





Our vision: Leading the Circular Economy for electronics through innovative diagnostic, repair and value recovery solutions





LEADING LIFECYCLE CARE SOLUTION PROVIDER





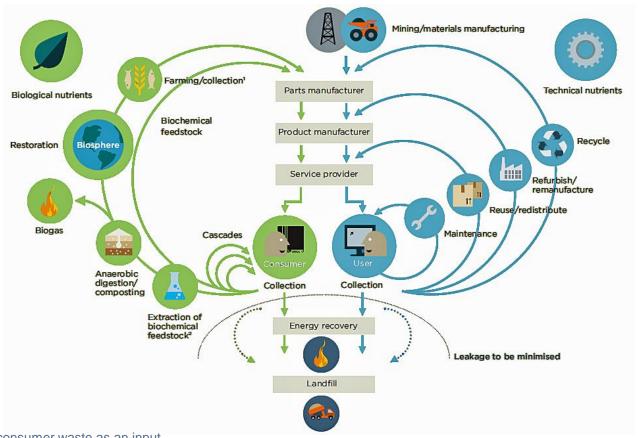
STRATEGICALLY LOCATED TO SUPPORT GLOBAL BUSINESS





THE CIRCULAR ECONOMY AIMS TO KEEPS PRODUCTS, PARTS, AND COMPONENTS AT THEIR HIGHEST UTILITY AND VALUE

The circular economy - an industrial system that is restorative by design



^{1.} Hunting and fishing

^{2.} Can take both post-harvest and post-consumer waste as an input Source: Ellen MacArthur Foundation circular economy team

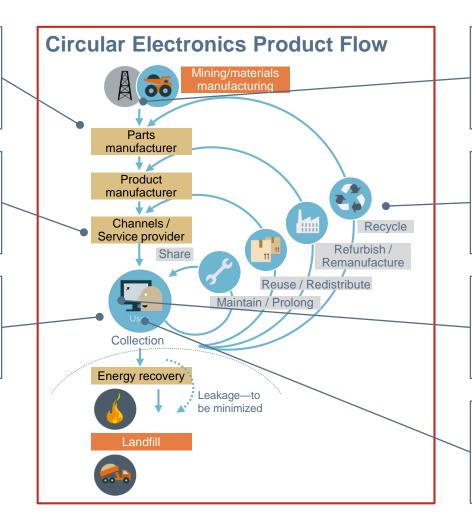


HOW COULD THE CIRCULAR ECONOMY WORK FOR ELECTRONICS?

Parts and products are **initially designed** for modularity, reuse, recycling

End user doesn't buy the product, they purchase the **use of it a service** (e.g. renting/leasing, or even on a per-use basis)

Actively and quickly **collect back (or redistribute) all products** after use, before their market value declines



Recycling processes directs some materials (especially plastic) to the original parts manufacturer, not the open market, to retain value

Parts harvesting, white box creation and other granular value capture processes are performed when reuse/refurbishment isn't possible

Market data combines with product data to make the optimal product disposition decisions

Greater economies of scale by **seeking out product returns** instead of avoiding them



BENEFITS FROM CIRCULARITY FOR CUSTOMERS

Internal Benefits

- Revenue visibility and security when products sold as a service
- Reverse logistics economies of scale
- New revenue streams
- Reduced waste
- Value capture at the part and subassembly level
- Hedge against fluctuating commodity prices
- Supplier leverage by controlling material supply
- Reduction in secondary market
- Employee and Recruiting benefits

External Benefits

- End user loyalty and retention
- More touch points
- Protection from counterfeit
- Positive environmental impact
- Positive or Less negative press
- Appeal to environmentally conscious customers
- Beyond the regulatory requirements
- Sustainable companies seen as more attractive to investors
- Lower supplier risk



IDEAS ON HOW TO NAVIGATE YOUR CIRCULAR JOURNEY

Figure out your starting point: Perform a high-level circularity assessment and then explore from there – where do your products actually go after their first use? Are there better opportunities to reuse "waste"?

Consider product returns as a source of value: Pilot programs such as take-back/upgrade programs to solicit products for reuse/resale/value capture

Investigate new business models: could selling product "as a service" (leasing/pay-for-performance) increase customer connection and create product loyalty

Design for circularity: Engage to explore ideas to design products for disassembly, repair, upgradability, and reassembly



CONSIDERATIONS TO HELP ASSESS PRODUCT'S CIRCULARITY





MIND SET CHANGE IN THE INDUSTRY (1)

"Circular Economy is no longer a cost center but a revenue driver"





MIND SET CHANGE IN THE INDUSTRY (2)



"Supply Chain companies are very well positioned to adopt Circular Economy elements"