

CIRCULAR ECONOMY POSITION STATEMENT

Siemens driving the transition to a Circular Economy

The world has finite resources and to ensure these can be used in a sustainable way we must transition to a Circular Economy. This brings new opportunities for Siemens, using new technologies and business models to use natural resources more productively. Historically, resources have been used in a linear way – Take – Make – Dispose. Resources must now be continually circulated throughout the economy, making use of resources multiple times and in multiple ways.

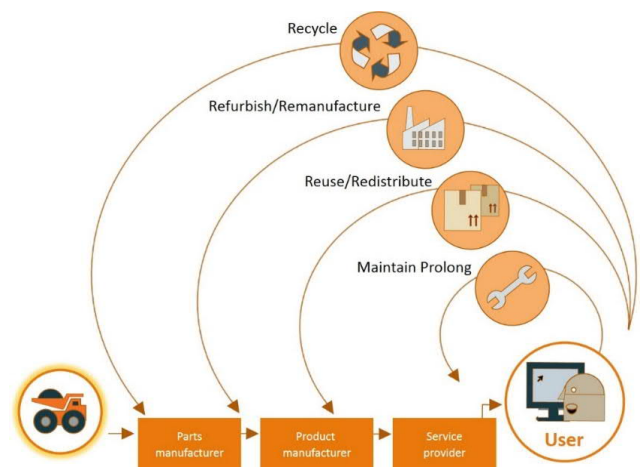
- Siemens is committed to making its own operations more circular, using resources more efficiently and designing out waste.
- Siemens will work across the value chain (with our customers and our suppliers) to support and enable their move to greater circularity.
- Siemens will work with other interested parties to collaborate on circular economy initiatives to enable societal shift to circularity of resource use.

Linear to Circular – USING materials rather than using them up

Why it's important

Working towards a Circular Economy is a key business strategy for Siemens. Failure to do so represents a significant business risk. Shifting to more circular models makes us Future Ready. Greater Resource Efficiency brings cost savings and makes the business more profitable and competitive.

Considering Circular Economy Thinking across the whole lifecycle of our products and services makes us Industry leading.



Adapted from Ellen MacArthur Foundation Circular Economy System Diagram

Applying these principles across our value chain brings wider societal benefits – supporting Siemens core purpose:

“The business of our business is to serve society and create value for all stakeholders based on economic benchmarks. That is our purpose.” Joe Kaeser, Aug 2018

Siemens role in a Circular Economy

Historically we have focused on improving recycling rates, but this only addresses the end of the production and use phases. A more holistic, system wide approach is needed.

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This can be summarized in to six key areas of opportunity:



Regenerate - using recycled materials and renewable energy

Prolong – prolonging product life spans through maintenance and design

Optimize - improving product efficiency and removing waste from supply chains

Loop - keeping components and materials in “closed loops”

Digitalize - delivering goods and services virtually

Exchange - replacing materials with advanced renewable ones or applying new technologies such as 3-D printing

Adapted from McKinsey “Mapping the benefits of a circular economy” 2017

Circular Economy and Sustainability

Working towards a Circular Economy supports Siemens UK Sustainability Strategy. The Circular Economy is underpinned by the efficient use of energy and a decarbonised energy system. It also requires parties across the supply chain to work together towards Circular solutions. This aligns with Siemens three other sustainability focus areas: Responsible Supply Chain, Energy Efficiency and Decarbonising our Fleet. Circular Economy is an intrinsic part of Siemens desire to become a net positive organization. A shift from “less bad” (wasting less material), to “doing more good”: keeping materials in the loop, continually reusing, repairing, remanufacturing and minimizing resource leakage.

What is resource efficiency and how does it relate to Circular Economy?

Resource efficiency is a key driver to achieving a Circular Economy. Resources include energy, nutrients, water and materials. In the context of this strategy we are focusing on Materials. Resource Efficiency is more than better waste management. It’s achieving the most efficient use of materials, throughout the supply chain, and keeping those materials circulating through the economy by:

- Making products last longer
- Making products easier to maintain and update without unnecessary wastage
- Making products easier to dismantle into clean material streams
- Sourcing materials already in circulation, reducing dependency on virgin materials
- Ensuring materials can be recovered and reused
- Eliminating waste

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The next 5 years – what will we do?

Objective – transition Siemens in the UK to operate in a Circular Economy

How:

- Establish a programme of Circular Economy Learning to embed Circular Principles across all parts of the business.
- Regularly report on Siemens own waste statistics and targets to drive our own resource efficiency
- Establish material and/or product specific programmes where these are key for our business
- Collaborate both within Siemens (across organisational and country boundaries) and with external parties to drive progress on Circularity
- Share our Circular Economy stories both internally and externally.

These commitments align with the BiTC Waste to Wealth Commitment of which Siemens is a signatory (November 2018)

REVISION HISTORY

Revision No.	Effective Date	Sections Affected	Reason for Revision