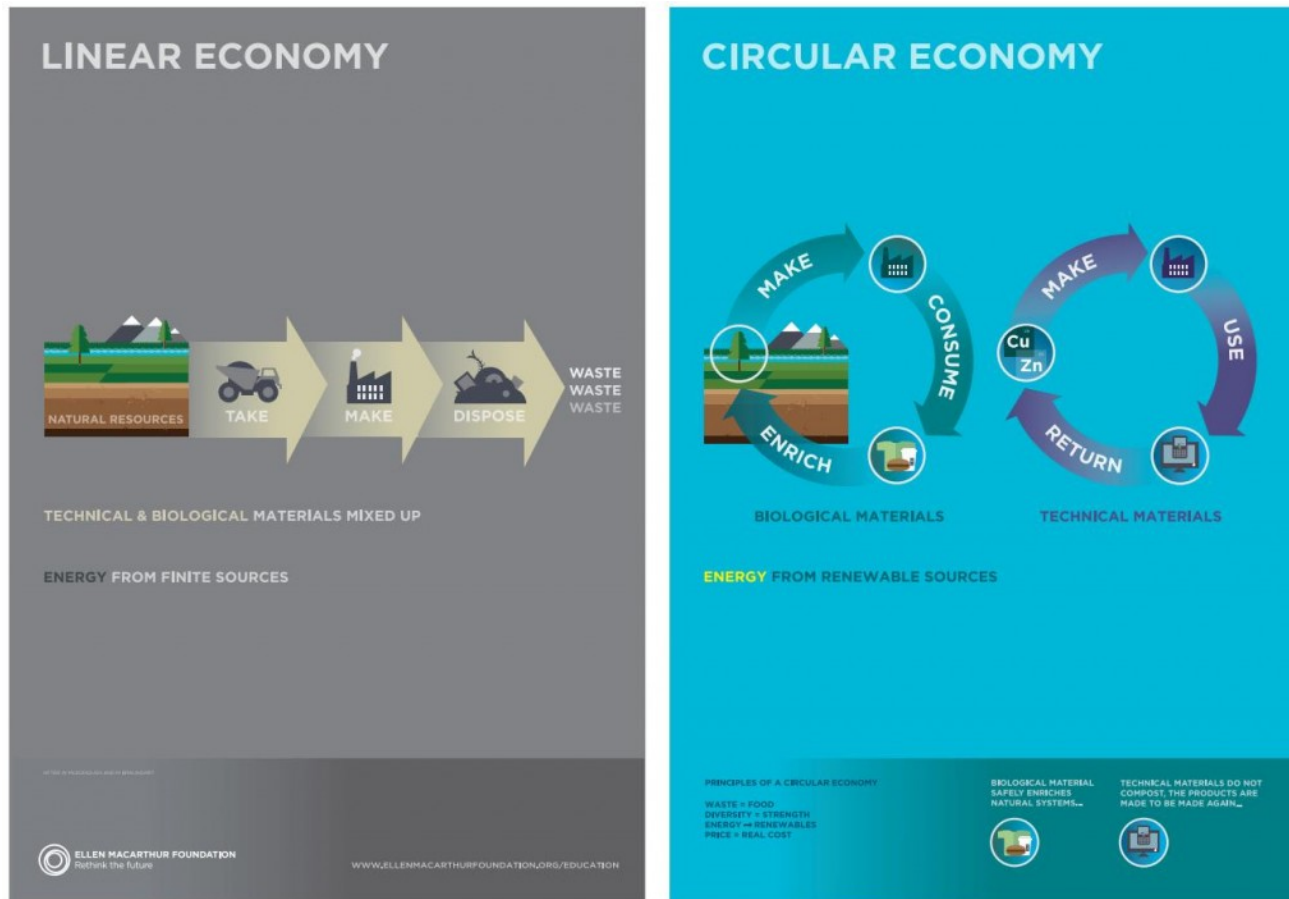
Transitioning our Communities  
Towards a More  
Circular Economy



35<sup>th</sup> Michigan Recycling Conference  
and Governor's Recycling Summit

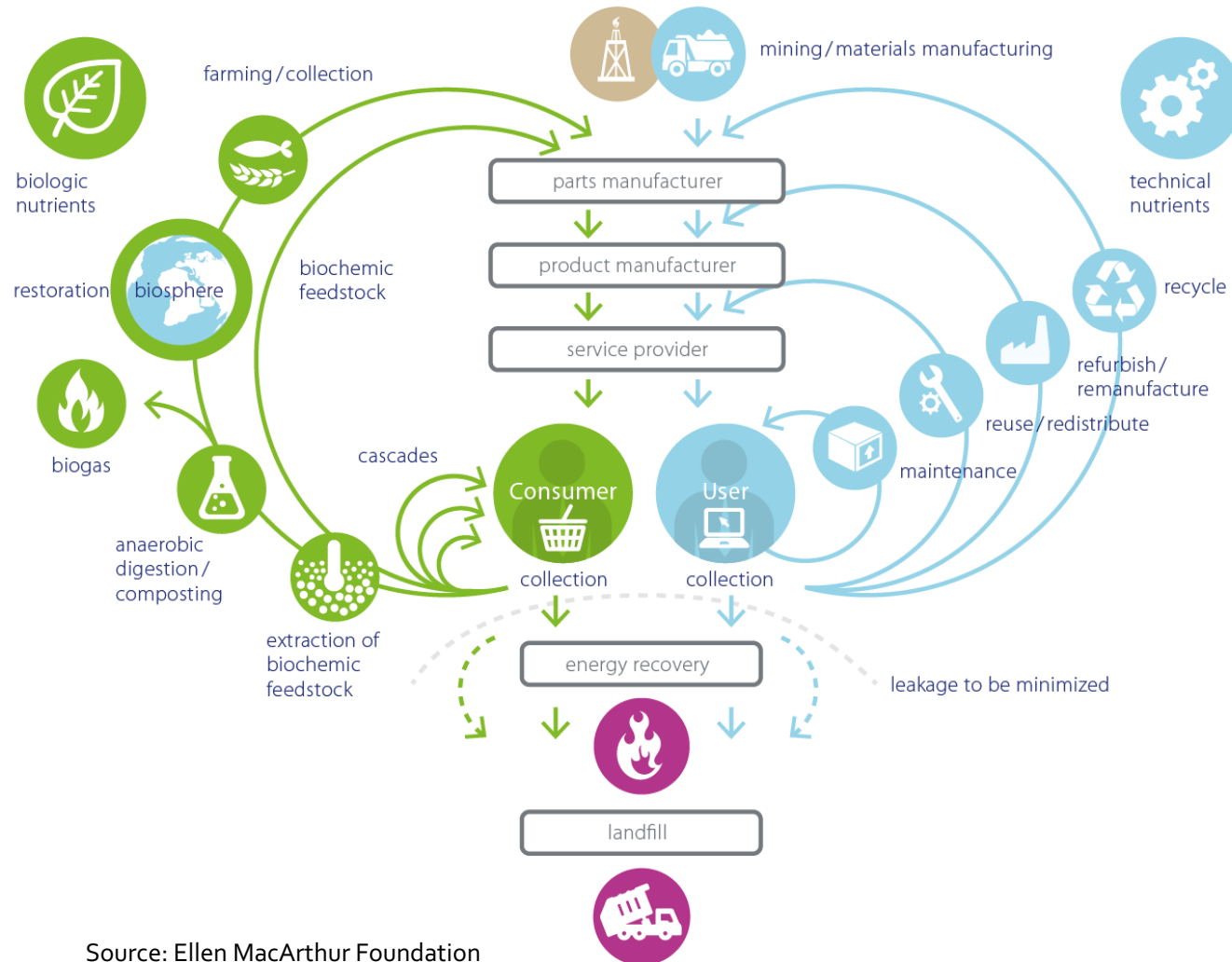
May 18<sup>th</sup>, 2017

# A Circular Economy



...is an economy that keeps resources in use for as long as possible, and produces as little waste and pollution as possible.

# Feeding the Circular Economy: biological nutrients and technical nutrients



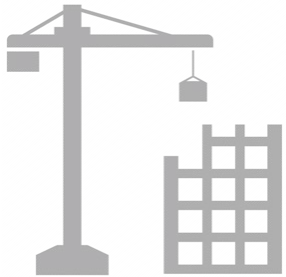
Source: Ellen MacArthur Foundation

# What does it really mean?

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## Smart design together with reduction & reuse = great potential

### Construction



**10-15%** of building material wasted during construction

### Energy Usage



**1.1 gigatons** of GHGs could be abated through greater energy efficiency

### Utilization



**66%** of the time, North American desks and office Space go unused

### End-of-Life



**63%** of MSW in the U.S. is landfilled

Source: Circular Economy Industry Assoc.

# Basic principles: be smart with what you need and how you re-use/repurpose what you have

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This translates into:

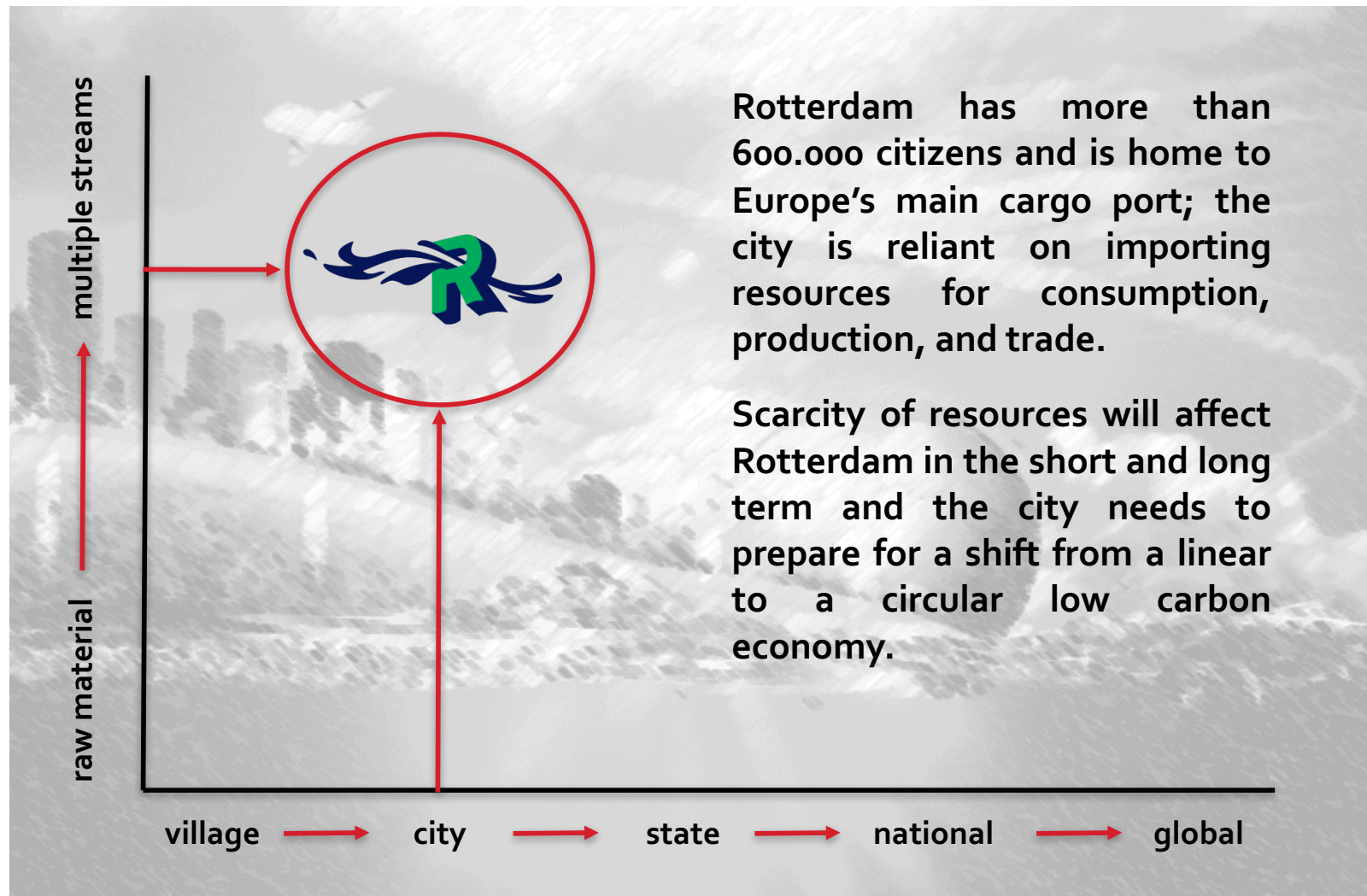
- **Preserve and enhance natural capital**, by controlling finite stocks and balancing renewable resource flows.
- **Optimize resource yields**, by circulating products, components, and materials at the highest utility at all times in both technical and biological cycles.
- **Foster system effectiveness**, by revealing and designing out negative externalities.



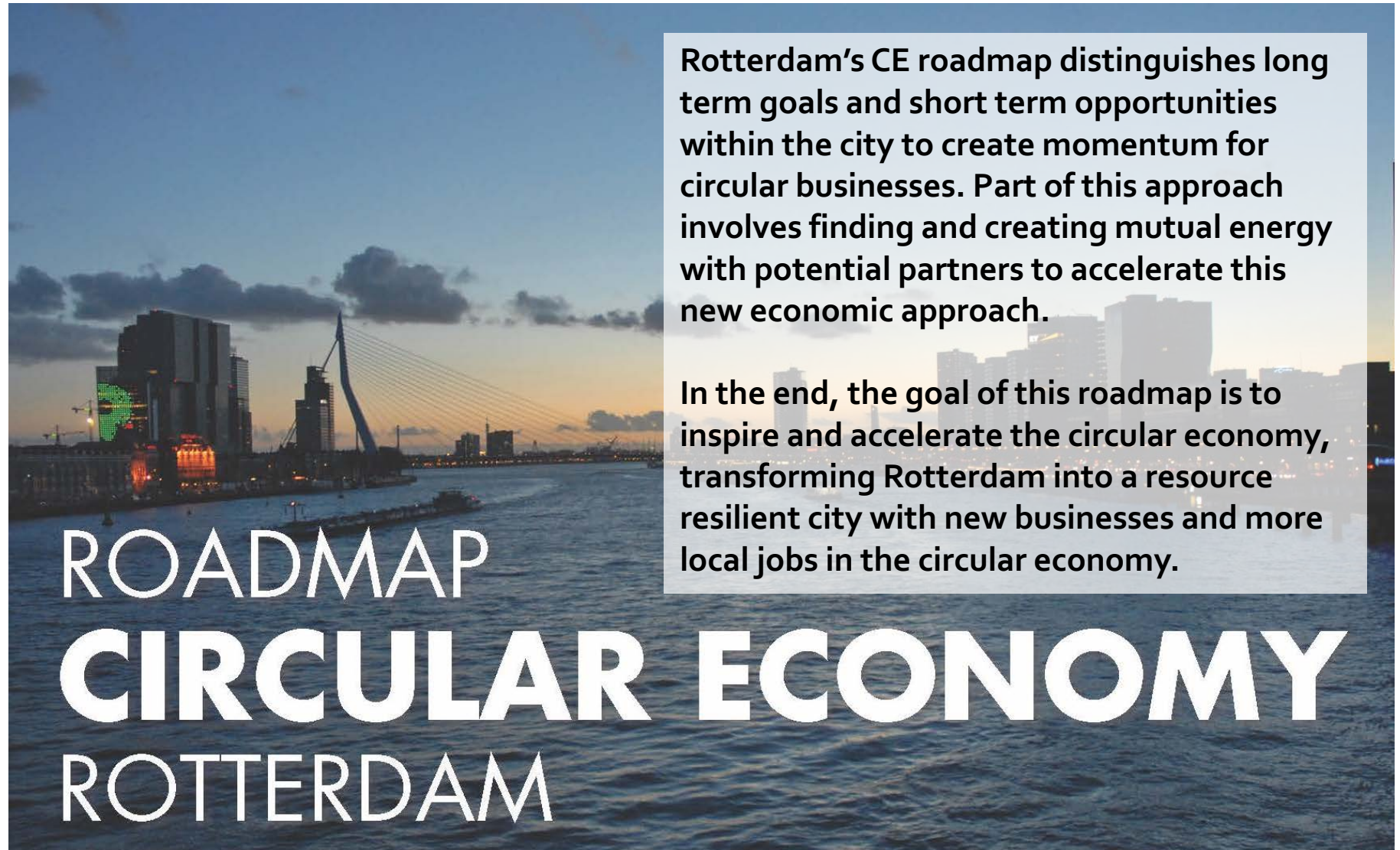
# Applying the circular principle on different scales



# Example 1: Circular Economy Rotterdam



# Rotterdam: roadmap to circularity



Rotterdam's CE roadmap distinguishes long term goals and short term opportunities within the city to create momentum for circular businesses. Part of this approach involves finding and creating mutual energy with potential partners to accelerate this new economic approach.

In the end, the goal of this roadmap is to inspire and accelerate the circular economy, transforming Rotterdam into a resource resilient city with new businesses and more local jobs in the circular economy.

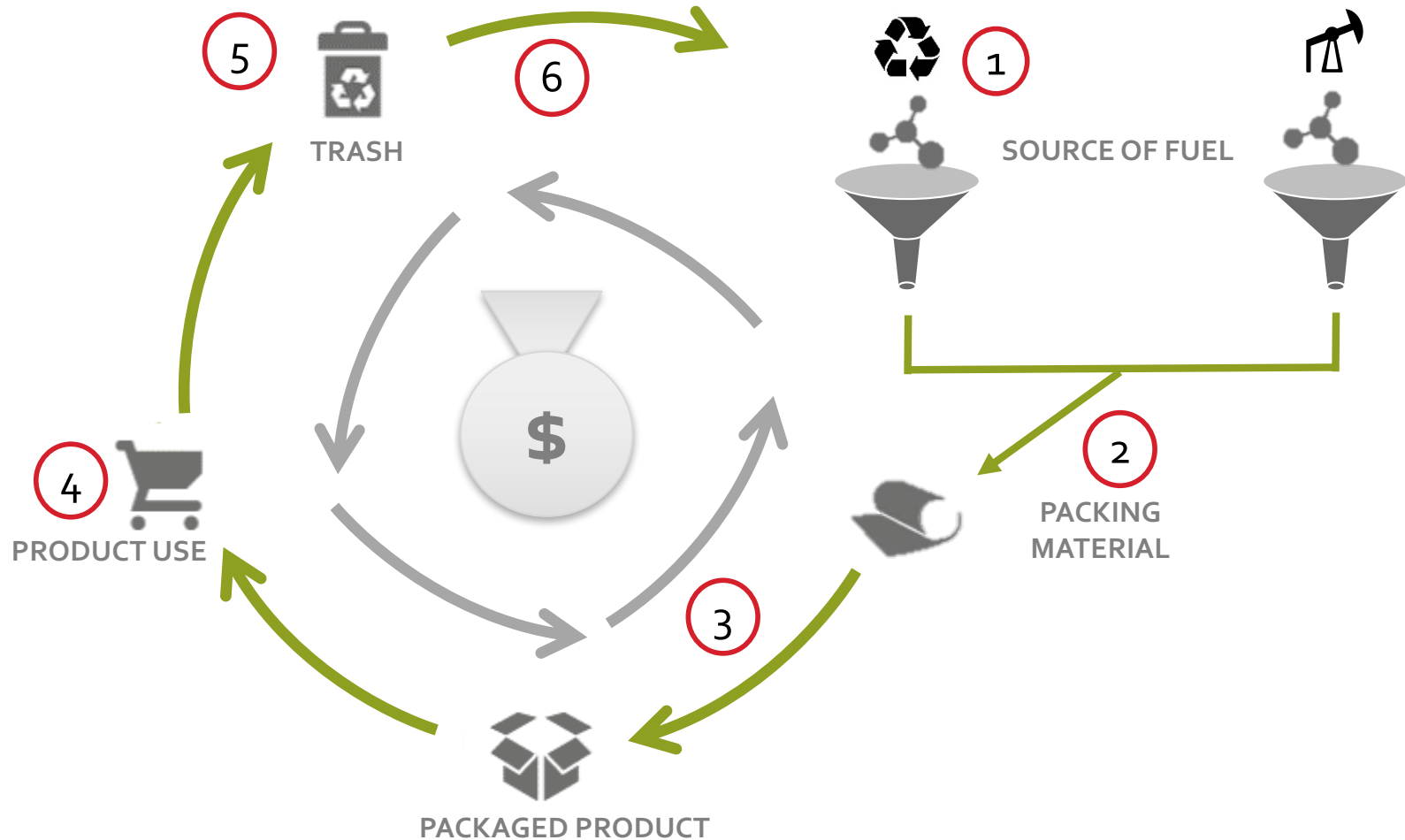
## ROADMAP CIRCULAR ECONOMY ROTTERDAM



## Example 2: Closing the loop for plastic



# Closing the loop for plastics requires multiple stakeholders and coordination



# Achieving an Circular Economy requires public & private partnerships at all levels

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Circular transition requires the cooperation of both public and private sectors:

- Public can facilitate private thru legislation and setting standards
- Private sector needs stability & stewardship to create dynamics in the market
- Balance achieves a new optimum between public and private

# Herman Miller

- 100 years old
- Almost 8,000 employees
- Headquarters in Zeeland, Michigan
- \$2.2 billion sales
- Manufacturing in US, UK, China, Italy, India
- Sales offices in over 40 countries
- Public company in 1970







“A business is rightly judged by its products and services, but must also face scrutiny as to its humanity.”

**DJ DePree, Founder**  
**Herman Miller, Inc.**





## Committed leadership

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Throughout our more than 100-year history, a lot at Herman Miller has changed, but our values and principles have not. We know that we need to develop great products and services for our customers that will also provide good returns for our investors. Yet we've always believed in a higher calling – that we must do right by humanity.

I believe businesses that earn trust and lead with a moral authority are the businesses of the future. People must believe business has a conscience that goes beyond the bottom line.



**Brian Walker,**  
**CEO and President**  
**Herman Miller, Inc.**



## Employee teams

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Grassroots activities  
lead to bigger initiatives.



# Environmental timeline

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1953: "Herman Miller shall be a good steward of the earth's resources."

1970: 50% Green space

1981: Energy Center

1990: Eliminate use of Rosewood

1991: Zero Landfill Goal

1993: Founding Member USGBC

1994: Aeron Chair

1995: LEED Pioneer Building

2001: Design for the Environment

2004: Mirra C2C Certified

2005: rePurpose is Born

2010: 100% Renewable Electricity

2015: 80% of Suppliers Adopt HMI Goals







# What are our clients asking about?

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## Carbon footprint

Regional materials

## Labor practices

Life cycle assessment

Recyclability

Certified organic

## Strengthening Communities

Greenguard

Life cycle thinking

Renewable energy

Water footprint

Safety

Takeback

Health & Well Being

## Certified wood

Recycled content

Renewable resources

Land use

Quality

## Zero toxics

Durability

## Ethics

Social Impacts

Safe Chemistry

Timeless design

Biodiversity

Supply Chain Management

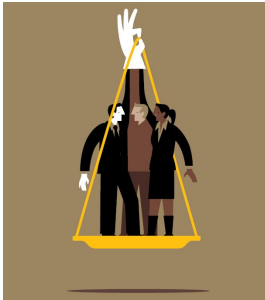
Climate change



# A better world

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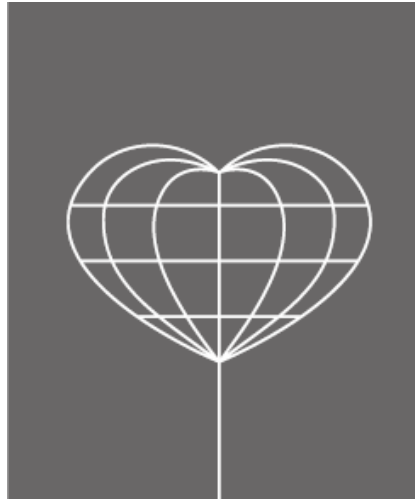
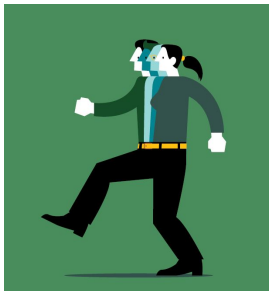
## Strengthening Communities



## Health & Well-being



## Inclusiveness & Diversity



## Environmental Advocacy





# rePurpose

HermanMiller rePurpose Program

In Partnership with Green Standards

In partnership with Green Standards, Herman Miller's rePurpose program is a single source approach for removing the assets you no longer need, in the most responsible way.





# rePurpose

- GM is transforming their campuses
- HMI and GM share values and a commitment; shared goals include:
  - Divert 2000 tons from the landfill
  - Donate to 100 non-profits (\$1MM in value); helping these organizations focus on their missions
- Future volunteer opportunities at MUFI and Cody High School







## Do social good

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*Protecting the environment and its natural resources is bigger than any one company – companies who want to make a difference must align themselves with like-minded partners.*

- Herman Miller is part of a growing movement of sustainable innovators attempting to harness the halo effect of working together to make a true impact.
- Environmental responsibility has been a core tenet of the company for over 50 years – long before it was fashionable.



# Circularity = long term sustainable opportunity

## The Circular Economy

### Economic Growth

The Circular Economy could generate

**\$1 trillion**

Annually for the global economy by 2025.

### Revenue Driver

More Business from Circular Strategies

Philips estimates 15% of business will come from circular strategies by 2021.

### Job Creation

Companies leading the Circular Economy like Google, Caterpillar, and Ford are bringing quality jobs back to the U.S.

### Conserve Natural Resources

Circular Economy Strategies help companies lower GHG emissions and mitigate risks associated with resource scarcity.

# Opportunity

Source:  
Circular Economy Industry Assoc.

BEL

Closing the loop...

**IMG**  **REBEL**

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 **HermanMiller**

**Diane Bunse**

email: [diane\\_bunse@hermanmiller.com](mailto:diane_bunse@hermanmiller.com)

# Backup slides

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# Lenny van Klink

- One of the Directors and owners of IMG Rebel
- He heads up the international waste and recycling sector of Rebel.
- Broad overview of relevant and actual topics regarding the transition towards a more Circular Economy. Fields of expertise are both the definition and implementation of policy and legislative frameworks, the introduction of Extended Producer Responsibility, innovative public private arrangements and technical and technological innovations from start-ups to investments from corporate companies.
- His professional career started in 1993. His involvement in the Circular Economy started in 2002.
- Earned a Master in Science in both Public Administration and in Business Administration.

He is married with Pauline and they have 3 kids, they live in the Netherlands.





# Diane Bunse

- Safety and Sustainability Specialist at Herman Miller, a company recognized worldwide for its legacy of environmental stewardship.
- Leads safety and sustainability communications directed at both internal and external customers.
- Supports Herman Miller's environmental product certifications including Forest Stewardship Council (FSC) Chain of Custody and GREENGUARD®.
- Joined Herman Miller in 1987, shortly after her boss at Baxter announced he was resigning "to go to work for this wonderful company in West Michigan that cares a lot about people."
- Earned a B.B.A. from Loyola University of Chicago and an M.B.A. at DePaul University.

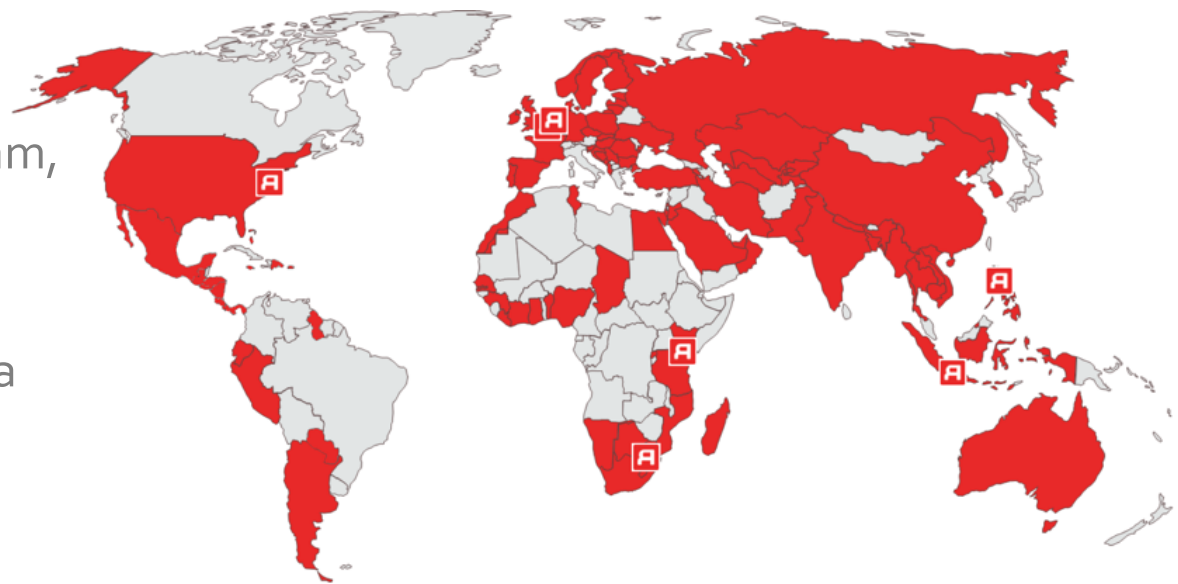
Diane and her husband Michael reside in Holland, Michigan.



# IMG Rebel is a leading infrastructure advisory firm specializing in project finance and PPPs

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- IMG Rebel partners with public and private organizations to bridge the gap between their infrastructure needs and financial resources.
- IMG Rebel focuses on developing and implementing innovative project delivery strategies, PPPs, and innovative project financing structures.
- IMG Rebel has offices and representations in **Washington DC, Rotterdam, Antwerp, Johannesburg, Jakarta and Manila.**
- IMG Rebel has developed a strong track record in the development of circular economy principles and implementation across Europe.



# Key is getting circularity in motion

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Thomas Jefferson and Mikhail Gorbachev both said exactly the same thing – when 5% of the thinking people were aligned, the revolution happened.

- *William McDonough, Co-Author of "Cradle to Cradle"*

find the **"Rebel"** within and lead the circular revolution