

## WORKSHEET

# Circular flows



At its core, a circular economy means that products no longer have a life cycle with a beginning, middle, and end, and therefore contributes less waste and can actually add value to their ecosystem. When materials stop getting used, they go back into a useful cycle, hence the circular economy. Imagine what would happen if everything was designed to be restorative and regenerative?

### STEPS

- 1 Download the Circular Flows Worksheet and get acquainted with the different ways of being circular. At a glance, which of these loops feels most relevant or achievable for what you are designing? If you are working with an existing product or service, consider its current position within the flows.
- 2 Now dive deeper, and go through each loop as a lens for your new product or service. For each loop, ask yourself: “What would it take for this to work for my new product or service idea?” and “What’s standing in my way from this working now?”
- 3 You may notice that there is a pattern as you go from the inner loops to the outer loops: the inner, tighter loops preserve more value and embedded energy.
  - Reused goes directly back to your users
  - Refurbished comes back to you (as the service provider)
  - Remanufactured goes through the manufacture process
- 4 Ask yourself, can you try to stay in the inner loops? What would I be able to affect right now? Once you feel like you have a starting point, try the Circular Opportunities activity or the Service Flip which might prompt different ideas.

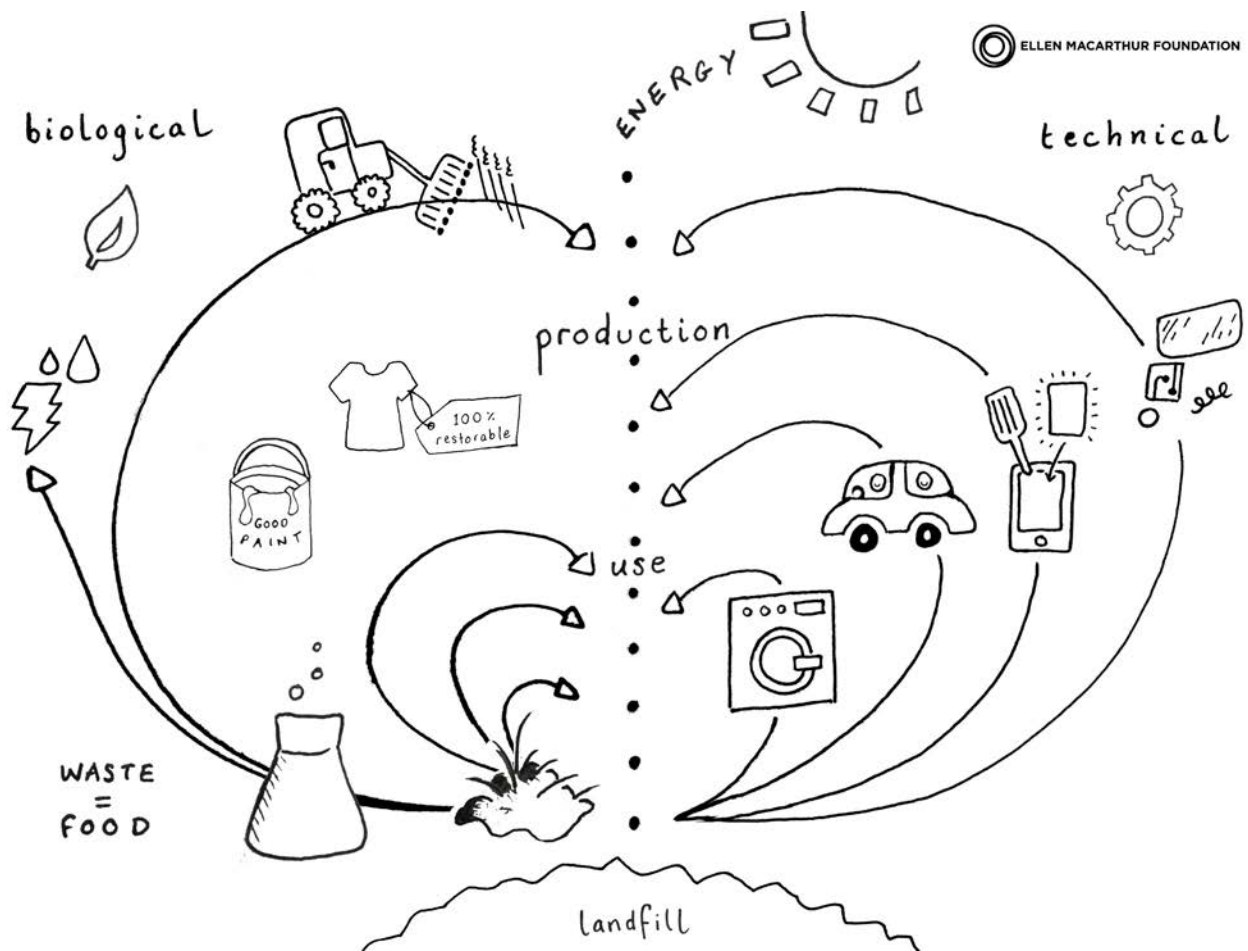


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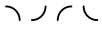
# Circular flows



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There are many ways to design for circularity. The left side is when you design for a biological cycle, whereas the right side represents when you design for a technical cycle, meaning man made materials.



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# Technical Cycle



Brainstorm some of the cycles that your product or service could be designed for.

HOW MIGHT THIS BE POSSIBLE FOR MY PRODUCT?

WHAT WOULD BE NEEDED OR IS STANDING IN MY WAY?

**1** IT GETS REUSED

You extend how long a product or material stays in use. This might mean offering a product as a service, as in car sharing schemes.

e.g. ZIPCAR

**2** IT GETS REFURBISHED

You design a product that can be easily repaired or upgraded to prolong use.

e.g. PATAGONIA

**3** IT GETS REMANUFACTURED

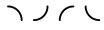
Your product returns to the manufacturer after use to have any necessary components replaced before reentering the market

e.g. RENAULT

**4** IT GETS RECYCLED

You design a product that is made from pure materials, standardised to be recycled and returned to a raw natural state.

e.g. PET PLASTICS



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# Biological Cycle



Brainstorm some of the cycles that your product or service could be designed for the biological cycle

HOW MIGHT THIS BE POSSIBLE FOR MY PRODUCT?

WHAT WOULD BE NEEDED OR IS STANDING IN MY WAY?

**1 MATERIALS GET CASCADED THROUGH OTHER APPLICATIONS**

Your product allows the biological materials to get cascaded through other applications - this means that more of the embedded value and energy can be extracted before the nutrients are going back to the soil. For instance, if you burn a tree directly for energy, you lose out on the value that could be harnessed as wooden products before eventual incineration.

e.g. **PATAGONIA**

**2 VALUABLE FEEDSTOCK GETS EXTRACTED**

Your product allows for extraction of valuable bio-chemical nutrients in biorefineries. This applies to the biological components in your product. Orange peel, for example, can yield limonene, which might be in your next cosmetic product.

e.g. **PATAGONIA**

**3 IT RETURNS TO THE BIOSPHERE**

Your product returns nutrients back to the earth after use (by composting, biodegrading, etc)

e.g. **ECOVATIVE**

