

# REDESIGNING FOR RECYCLING, SUSTAINABLE MATERIALS MANAGEMENT AND THE CIRCULAR ECONOMY

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DESIGN IS THE FIRST SIGNAL  
OF HUMAN INTENTION.

- *William McDonough*

# IF THE INTENT OF MANUFACTURES IS TO INCREASE RECYCLING THROUGH BETTER DESIGN...

Why is there a disconnect from the realities  
of commercial recycling today?



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PRESENTLY DESIGNERS OF  
PRODUCTS AND PACKAGING  
ARE NOT SCHOOLED IN  
HOW TO DESIGN FOR  
COMMERCIAL RECYCLING

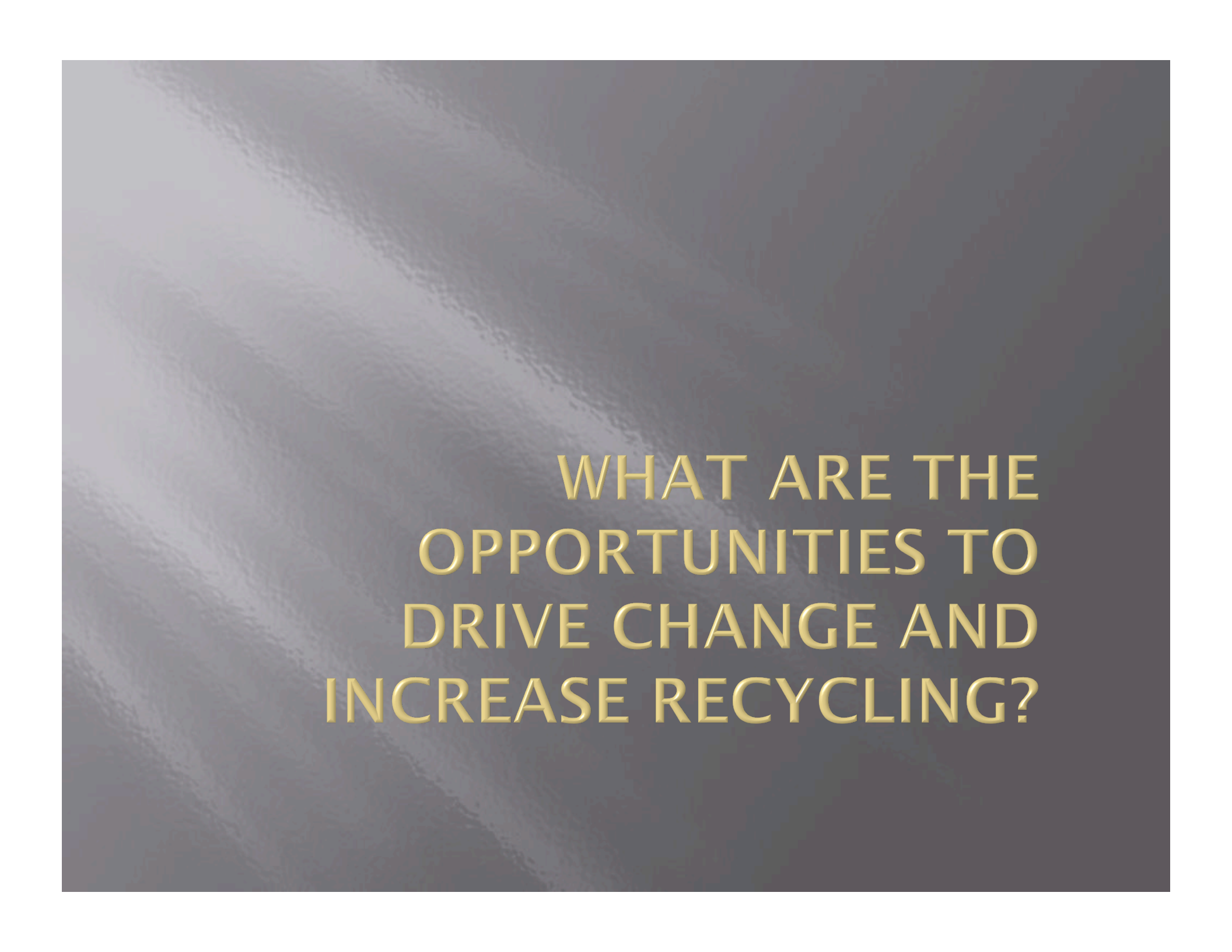


Designers do not understand  
the concept of “designing up  
from the dumpsters.”

as put forth by William McDonough

# Key Disconnects

- Packaging manufactures recycling claims
- Chemical company claims
- Marketing feel good programs with little impact
- Lack of understanding how commercial recycling works
- Perception that design for recycling adds cost
- Not a high priority with many organizations



WHAT ARE THE  
OPPORTUNITIES TO  
DRIVE CHANGE AND  
INCREASE RECYCLING?




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# Be Proactive and Join the Conversation


The world wants to hear from YOU.

The Ellen MacArthur Foundation  
works in education, business  
education, innovation and analysis  
to accelerate the transition to  
a circular economy.



*A circular economy is one that is restorative by design, and which aims to keep products, components and materials at their highest utility and value at all times, distinguishing between technical and biological cycles.*





Cradle to Cradle  
Products Institute  
was created to bring  
about a new industrial  
revolution that turns the  
making of things into a  
positive force for society,  
economy, and the planet.

Cradle to Cradle® design is  
a biomimetic approach to  
the design of products and systems.

It models human industry on nature's  
processes viewing materials as nutrients  
circulating in healthy, safe metabolisms  
eliminating the concept of waste.

The Cradle to Cradle® continual improvement quality standard was gifted to the Institute by William McDonough and Michael Braungart after more than 20 years of private development with some of the world's leading brands.



MBDC can improve product design and manufacturing operations. By applying the Cradle to Cradle framework, they help companies go beyond minimizing negative impacts, optimize positive impacts, and work towards the goal of 100% good for people, planet, and profits.

MBDC helps companies rethink and redesign using the Cradle to Cradle® framework, select optimal materials, and plan for the future use cycles for the component materials for any new or existing product or packaging design.


Waste Management Test for  
Recycling Program runs  
products and packaging through  
multiple MRFs to determine  
real world recycling



# MCDONOUGH INNOVATION WORKSHOPS TO INFORM AND TRAIN PRODUCT AND PACKAGING DESIGNERS

First, going to the source — the supply chain

Second, working with demand side — the major retailers

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What can NRC and members  
do to impact the design  
process and influence  
material manufactures?

Designer product and  
packaging development track  
at NRC conferences

Offer to create a track or  
breakouts for relevant  
conferences

Ask for a seat at the table to  
be a change agent