

Circularity: The next step in sustainability

Never before has the world seen such significant climate change, population growth and technological change in such a short timeframe. The International Resource Panel Report says material resource use reached nearly 90 billion tons in 2017, and may more than double from 2015 to 2050 in support of a growing global population.¹



The average share price growth of companies listed on the Climate Performance Leadership Index (CPLI) outperforms the Bloomberg World Index by nine percent.²

This level of consumption is not sustainable under the current take/make/waste approach to producing goods that has dominated manufacturing since the industrial revolution.

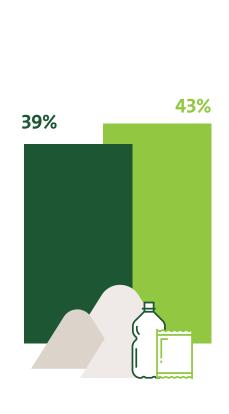
With a growing awareness of a finite supply of natural resources, unchecked climate change and the demand for more sustainable practices, the circular economy movement has been growing at a rapid pace. A completely new approach to manufacturing and business, circularity thinking puts resource conservation, sustainability and environmental impact at the heart of product design and business purpose.

For companies that are making sustainability a strategic part of their business, understanding circularity is critical to advancing their agenda. From increasing long-term viability to generating significant cost savings, circularity brings value to business.



Consumers' awareness and concern is growing

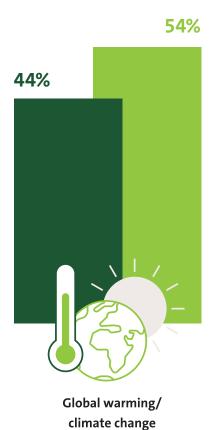
A comparison of responses from NMI's U.S. Sustainability Trends Reports from 2014 and 2018 indicates that consumers' concern about high level environmental issues is growing.³



Packaging filling up the landfills



Hazardous, toxic, nuclear waste



Circular economy triggers a paradigm shift

As business conditions and the global economy evolve, entire approaches to business and revenue models are changing. The circular economy is changing the way we see the world, value resources and generate revenue. See how some common business terms are being redefined by the circular economy.



According to the 2018 UN Circularity Gap Report, only nine percent of the world's resources are cycled back into the economy after use.⁴

Traditional economy

Take/Make/Waste is the predominant business model. We extract and use natural resources and energy to produce goods, which are sold, then used, then disposed of at end of life.



Economic model



New economy

Circular business models consider products from design through end of life, diverting materials from landfill to use as recycled content, for second life reuse, or for repurposing for different uses.

Unlimited natural resources are available to use and generate economic benefit.



Natural resources



Resources are limited and are to be maximized and used sparingly and/or reused whenever possible.

End product with no value to be disposed of at the end of the manufacturing and/or usage cycle.





A resource; a stock or supply of materials that can be re/used for manufacturing and/or other processes.

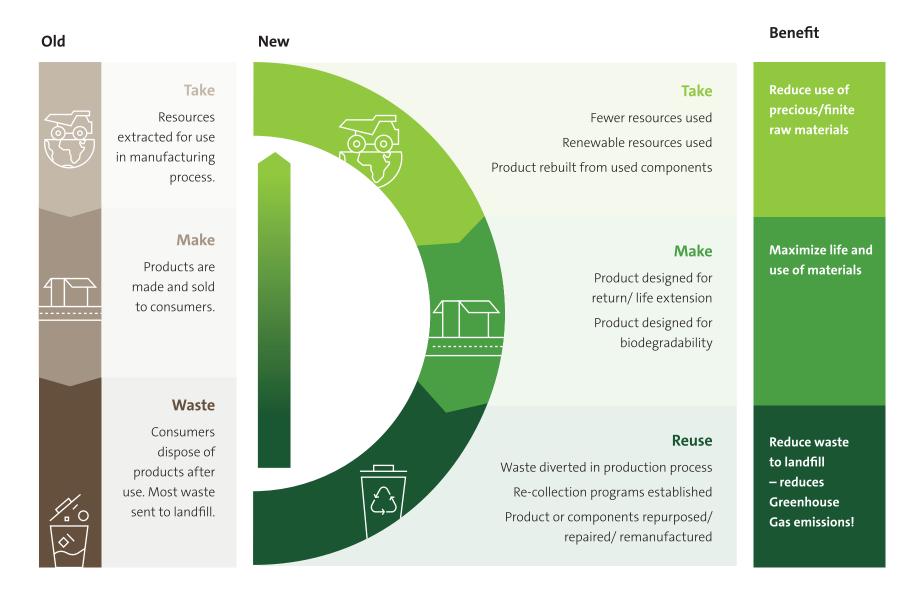
A differentiator. A criteria pursued by the most progressive, forwardthinking organizations.





An essential aspect of every business incorporated into all areas of operation and reported on alongside financial performance.

The making of a circular economy



Bending the linear model

Transform your sustainable business model by employing circular business principles. The table below presents some strategic objectives and then possible approaches for realizing circularity in those areas.



Approach with circular mindset



Minimize use of non-renewable resources and, where possible, identify renewable resource replacements.

Considerations

- Reevaluate product designs and dematerialize where possible
- Commit to sourcing recycled or biobased content



Rather than designing products for sale, use and disposal, consider full lifecycle impact during design. Make products that can be repaired, upgraded or reused. Also consider the environmental implications of the manufacturing process.

- Certify for recycled or rapidly renewable content
- Design products and channels to encourage users to recycle
- Design modular products for repair, reuse or easy disassembly for recycling
- Reduce energy consumption during production process



Rather than plan for waste and product disposal as a natural part of a product's lifecycle, rethink approaches to eliminate as much waste as possible through resource recovery, recycling, etc.

- Pursue Zero Waste Certification
- Reduce packaging by lightweighting
- Recover resources and reuse them as resources for other processes

Start mapping the path to circularity with more insight.



Get ideas about what sustainability means to your business.



Read insights from sustainability experts.



Understand how to pave a path to circularity in your business.

Additional resources

Interested in learning more about the circular economy? Check out these resources for more information.

Ellen MacArthur Foundation

Chamber of Commerce Foundation Circular Economy Toolbox

Circular Economies Industries Association

European Commission "Towards a Circular Economy" Resources

Accenture

The Knowledge Transfer Center

UL – Circular Economy

Visit UL.com/insights to explore and engage.



Sources

1 International Resource Panel, "Assessing Global Resource Use," 2017

2 World Economic Forum and Accenture, "Beyond Supply Chains – Empowering Responsible Value Chains," 2015

3 NMI, "U.S. Sustainability Trends Report," 2014, 2018

4 Circle Economy, "The Circularity Gap Report," January 2018

5 McKinsey, "Europe's circular economy opportunity," September 2015