Latin America's View of the Circular Economy

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*Abstract: The purpose of this **concept note** is to investigate the transition level of Latin America toward the circular economy. The findings show Latin America countries are implementing circular economic. The Latin America circular economy is a hotly debated theoretical and operational issue that affects the entire world.*

Keywords: Linear Economy, Latin America, Circular Economy, Local Economy, Scenarios

INTRODUCTION

Despite high levels of poverty and inequality, the Latin America Development Project has focused on the circular economy.

Circular economy, which has established itself over the past decade as a model oriented to sustainability both in terms of resource management and productivity, is a modern concept that has the potential to convert the linear economic model into a circular one.

The three major industrial areas that are a priority for the circular economy in LA are the mining and extractives sector, waste management and recycling, and the agriculture. 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 agriculture offers major opportunities for sustainable food systems in the region, which can help avoid trade-offs between economic, social and environmental objectives.

The circular economy, based on the principles of extending the lifecycle for materials – to keep the value of products and materials in the loop as high as possible for as long as possible – is central to sustainable development, as is the transition to renewable energy,

respect for biodiversity, societal balance and social inclusion. Within these track, is strategic the contribution of circular economy to the fight against poverty and inequality, and to the 17 United Nations Sustainable Development, such as: 1 (No Poverty); 6 (Clean water and sanitation); 7 (Clean energy), 11 (Sustainable cities and communities); 13 (Climate change); 16 (Life before water); 15 (Life on land).

CONCEPTUAL IDEAS

In the linear model, any industry generates both goods and waste. Waste management is regarded as a geopolitical concern in all regions of the world that is needed to accelerate the transition from the linear to the circular economy.

Sustainable waste management is the first best practice for ensuring a modern circular economy, and driving local economies.

We wish to demonstrate how the circular economy aids in the development of local economies. The numerous ways in which individuals, corporations and institutions interact, in our opinion, are ripe with opportunity. The circular economy can begin small and produce results "near home," opening up new avenues for collaboration to protect and create value. Building revitalization, meaningful jobs, and increased mobility are all examples of major drivers of innovation.

In fact, circular local based economy can take many advantages from proximity, relationships, and knowledge , such as:

- *Competitiveness due to local products typicalities*
- *Reduced transaction costs*
- *More employment*
- *Better resilience, with respect to technological changes, and market variability*

A core approach in this paradigm is the principle of “reduce, reuse, and recycle” (3R).

The 3R strategy is based on a zero-waste culture, but it also stresses the importance of investment in infrastructure and the legal system.

Many Countries focused on different theoretical and operational aspects to measure the transition from the linear to circular economy model.

The heterogeneity of the quantitative and qualitative approaches, pointed out the need to link the indicators in different social, economic, and technological contexts.

Following this conceptual stream, it is interesting to study the knowledge actions and policies that have been applied in LA, which has not only high levels of poverty and injustice, but also rapid growth rates.

Mining and extractives sector, waste management and recycling, and the agriculture are heading toward a circular economy approach, accounting for 32 percent of LA’s gross domestic product.

To promote the transition process, should be assisted by both institutional and theoretical actions.

To research an understanding of circular economy in the LA context, it is important to consider how countries are adopting the circular economy model.

FIRST OPERATIONAL CONSIDERATIONS

A first analysis of the following documents concerning LA circular economy:

- **Mexico** National Zero Waste Vision (2019),
- **Cuba** Policy for increasing the Recycling of Raw Materials (2012),
- **Dominican Republic** Dominicana Limpia Policy on Solid Waste Management, (2017),
- **Puerto Rico** Law No. 411 for Recycling and Reducing Solid Waste (2000),
- **Guatemala** National Policy for Integrated Solid Waste Management (2015),
- **Antigua and Barbuda** The External Trade (Shopping Plastic Bags Prohibition) Order, (2016),
- **El Salvador** Law on Integrated Management of Waste and Promotion of Recycling (2020),
- **Honduras** Regulation for Solid Waste Management (2010),
- **Nicaragua** National Policy on Solid Waste Management, (2005),
- **Venezuela** Comprehensive Waste Management Law (2010),
- **Costa Rica** National Policy on Sustainable Production and Consumption (2018),
- **Guyana** A National Integrated Solid Waste Management Strategy for the Cooperative Republic of Guyana (2017),
- **Panama** Law No. 33 on Integrated Waste Management and Zero Waste (2018),
- **Brazil** Law No 12.305 National Policy on Solid Waste Management (2010),
- **Colombia** National Strategy for the Circular Economy (2019),
- **Paraguay** Law No. 3956.09 on Solid Waste Management (2017), Ecuador Circular Economy Pact (2019),
- **Uruguay** Circular Economy Action Plan (2019),
- **Peru** Circular Economy Roadmap for Industry (2020),
- **Argentina** National Strategy for the Comprehensive Management of Urban Solid Waste (2005),
- **Bolivia** National Law No. 755: Integrated Waste Management Law (2015),
- **Chile** National Law 20, 920 Regarding Wast Management, Extended Producer Responsibility and Recycling (2020)

highlights some considerations.

A first operational consideration is that numerous **LA government policies and enterprise commitments have been made to advance the circular economy model**. Analyzing the considered documents is possible highlights internal and external barriers related to develop LA circular economy.

A second operational consideration is linked to the **internal barriers** in twenty one LA Countries are related to *sustainability cycle* (all twenty one), *sunk costs* (Mexico; Cuba; Puerto Rico; Guatemala; El Salvador; Honduras; Nicaragua; Venezuela; Panama; Brazil, Colombia; Paraguay; Uruguay; Peru; Argentina; Bolivia; Chile), *resource quality* (Mexico; El Salvador; Honduras; Nicaragua; Venezuela; Panama; Brazil; Colombia; Paraguay; Uruguay; Peru; Argentina; Bolivia; Chile), *customer-supplier relationship* (Mexico; El Salvador; Honduras; Nicaragua; Venezuela; Panama; Brazil; Colombia; Paraguay; Uruguay; Peru; Argentina; Bolivia; Chile), technology availability (all twenty one) , *lack of expertise* (all twenty one).

A third operational consideration is linked to the **external barriers** in twenty one LA Countries are linked to *regulations* (Mexico; Cuba; Dominican Republic; Puerto Rico; Guatemala), *social responsibility* (Venezuela, Mexico; Costa Rica; Guyana; Panama; Brazil; Peru; Argentina; Bolivia; Chile), *stakeholder pressure* (El Salvador; Honduras; Nicaragua; Venezuela; Costa Rica; Guyana; Panama; Brazil; Colombia; Paraguay; Uruguay; Peru; Argentina), *lack of support of national company* (all twenty one), resistance to change (all twenty one), *cost and financial constraints* (Costa Rica; Guyana; Panama; Colombia; Paraguay; Uruguay; Peru; Bolivia; Chile), *lack of technical and technological capacity* (Mexico; Cuba; Dominican Republic; Puerto Rico; Guatemala; Antigua and Barbuda; El Salvador; Honduras; Nicaragua), *lack of supply cycles* (Mexico; Cuba; Nicaragua; Venezuela; Panama; Brazil; Colombia; Paraguay; Uruguay; Peru; Argentina; Bolivia; Chile).

Despite these barriers, LA countries are embracing circularity to facilitate a sustainable transformation to a circular economy.

Overcoming these barriers is not easy, but possible.

Analysis of official reports identifies and offers an understanding of the relevant both barriers and opportunities to circular economy implementation in LA.

In all documents analyzed, the concern on the part of the local government for issues such as the environment emerges strongly, but it is equally clear that the weak local, economic, financial, and managerial skills represent elements of difficulty in the transition from a linear economy to a circular one.

While technology is a major subject, other issues include social innovation, design, and coalition building. The move to a circular economy necessitates fundamental change and demands teamwork. A municipal government can declare the goal, define the boundaries, and foster innovation. Researchers and knowledge institutes can create new insights and tools, as well as validate ideas and raise awareness. Local entrepreneurs have the courage and inventiveness to take risks, accelerate change, and execute on a large scale. Meaningful participation by people and residents is likewise essential, as is educating tomorrow's leaders, employees, and consumers.

The circular economy is a hotly debated theoretical and operational issue that affects the entire world, this exploration of its application to LA is timely and relevant.

The main issues highlighted in the concept note are included in the following picture

CONCEPT NOTE HIGHLIGHTS

EFFORTS IN LATIN AMERICA.

Numerous LA government policies and enterprises commitments have been made to advance the circular economy model.

INTERNAL BARRIERS

- sustainability cycle
- sunk costs
- resource quality
- customer-supplier relationship - collective governance
- technology availability
- lack of expertise

EXTERNAL BARRIERS

- regulations
- social responsibility,
- weak relationships among stakeholders at all (regional, national) level
- resistance to change
- cost and financial constraints
- lack of technical and technological capacity
- lack of supply cycles

NEEDS FOR OVRCOMING THE BARRIERS.

While technology is a major subject, before focusing on it, social innovation, design, and coalition building are the main issue, without which no tecnologic innovation could be appropriate and effective

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