



“The contradiction between the cross-border nature of supply chains and their design in national contexts poses a particular challenge in the transition to a circular economy for governments and all stakeholders in global supply chains.”

-Holger KUHLE

Image Source: Wikimedia Commons. August 7, 2017. Gebang leaves from Gorontalo are loaded by trucks at the Pagimana ferry port and then to Makassar with the final destination of Bali as raw materials for all kinds of decorations. Photo Credit: Marwan Mohamad. [https://commons.wikimedia.org/wiki/File:Daun\\_Gebang.jpg](https://commons.wikimedia.org/wiki/File:Daun_Gebang.jpg)





Holger KUHLE  
Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ)  
Germany

## Commitment to global supply and value chains' transition to circularity

What factors need to be considered moving forward and how can due diligence be leveraged to achieve ecologically aligned circular value chains?

A number of countries are wary, particularly those in the Global South, of tinkering with their contribution to global trade. They want to defend their status in the existing linear value chains they have built up over decades and trust that they will be able to exploit even more of the potential that comes from the well-rehearsed development path. Global supply chains (GSC) and global value chains (GVC) provide opportunities for countries to integrate into the global economy at lower costs by producing only certain components or tasks – that they excel at – rather than complete final products – for which they would struggle to deliver. The World Trade Report from 2014 reveals that the “share of trade in parts and components between developing

countries has quadrupled over the last 25 years”, but also highlights that “gains from GVC integration are not automatic” and “involve risks. For example, while it may make industrialization easier to achieve, competitive advantage can become more fleeting, increasing vulnerabilities to relocation of firms.”<sup>1</sup>

Countries hesitate to lose their position within GSC. Their interest in preserving and expanding their place in the process of globalization contains a potential for resistance against technologically innovative “creative destruction”. While the Global North believes that the diffusion of its technological solutions will ensure sustainable economies in the Global South, actors in the Global South tend to be cautious and anticipate that the transformation of production processes might destabilize their economic position and ecosystem. The experience of how the incessant technological changes in global industrial operations not only produce new consumer goods, but also new production or transport chains has been already widely diffused worldwide. Hence, it has become clear that the business partner of today may suddenly turn into a competitor and even force one completely out of the market. In the Global South, the last decades have been often perceived as playing a part of increasing economic importance in global trade since the beginning of decolonization. Anything that threatens to restructure these achievements appear, in the eyes of some, as a step backwards to weaken their position.

These concerns become even more virulent as the circular economy does not only converge with increasing digitalization, but the latter also announces itself as its enabler. While it is foreseeable that circularization will change the rules and relationships within supply chains, it cannot be ruled out that the digitalization emerging from the tech industry will eventually hijack the norms in place within supply chains. However, there are concerns that only those who bring about the reorganization of supply chains will have this power and opportunity to apply the innovation.

What are factors conducive for moving forward?

Against the given global economic background, the principles of circular economy may prove to be corporate duty of care in an ecological dimension if:

There are mechanisms in place to allow countries, especially in the Global South, to harness technological potentials for the transformation of global supply chains to circularity. These require a clear and shared understanding of the opportunities and potential trade-offs in regional and global trade frameworks.

All stakeholders are integrated in a non-disruptive transition. To address the radical environmental and social challenges faced by supply chain actors around the world, it is important to recognize that the rhetoric of disruption (i.e. feared here and idealized there) distorts the question of who society and state

should support in the circular transformation of supply chains. In essence, it is about a “just transition.” It is not only about financing innovative users of circular technologies and fueling their dissemination, but also supporting the social, economic and societal conditions of the transition.

To be non-disruptive, the principle of circularity should apply across all levels of supply chains, i.e., global, regional and local. This becomes possible if:

The rise of new regional and large country domestic supply chains in China and other emerging countries as well as their regional eco-systems are used as a basis to anchor and contextualize circular economy principles. The GSC, is often integrated across several countries within one world region. At the same time, new centers of consumption have emerged in the Global South with the growth of high-demand middle classes. The Chinese electronics industry, for example, imports almost 90 per cent of its primary products from other countries in East and Southeast Asia. Value chains are being reconfigured as companies decide how to compete in the many major consumer markets that are now dotted worldwide. Statistics show that “in 2016, 40 percent more cars were sold in China than in all of Europe, and China also accounts for 40 percent of global textiles and apparel consumption.”<sup>2</sup> The same estimations predict “that emerging markets will consume almost two-thirds of the world’s manufactured goods by 2025, with products such as cars, building products, and machinery leading the way. By 2030,

middle income countries are projected to account for more than half of all global consumption.”<sup>3</sup>

There is focus on the very local contributions to regional and global circularity. The specific local preconditions to participate in circularity, as demanded by the regional and global levels, need to be taken into account. It is key to tap into local “circulating” capacities for the benefit of the entire regional and global chains. At the very local organizational level, the transition to a circular economy pays off when the local circumstances do not have to only execute a global technological trend, but are able to harness local conditions and innovations to driver forward global circular solutions. In Kalundborg Eco-Industrial Park in Denmark, which is valued as a pioneer for Circular Economy, several companies in the same location exchange material waste, energy and water in an integrated closed-loop ecosystem. This process is known as industrial symbiosis.

#### Due diligence leveraged to achieve ecologically aligned circular value chains

These above mentioned regional and local dimensions are essential because ultimately this is where both circularity is implemented and due diligence comes into play. At the same time, the principle of corporate due diligence in GSC is intended to ensure that ecological demands, such as climate and biodiversity protection, consistently contain the economic cost considerations of international trade.

Against this backdrop, the circularity of value chains is not only dependent on the regional and local underpinnings, and vice versa. The regional and local levels are dependent on their global superstructure. The latter will be able to enforce due diligence through circular economy principles to the extent that:

Regional regulatory initiatives come up, such as the European Union’s guidelines, to set standards and due diligence frameworks.

Regional initiatives align with global efforts through integrating circular economy principles in trade agreements by considering the different needs between Global North and Global South. Currently, “more than 40 per cent of trade agreements in force today include provisions related to competition policy, investment, standards and intellectual property rights”.<sup>1</sup> GSC across the world, where state borders continue to endure, lack the power or incentive to resolve the contradiction between finite extractable resources and the infinite production, investment and consumption of said resources. The contradiction between the cross-border nature of supply chains and their design in national contexts poses a particular challenge in the transition to a circular economy for governments and all stakeholders in global supply chains.

Assessments and reporting integrate due diligence and circularity into monitoring and certification principles of large

leading companies, with adequate mechanisms in the lower segments of value chains. It includes a strong due diligence framework for primary raw materials.

Options of de-risking companies and countries that have a stake in the up-stream segment of value chains is explored (e.g., using tax and price policies) to increase profitability of due diligence and circularity-based products.

References:

1. The World Trade Report 2014,  
[https://www.wto.org/english/res\\_e/booksp\\_e/wtr14-2c\\_e.pdf](https://www.wto.org/english/res_e/booksp_e/wtr14-2c_e.pdf)

2. McKinsey Global Institute  
Globalization in transition: The future of trade and value chains  
<https://www.mckinsey.com/featured-insights/innovation-and-growth/globalization-in-transition-the-future-of-trade-and-value-chains>

3. McKinsey Global Institute  
Globalization in transition: The future of trade and value chains  
<https://www.mckinsey.com/featured-insights/innovation-and-growth/globalization-in-transition-the-future-of-trade-and-value-chains>