

# OPEN POSSIBILITIES.

## Circularity at the Center



NOVEMBER 9-10, 2021

# Circularity at the Center

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# A planet-sized challenge

**50 billion**

metric tons of greenhouse  
gases emitted annually

**1 in 4**

species are threatened  
with extinction

**55 billion**

metric tons of waste  
produced annually

**2 billion**

people lack access to  
safe drinking water

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# Circular Economy



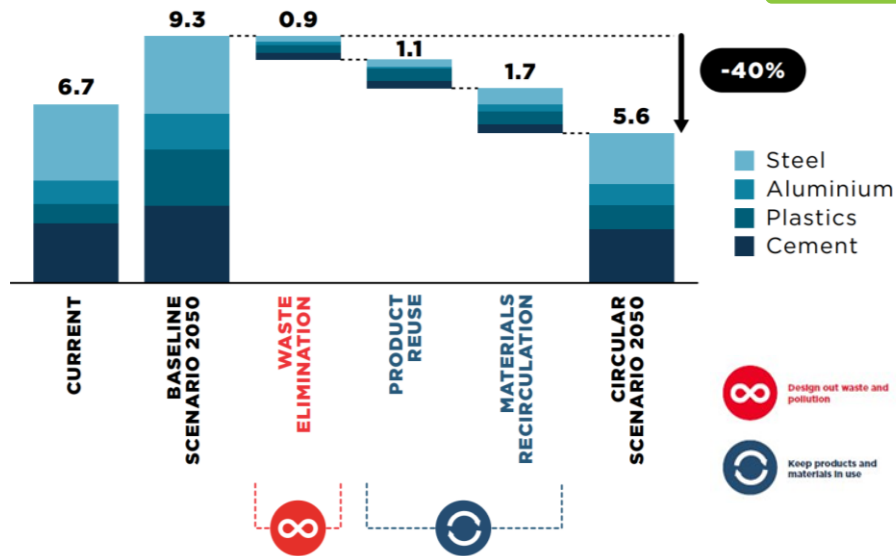
Design out waste and pollution  
**to reduce GHG emissions**  
across the value chain



Keep products and materials in use  
**to retain the embodied energy**  
in products & materials



Regenerate natural systems **to sequester carbon**  
in soil & products



Global CO2 emissions from four key materials  
production Billion tonnes of CO2 per year

Source: COMPLETING THE PICTURE HOW THE CIRCULAR ECONOMY TACKLES CLIMATE CHANGE by Ellen MacArthur Foundation & Material Economics

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SUSTAINABILITY

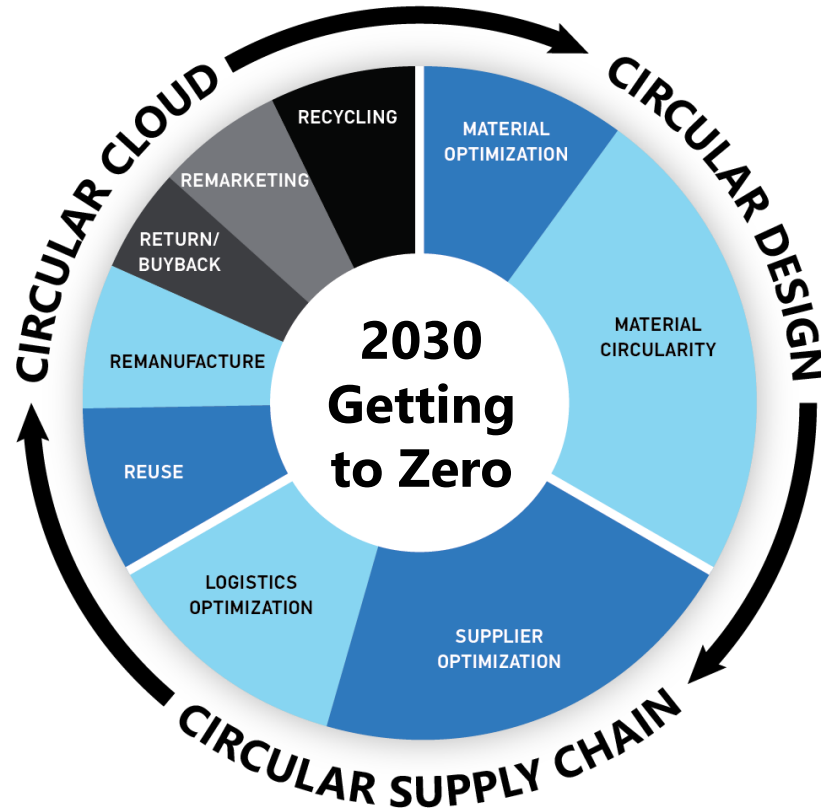


# Opportunities

- Insufficient integration of circular economy principles across the lifecycle
- Business models do not incorporate circular economy principles
- Regulatory disincentives to product use extension
- Limited collaboration across the value chain – design through recycling
- Nascent markets for used and remanufactured components
- Adoption and availability of sustainable materials

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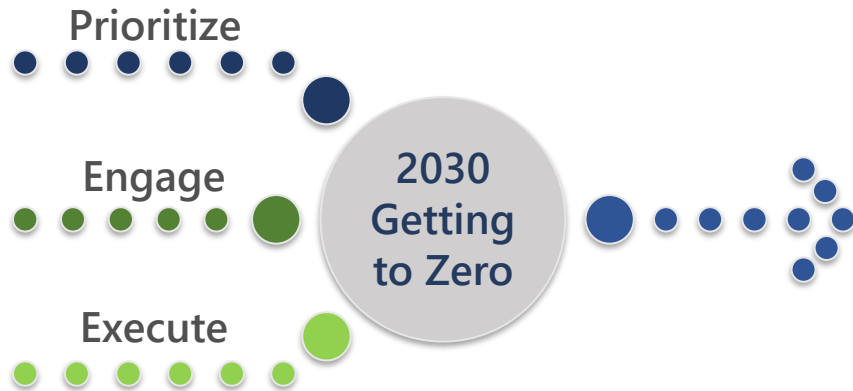
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# Supplier Engagement



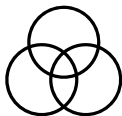
SUSTAINABILITY



Contracts



Supplier Hotspots



Performance



Buying Power



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SUSTAINABILITY

# Design for Sustainability

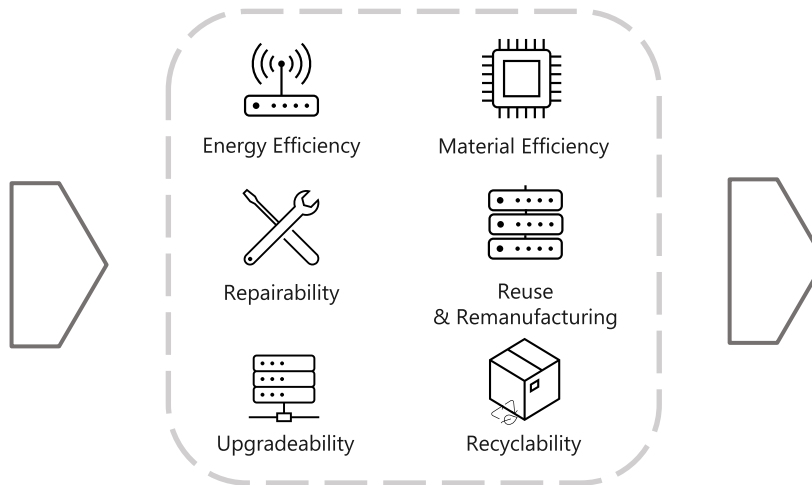
## DRIVERS

Carbon Negative by 2030

Circular Economy

Industry Standards & Customer Demand

## DESIGN FOR....



## IMPACT

Carbon & Waste Reduction

Increase Circularity

Strengthen Brand Equity

Industry Leadership

## SCOPE



Rack, Server, Storage, Network, Commodities, Packaging & Software

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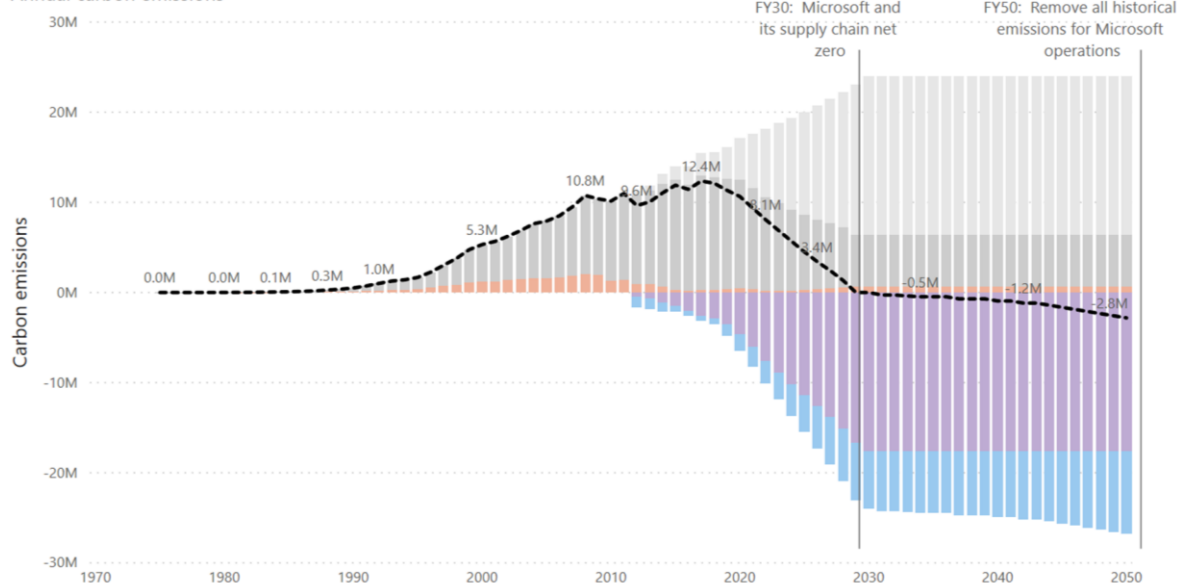
# Building platforms for technology solutions to address environmental challenges



SUSTAINABILITY



Annual carbon emissions



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# Our progress



**1.3 million metric tons**  
of carbon removal procured



**Nearly 20**  
water replenishment  
projects funded



**60K metric tons**  
of waste diverted from  
landfills



**10 petabytes**  
of environmental data now  
available

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# Circular Centers' Role in Reducing Carbon Emissions



How circular centers will help Microsoft achieve zero waste by 2030 - YouTube

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# OCP – A Decade of Action

Today's innovation is tomorrow's standard

Businesses & Manufacturers	International Standards	Regulations
<ul style="list-style-type: none"><li>• Establish reverse logistics voluntarily</li><li>• Implement circular design or circular-ready designs</li><li>• Explore innovative business models</li></ul>	<ul style="list-style-type: none"><li>• Define circular product design standards</li><li>• Clear definitions for wide scale adoption</li><li>• Standardize Measurement methods</li></ul>	<ul style="list-style-type: none"><li>• Tax Incentives &amp; Subsidies</li><li>• Carbon Pricing</li><li>• Targets for reuse</li></ul>

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**Sustainability**

**Circularity**

**Cloud**

**DataCenter**

**Lessons Learned**

**ClimateChange**

**Design**

**Hardware**

**Testing**

**Environment**

**Methods**

**Carbon**

**Future**

**Supplier**

**Center**

**LCA's**

**CommonUse**

**Memory**

**Standard**

**CircularCenter**

**Optimizing**

**Consolidating**

**Recovery**

**Improvements**

**Quantifying**

**Solutions**

**Datasphere**

**Infrastructure**

**Transformational**

**CollectiveAction**

**Partnership**

**Protection**

**Reliability**

**Ecosystem**

**Efficiency**

**Performance**

**Measurement**

**Lifecycles**

**Data**

**Collaboration**

**Effectiveness**

**Hyperscale**

**CodeOfConduct**

**Power**

# Thank you!



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