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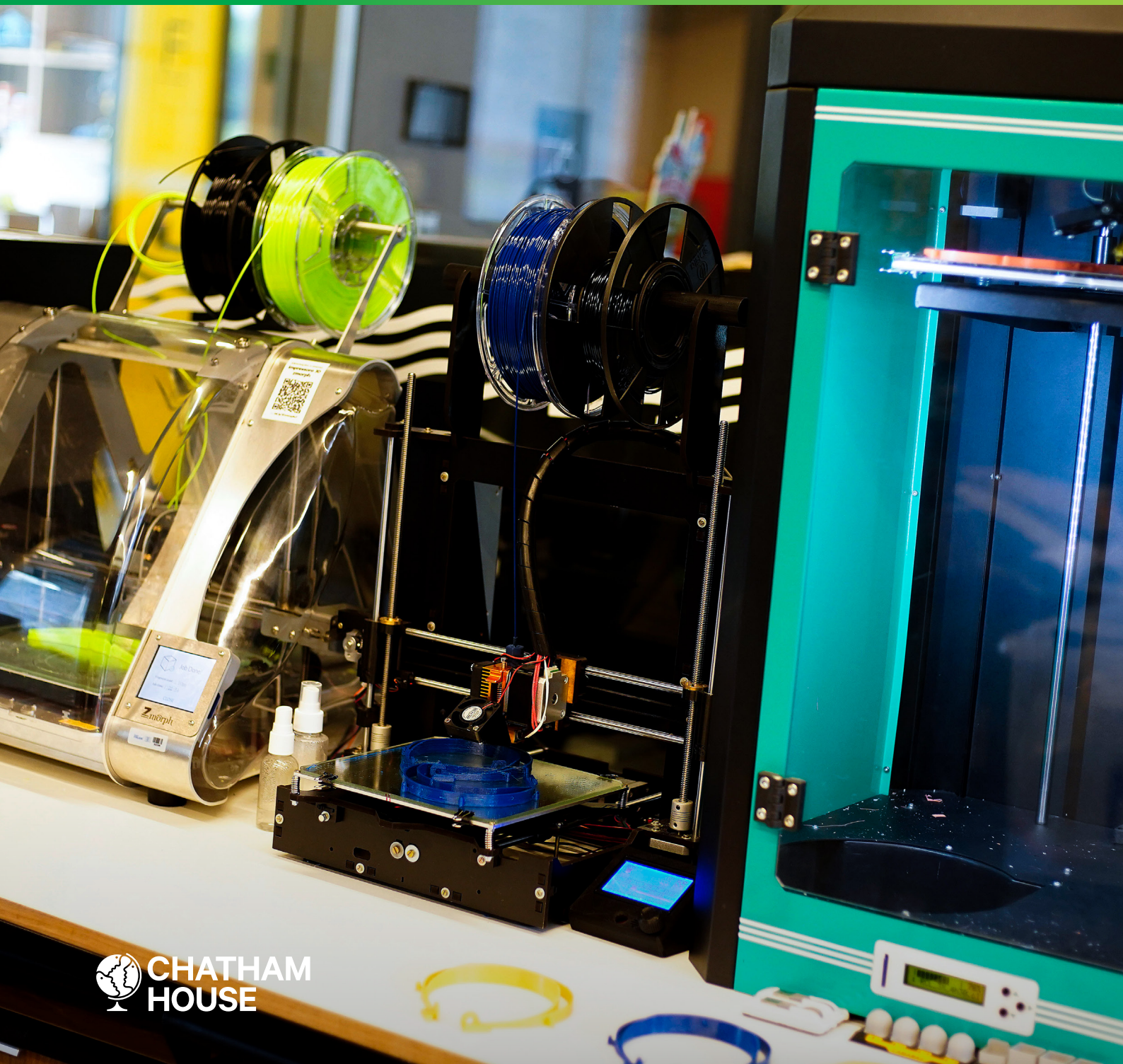
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# The circular economy in Latin America and the Caribbean

## Opportunities for building resilience

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# Summary

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- The circular economy has gained prominence in Latin America and the Caribbean (LAC) in recent years as an approach to sustainable development. Countries in the region have either implemented or are planning new circular economy policies, public initiatives and roadmaps.
  - The COVID-19 pandemic has revealed significant shortcomings in the linear economy – the vulnerability of global value chains, the depletion of natural resources and the exacerbation of social inequalities. The circular economy offers an alternative framework for a more resilient and inclusive economic model in LAC countries.
  - A successful transition towards the circular economy in LAC will depend on the widespread adoption of Industry 4.0 technologies. Industry 4.0 is a key enabler of the circular economy, allowing new business models to be profitable while reducing environmental impacts. LAC governments need to support a circular economy transition through a technology lens, to guarantee both added value and sustainability.
  - LAC countries must invest more in research and development in order to take full advantage of Industry 4.0 technologies and apply them to a circular economy transition. Investment in science and technology is still comparatively low, equating on average to just 0.66 per cent of GDP across the region, with enterprises (public and private) financing only about 36 per cent of that share.
  - Social and environmental justice considerations are of equal importance in the circular economy model. A ‘just transition’ approach is important to ensure that the circular economy does not perpetuate existing inequalities of the linear economic model, or damage livelihoods through new technologies and the automation of jobs. A social innovation-based approach to the circular economy in the LAC region can reduce poverty while promoting human development and sustainable consumption patterns for a more resilient and inclusive society.
  - Good governance and the establishment of transparent, rules-based institutions at the national level are crucial for a successful and inclusive circular economy transition in the region. Providing a stable investment environment and functioning markets for business, as well as addressing inequality, are all crucial for success. At the regional level, strategies can be designed to ensure that countries coordinate to support national and subnational regions in the transition.

- The current financing situation for the circular economy in the LAC region is limited mainly to the provision of international development finance for waste management and recycling, which are at the lower end of the valorization hierarchy within the circular economy. Over the next decade there could be substantial changes across the region in waste management, which will need to be financed. It is important to attract both domestic and foreign investments beyond the waste management sector to make the transition to a circular economy possible.
- The three major industrial areas that are a priority for the circular economy in LAC are the mining and extractives sector, waste management and recycling, and the bioeconomy. Circular economy practices in the mining sector are essential for reducing environmental impacts and social risks. They will also improve the sector's competitiveness as demand for primary metals and minerals falls due to urban mining and advances in product reuse, material recovery and recycling technologies. In the waste management and recycling sector, circular economy practices could reduce the amount of waste that is either landfilled or burned. Meanwhile, the bioeconomy offers major opportunities for sustainable food systems and agriculture in the region, which can help avoid trade-offs between economic, social and environmental objectives.



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# 01

# Introduction

**With heightened urgency around international commitments on the environment and development, the circular economic model offers Latin America and the Caribbean (LAC) an alternative way of upholding the region's global responsibilities.**

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## The emerging momentum of the circular economy in LAC

The circular economy model has gained high-level political attention and support in Latin America and the Caribbean (LAC) in recent years. The region has already launched more than 80 public initiatives relating to the circular economy.<sup>1</sup>

These policies are important enablers that are necessary to accelerate and scale up circular practices in the economy, such as changes in product design, in supply chains and industrial production processes, and in how products are being used and disposed of at the end of their lifetime.<sup>2</sup>

In 2019, the circular economy concept gained significant traction at the regional level in LAC. In November of that year, the Intersessional Meeting of the Forum of Ministers of Environment of Latin America and the Caribbean announced proposals for a Regional Coalition on Circular Economy (Coalición Regional de Economía Circular), 'with the main objectives [of developing] a common regional vision and strategy on circular economy in order to have a bigger impact, to build cooperation and exchange best practices', tasking the UN Environment Programme (UNEP) with building the coalition in close cooperation with the United Nations Industrial Development Organization (UNIDO) and other

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<sup>1</sup> Cerna, L., Aravena, A., Castello, N. and Urrutia, R. (2019), *Economía Circular y Políticas Públicas: Estado del arte y desafíos para la construcción de un marco político de promoción de economía circular en América Latina [Circular Economy and Public Policies: Best practice and challenges for the construction of a political framework to promote the circular economy in Latin America]*, Konrad-Adenauer-Stiftung, <https://www.kas.de/es/web/energie-klima-lateinamerika/einzelitel/-/content/economia-circular-y-politicas-publicas> (accessed 16 Jun. 2020).

<sup>2</sup> World Business Council for Sustainable Development (2019), *Policy enablers to accelerate the circular economy: Scaling up actions across regions and stakeholders*, Geneva: WBCSD, [https://circulareconomy.europa.eu/platform/sites/default/files/wbcd\\_policy\\_enablers\\_to\\_accelerate\\_the\\_circular\\_economy.pdf](https://circulareconomy.europa.eu/platform/sites/default/files/wbcd_policy_enablers_to_accelerate_the_circular_economy.pdf) (accessed 16 Jun. 2020).

international and regional partners.<sup>3</sup> In the context of the post-COVID-19 recovery in the region, the circular economy is gaining additional attention as a solution to increase resilience and mitigate future disruptions.<sup>4</sup>

This research paper provides analysis of the current state of circular economy policies in LAC and identifies priority issues for national governments, businesses, civil society and the research community. It has five aims:

- To map circular economy-related policies and public initiatives in LAC;
- To identify opportunities to build resilience in LAC economies and societies through the circular economy, post-COVID-19;
- To analyse challenges and solutions associated with the transition from a linear to a circular economy in the LAC context;
- To highlight the relevance of Industry 4.0 technologies and innovation for the circular economy; and
- To give special consideration to the need for a ‘just transition’, which figures prominently in the climate change debate, but whose applicability is equally relevant in relation to the circular economy.

The analysis and findings of this paper are based on a literature review and on insights gathered from a Chatham House research workshop – ‘Just Circular Economy Transitions in Latin America’, held in Montevideo, Uruguay, in December 2019, with 33 participants from eight LAC countries – as well as on the responses to a follow-up survey after the event. The survey was designed to gain insights into how the circular economy is understood in LAC among leading stakeholders including governments, international organizations, academia, civil society and the business community. The survey was completed by 28 stakeholders representing 11 LAC countries (see Annex for details of participants and the full survey methodology) and participants were asked to indicate and elaborate on the sectors they felt would most benefit from a transition to the circular economy and those that would face the greatest challenges, the key policies required to support an inclusive transition, as well as their thoughts on existing financing opportunities and requirements, technological needs and the role of trade. The results from the literature review, workshop and survey ultimately led to this paper focusing on the bioeconomy, waste and extractive sectors as the most likely to be affected by the introduction of the circular economy in LAC. The selection of countries included in the analysis was based on the geographical representation at the workshop and in the survey, as well as on the literature review.

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<sup>3</sup> UN Environment Programme (2019), ‘Conclusions and recommendations of the Intersessional Meeting of the Forum of Ministers of Environment of Latin America and the Caribbean’, UNEP/LAC-IC.2019/8, 6 November 2019, <https://wedocs.unep.org/bitstream/handle/20.500.11822/31103/conclusions.pdf?sequence=1&isAllowed=y> (accessed 16 Jun. 2020).

<sup>4</sup> Kechichian, E. and Mahmoud, N. (2020), ‘The circular economy can support COVID-19 response and build resilience’, World Bank Blogs, 18 May 2020, <https://blogs.worldbank.org/psd/circular-economy-can-support-covid-19-response-and-build-resilience> (accessed 16 Jun. 2020).

## Just circular economy transitions

The circular economy entails moving away from the current linear economic model of ‘take–make–throw away’, in which resources are extracted, turned into products, consumed and finally discarded. In a circular world, by contrast, products and materials are kept in circulation for as long as possible by designing them to be more durable, reusable, repairable and recyclable. The circular economy concept applies life cycle thinking and ‘cradle to cradle’ approaches, considering residues as the ‘food’ for new products and processes, and is underpinned by the shift to using renewable energy sources.<sup>5</sup>

Transitioning to a circular economy is critical for achieving the targets of the Paris Agreement and the 2030 Agenda for Sustainable Development. Emissions from the production of materials accounted for 15 per cent of global greenhouse gases in 1995, this figure increased to 23 per cent in 2015.<sup>6</sup> Implementing circular economy strategies in five major sectors – steel, cement, plastic, food and aluminium – could reduce global emissions from the production of key materials by 40 per cent, or 3.7 billion tonnes, in 2050.<sup>7</sup>

## Transitioning to a circular economy is critical for achieving the targets of the Paris Agreement and the 2030 Agenda for Sustainable Development.

The circular economy is also critical for addressing the global waste crisis, which threatens environments, public health and economic development worldwide. About 40 per cent of plastic waste is not accounted for in managed landfills or recycling facilities, and it is estimated that between 4.8–12.7 million tonnes of such waste enter the oceans each year as marine litter and microplastic particles.<sup>8</sup> Moreover, the transition to a circular economy has the potential to be a driver of job creation, value addition and economic growth, when supported by appropriate policies, legislation and incentives.<sup>9</sup>

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