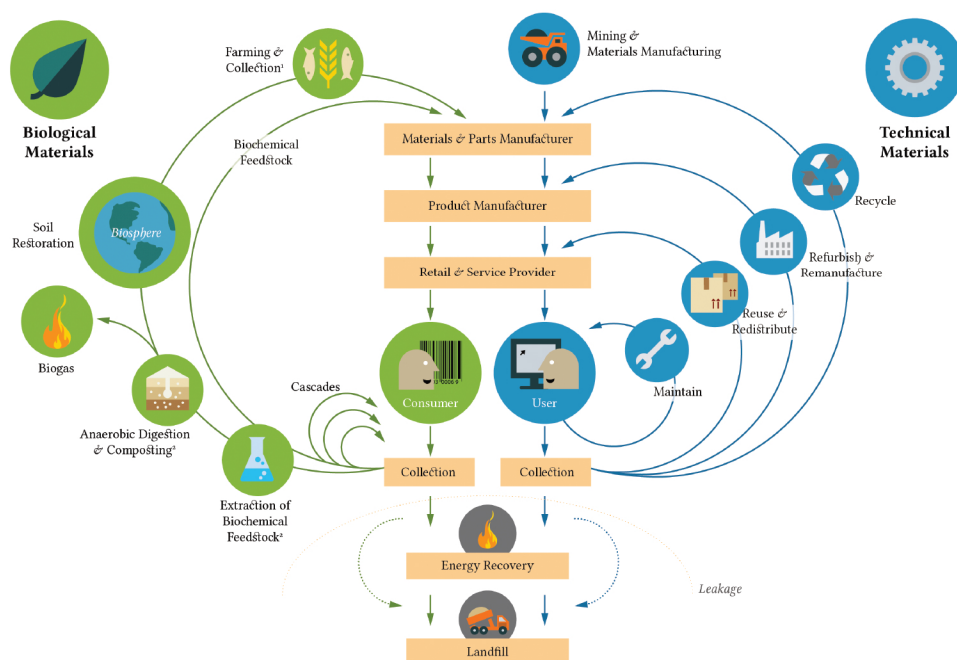


ESTA VIEWPOINT

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Join the circular movement

Is the circular economy a golden bullet for innovation and long-term sustainability? *Dr Lore Grohmann* explains that this change in economic development is coming to the energy industry

Just over a year ago, the European Commission (EC) put forward a package to support the EU's transition to a circular economy. Despite this and intensive lobbying activity by the Ellen MacArthur Foundation (EMF), surprisingly few people have heard the term and even fewer have any idea of what a "circular economy" actually is.

So what is different between a linear and a circular economy? The globally prevalent "take - make - use - dispose" economic model originated on the back of the industrial revolution. It relies heavily on large volumes of cheaply available raw materials, energy, credit and waste sinks. Does it remain fit for purpose in view of today's resource scarcity, increased price volatility and growing environmental risk

including pollution and climate change?

The circular economy provides an alternative economic model that is restorative and regenerative by design. In a circular economy the value of products and materials is maintained for as long as possible and a clear distinction is made between technical and biological materials. It is an industrial system that replaces the end of life concept with restoration, is run by renewables and eliminates the use of toxic chemicals.

Its overall goal is to decouple global economic development from the consumption of finite resources. As such, the circular economy addresses increasingly pressing resource-related challenges for business, economies and - quite possibly - humanity as a whole.

It's not rocket science but it is time to



Dr Lore Grohmann is marketing manager at **Wilson Power Solutions** and chair, **ESTA's Strategy Group** on the attractiveness of a new economic model

think in terms of systems. New challenges require new ways of thinking. 'Systems thinking' is a key building block of a circular economy. When people consider natural systems, most intuitively understand that nothing goes to waste and that all parts of the system are ultimately connected: atoms, molecules, cells and organisms transit through sequences of differing morphologies and energetic states, with materials and components being reused and reconfigured in perpetual cycles of stability and change.

Circular product design takes its inspiration from this characteristic. The recovery of materials and components is not just dealt with after a product has reached the end of its life but is enabled at the design stage. This means that material selection for durability and non-toxicity, construction for ease of disassembly and the existence of appropriate reverse cycles all become important design considerations.

The rise of new business models will involve turning owners into users. Speaking from a product manufacturer's point of view, re-thinking the way we design our products is not everything. Creating attractive value propositions for circular products will require new business models that promote a shift from ownership to use (or access). Many businesses are already operating such models. For example, car leasing has been around for decades. Car sharing is on the rise in many cities. Telecoms companies are providing access rather than selling a particular handset with "new phone every year" programmes. And most software is now leased and services like Netflix and AppleTV have dematerialised home entertainment.

This is likely to spread to the energy industry. Wilson Power Solutions supplies power transformers. But who really wants to own a power transformer?

A circular economy offers a historic opportunity not just to boost our economy but make it more competitive, more responsible, fairer and ultimately more sustainable.

This is where ESTA as an association can not only contribute significant input but become true enablers of a new economic system that is fit for the 21st century.

To find out how ESTA is supporting its members in the current economy, informing wider stakeholders and shaping future direction - grab your invite to a 2017 ESTA event at www.esta.org.uk ■

• For more information on the circular economy and to get involved visit:

<https://www.ellenmacarthurfoundation.org/>
http://ec.europa.eu/environment/circular-economy/index_en.htm

6 The aim of the circular economy is to decouple economic development from the consumption of finite resources