

02. THE WEIGHT OF THE ECONOMY IN RESOURCES CONSUMPTION

Area	Use of Resources
Level	ADVANCED
Topic	x 2. Economic implications of RC production and consumption
<i>Module</i> Keywords	x The weight of the economy in (Area) circular economy; corporate social responsibility;
	responsible business models; limited resources; reusing; repairing; recycling; zero waste
Introduction (500-1000 characters including spaces)	The satisfaction of the citizens' needs requires resources to be converted into goods and services: food, clothing, houses, roads, hospitals, schools, etc. Productive resources, therefore, are all those used to produce such as raw materials, labour, machinery, energy, buildings, financial capital, etc. But productive resources are limited, as opposed to the unlimited nature of the needs and desires to be

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	satisfied, so not all needs can be met with the available resources. This is the fundamental economic problem. If current consumption patterns continue, natural resources will continue to degrade and deplete, threatening the feasibility of future generations. The economic response to this challenge lies in the circular economy, which consists of a production and consumption model that involves reusing, repairing and recycling materials and products as long as possible, extending their life cycle, and reducing waste to a minimum. When a product ends its life, its materials are kept for being productively used again and again, trying to reach zero waste production.
Economic Impacts/Benefits (2000-2500 characters including spaces)	Responsible consumption by citizens is one of the drivers of the circular economy. This economic model offers a framework of systemic solutions for economic development that profoundly addresses the cause of global challenges while revealing great opportunities for growth. Driven by design and underpinned using renewable energy and materials, the circular economy revolutionises the way we design, produce and consume.
	The circular economy involves creating responsible business models based on the creation of real value, combining economic feasibility and profitability with providing a utility to society This is what is called Corporate Social Responsibility.
	The application of the circular economy has a direct impact on the fight against climate change and waste prevention. For example, changing the way we produce and use steel, cement, aluminium and plastic could reduce GHG emissions up to 40% by 2050. On the economic side, using recycled or reused steel for building construction could in turn

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	generate up to 25% savings in material costs per ton of steel. Likewise, the application of circularity principles to the construction sector could lead to a reduction in materials (and costs) using modular production and 3D printing, the optimization of energy use and the reuse or recycling of high-value materials in the deconstruction phase. For its part, reducing plastic production and consumption can avoid one-third of global plastic waste generation by 2040. Given the current and projected increase in global waste generation, the transition to a circular economy becomes crucial. By addressing structural inefficiencies along supply chains, the circular economy offers abundant opportunities for value creation at the industry level. For example, the returnable packaging market is expected to grow from US\$37 billion (2018) to US\$59 billion by 2026. Similarly, the second-hand clothing market will double the size of
	the fast fashion market by 2029. Some studies suggest that the transition to a circular economy could generate a net economic benefit of €1.8 trillion for Europe by 2030, and an annual value of approximately US\$ 624 billion in India by 2050, compared to the current linear scenario.
	According to <i>Accenture</i> , circular economy (CE) practices would contribute 4.5 trillion dollars until 2030 by closing the circularity gap. Recent studies in Latin America and the Caribbean also indicate that the adoption of the circular economy could create a net increase of 4.8 million jobs in the region. Furthermore, according to the European Commission, the implementation of ambitious circular measures in Europe could generate around 700,000 new jobs.
Good practices	Companies as the main protagonists of the change towards a more sustainable production model







(1000 -1500 characters including spaces)	 must incorporate good practices. Some good business practices are pointed out: Mercadona, Makro, Carrefour, and other supermarkets and stores apply discounts to food close to its expiration date that are easily distinguished by the coloured stickers indicating the discount percentage. Triodos Bank uses the money of savers and investors to finance only social, environmental and cultural projects. Endesa's RC4ALL project uses artificial intelligence to achieve responsible energy consumption, generating customised recommendations that improve the efficiency of client consumption. Circular Economy in Action is a platform made up of Cosentino, Ecoembes, Faconauto, GM Tecnologías Ferrovial Servicios, IKEA, Mercadona, Oficemen and Sedigas, that aims to make visible circular projects that contribute investment to the economy and generate employment opportunities, thus becoming a lever to establish the foundations for solid growth. Currently, the platform brings 19 circular economy projects which represent an aggregate investment of 9,555 million euros and an estimated employment generation of 4,750 direct jobs in Spain.
Current and future challenges (1000 -1500 characters including spaces)	The economy was just 8.6% circular in 2021, which implied we could only reallocate 8.6% of non-virgin materials. Our economic system is founded on recklessly exploiting the planet's resources, resulting in environmental, ecological, social, and health issues. Employing virgin resources for 91.4% of our economic activities also suggests a significant







	"circularity gap" that is linked to inefficient business practices.
	Thus, we have to talk about concepts such as sustainable value chains that generate trusting relationships that seek a win-win approach for all the actors involved, the promotion of sustainable entrepreneurship and social innovation as responsible business models. Sustainability means cost savings by reducing the use of resources and waste, and by promoting a local, local economy.
	Transparency from companies, and education and information on the part of consumers are also important for the further development of sustainable markets and economic indicators of sustainability (such as stock market indexes of ethical businesses, financing, etc.).
	Sustainability is economically profitable and is a long-lasting strategic commitment for the future. This means that we are facing a new paradigm. The Next Generation programme is a huge opportunity to advance to a more circular economy. The EU's long-term budget, coupled with <i>NextGenerationEU</i> (NGEU), the temporary instrument designed to boost the recovery, form the largest stimulus package ever financed in Europe. A total of €2.018 trillion in current prices* are helping rebuild a post-COVID-19 Europe. It will be a greener, more digital and more resilient Europe.
Language	English
Partner	UMA / Eva Sánchez Teba – Germán Gémar – Ana M. Castillo
Further references	Circular economy: a question of design (UNIDO, Feb 2021) <u>https://www.unido.org/stories/circular-</u> <u>economy-question-design</u>







Accenture (2021). Winning consumers with a circular economy: <u>https://www.accenture.com/us-en/insights/consumer-goods-services/circular-economy</u> Launch of the Global Alliance on Circular Economy and Resource Efficiency (UNIDO, Feb 2021) <u>https://www.unido.org/news/launch-global-alliance-circular-economy-and-resource-efficiency-0</u> .
Why innovative manufacturing and circularity are key for a resilient manufacturing industry post- COVID-19 (UNIDO, May 2020) https://www.unido.org/news/why-innovative- manufacturing-and-circularity-are-key-resilient- manufacturing-industry-post-covid-19.
EC: Recovery Plan for Europe: <u>https://commission.europa.eu/strategy-and-</u> <u>policy/recovery-plan-europe_en</u>
Circular economy and employment: <u>https://www.up-to-</u> <u>us.veolia.com/en/climate/circular-economy-</u> <u>climate-change-solution-unemployment</u>



