

OPEN POSSIBILITIES.

Circularity at the Center



NOVEMBER 9-10, 2021

Circularity at the Center

Anand Narasimhan

General Manager, Cloud Supply Chain Sustainability
Microsoft

OPEN POSSIBILITIES.





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

OPEN POSSIBILITIES.



Circular Economy



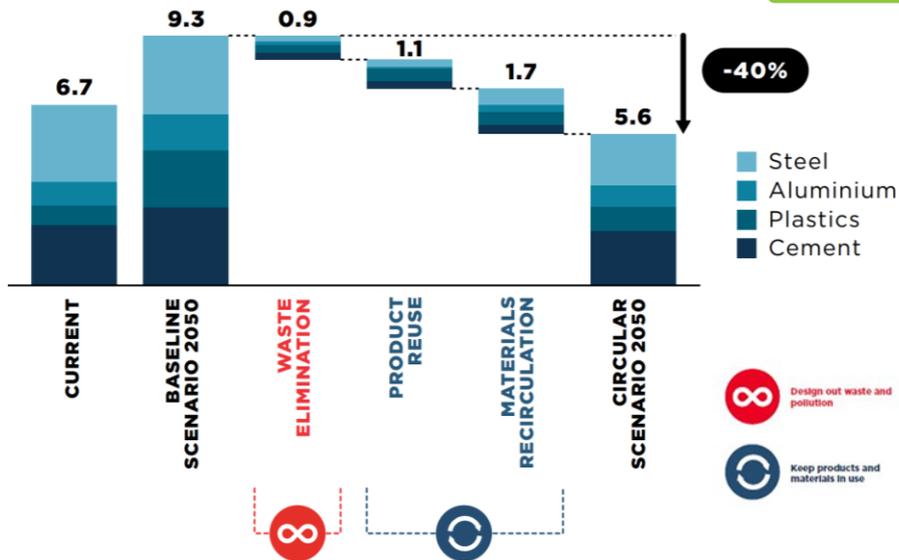
Design out waste and pollution **to reduce GHG emissions** across the value chain



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

OPEN POSSIBILITIES.



SUSTAINABILITY



Opportunities



SUSTAINABILITY

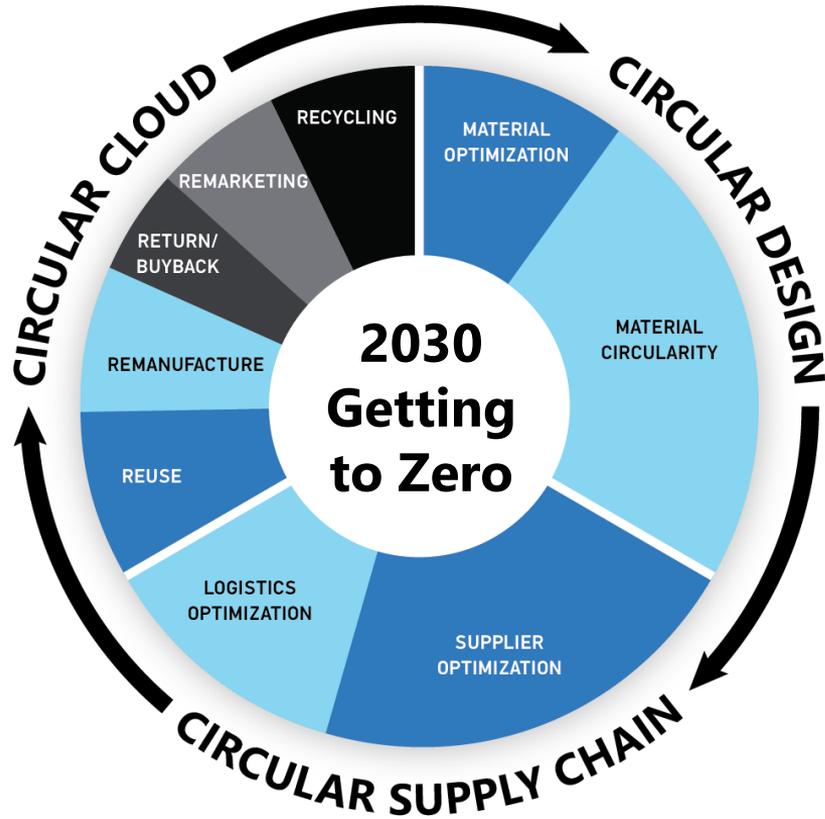
- Insufficient integration of circular economy principles across the lifecycle
- Business models do not incorporate circular economy principles
- Regulatory disincentives to product use extension
- Limited collaboration across the value chain – design through recycling
- Nascent markets for used and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

OPEN POSSIBILITIES.





SUSTAINABILITY



OPEN POSSIBILITIES.



Supplier Engagement



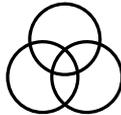
SUSTAINABILITY



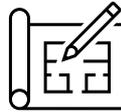
Contracts



Supplier Hotspots



Performance



Buying Power



OPEN POSSIBILITIES.





SUSTAINABILITY

Design for Sustainability

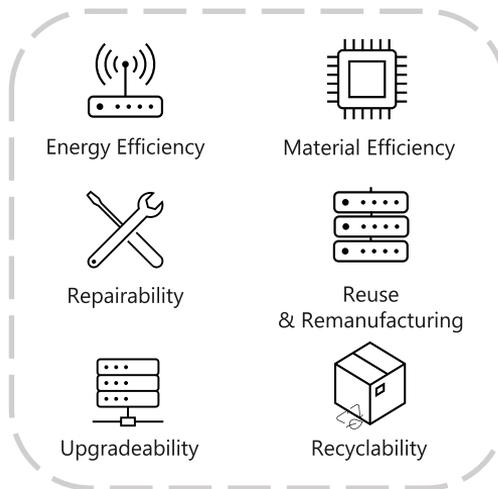
DRIVERS

Carbon Negative by 2030

Circular Economy

Industry Standards & Customer Demand

DESIGN FOR....



IMPACT

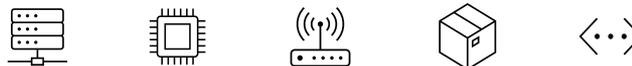
Carbon & Waste Reduction

Increase Circularity

Strengthen Brand Equity

Industry Leadership

SCOPE



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

OPEN POSSIBILITIES.



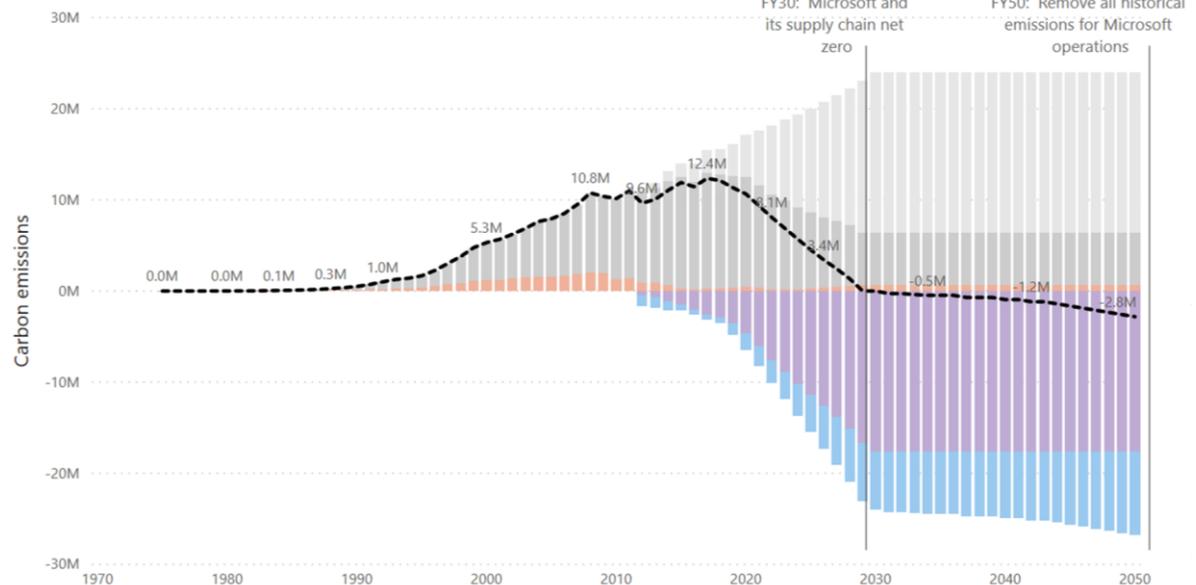
Building platforms for technology solutions to address environmental challenges



SUSTAINABILITY



Annual carbon emissions



OPEN POSSIBILITIES.





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

OPEN POSSIBILITIES.





Circular Centers' Role in Reducing Carbon Emissions



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

OPEN POSSIBILITIES.





OCP – A Decade of Action

Today's innovation is tomorrow's standard

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

OPEN POSSIBILITIES.





Thank you!



OCP
GLOBAL
SUMMIT

NOVEMBER 9-10, 2021