The Circular Economy Could Unlock \$4.5 trillion of Economic Growth, Finds New Book by Accenture

Waste to Wealth, by Accenture Strategy, identifies five business models for circular advantage

NEW YORK; Sept 28, 2015 – The Circular Economy could generate \$4.5 trillion of additional economic output by 2030, according to new Accenture (NYSE: ACN) research that identifies circular business models that will help decouple economic growth and natural resource consumption while driving greater competitiveness.

The Accenture Strategy research unveiled in a new book, Waste to Wealth, published by Palgrave Macmillan, reveals that today's business practices will contribute to a global gap of eight billion tons between the supply and demand of natural resources by 2030. This is equal to the total resource usage in North America in 2014 and translates to \$4.5 trillion of lost economic growth by 2030 and as much as \$25 trillion by 2050.

Waste to Wealth notes that for the forty years until the turn of the millennium, the real price of commodities fell despite rising demand, resulting in various forms of waste: wasted energy and materials that are only used once, wasted lifecycles where products are discarded after a short time, and wasted assets, such as cars, that stand idle for much of their lives. In the last fifteen years, however, commodity prices have begun to rise and become more volatile, reflecting the uncertainty of supply of many natural resources caused by the growth of the global population, the consumer economy and urbanization.

"The take, make and waste approach of traditional, linear business models has now begun to choke economic growth through unpredictable raw material prices and the increased cost of depending on less stable supplies of constrained resources," said Peter Lacy, managing director, Accenture Strategy and co-author of the book. "By turning waste into wealth with new business models, companies can boost their competitiveness by reducing dependence on scarce resources and generating new innovative services that grow revenues."



Waste to Wealth

The Circular Economy Advantage

Peter Lacy & Jakob Rutqvist

The circular economy could unlock \$4.5 trillion in growth, according to Waste to Wealth from Accenture Strategy

The Accenture Strategy book identifies five business models that will drive the circular economy:

- Sharing Platforms use digital technologies to maximize the use of underused assets, such as hotel rooms, vehicles or consumer goods. The authors note that 80 percent of typical household items in mature economies are used only once a month.
- Products-as-a-Service replace ownership-based models with usage based services, such as selling driving time instead of selling cars. These encourage companies to maintain products for longer and offer new services, such as predictive maintenance or fuel efficiency support.
- Product Life Extension relies on remanufacturing and repairing used products to give them a longer life with existing or new customers.
- Circular Supply Chains allow suppliers and partners to use recycled materials repeatedly, saving costs and bringing predictability to supply chains e.g. a clothing company using new materials to avoid the environmental damage and risks associated with cotton cultivation.
- Recovery and Recycling saves costs and reduces the volume of waste and landfill.
 Some major companies now re-use 100 percent of the waste generated at certain manufacturing plants.

Digital strategies underpin the circular economy

Advances in digital technologies will underpin the emergence of the circular economy, according to the book. For instance, many companies are using combinations of mobile, machine-to-machine and data analytics to match the supply and demand for otherwise underused assets and products.

"While a number of pioneers have achieved successful examples of the circular economy, new digital technologies now offer an opportunity for all companies to put circular business models at the core of their global strategies," said Jakob Rutqvist, senior manager, Accenture Strategy and co-author of Waste to Wealth. "To achieve large scale adoption, organizations also have to deploy new functional capabilities across their value chains."

Waste to Wealth recommends that companies consider implementing the following capabilities to support their circular economy models:

- Manage complex circular networks in which suppliers and partners collaborate to gain value from waste
- Design products fit for multiple lifecycles and develop services based on the re-use of products. This requires closer links between product design and after sales services.
- Secure circular supplies through redesigning the role of procurement and ensuring manufacturing processes can make use of repurposed materials.
- Invest in continuous customer engagement to create a receptive market for repurposed products and to compete effectively in the shared economy.
- Create 'return chains' with partners and suppliers to boost the quality and reliability of recycled and remanufactured materials.

"The driver of the circular economy isn't scarcity, it's opportunity," said Lacy. "By keeping resources economically productive for as long as possible, companies can achieve greater growth. Most companies have waste hotwired into their existing ways of doing business and it will take many steps for most to turn waste into wealth. But those who get there first will achieve circular advantage that differentiates them in their market."

Waste to Wealth is based on research across 120 companies and 50 executives and is the first book to establish the global economic opportunity presented by the circular economy. It contains a large number of case studies that explain how pioneers have succeeded across multiple industries. It is available in the UK, China and Germany and will be published in the US on September 25, 2015. It can be purchased through amazon.com, amazon.co.uk and other retailers. Read more at www.accenture.com/Waste2Wealth.

About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with more than 358,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$31.0 billion for the fiscal year ended Aug. 31, 2015. Its home page is www.accenture.com.

Accenture Strategy operates at the intersection of business and technology. We bring together our capabilities in business, technology, operations and function strategy to help our clients envision and execute industry-specific strategies that support enterprise wide transformation. Our focus on issues related to digital disruption, competitiveness, global operating models, talent and leadership help drive both efficiencies and growth. For more information, follow @AccentureStrat or visit www.accenture.com/strategy

###

Contacts

Matthew McGuinness Accenture + 1 917 282 7187 matthew.mcguinness@accenture.com