

Palacký University Olomouc  
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## **MASTER THESIS**

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Palacký University Olomouc  
University of Clermont Auvergne  
University of Pavia

**MASTER THESIS**

# Circular Economy in the Context of “Development”

From win-win-win towards social justice implications: A policy discourse analysis accompanied by a  
case study

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GLODEP  
2022-24

**Declaration:**

I, Sara Zimmermann, hereby declare that my thesis, titled “Circular Economy in the context of ‘development’” is the result of my individual efforts for the Erasmus Mundus Joint Master Program in Global Development Policy (GLODEP). I affirm that all the work presented in this thesis is my own, and I have appropriately cited, referenced, and acknowledged all the academic papers and secondary sources used in my research.



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Sara Zimmermann, May 2024

## Declaration of honour on the use of AI

*During the writing of the submitted thesis, I used the following AI tools, Grammarly (<https://www.grammarly.com/>), DeepL (<https://www.deepl.com/translator>) and to a lesser extent ChatGPT (<https://chatgpt.com>) to check for spelling/grammatical mistakes, to check/improve my translations and to improve some of my formulations. After using this AI tool, I declare that I have reviewed and edited the text and I take full responsibility for the content of the submitted thesis.*

Signature



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Sara Zimmermann

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### Zásady pro vypracování

While globally, Circular Economy (CE) policies have gained rapid popularity in the last 2 decades (Calisto Friant et al., 2020; Pansera et al., 2021), many scholars have pointed out the neglect of the social dimensions in the current policy discourse (Mies & Gold, 2021; Ziegler et al., 2023). Yet, even CE policies that consider a social dimension, such as the widely cited example of the French ban on food waste (Ellen MacArthur Foundation, 2022), can actually create violence and institutionalize existing injustices (Bonzi, 2023).

Moreover, it is widely accepted that many countries in the Global South have an inherently high level of circularity (Muchangos, 2022). Additionally, CE policies are increasingly relevant not only in the national context of many Global South countries but also in African-European cooperation (Rademakers et al., 2021). Yet, the academic literature mainly covers European and to a lesser extent North American and Asian, in particular Chinese contexts (Muchangos, 2022).

Therefore, this thesis aims to zoom in and qualitatively understand how the CE discourse interrelates with the development apparatus and what possible implications for social justice are.

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- Bonzi, B. (2023). *La France qui a faim. Le don à l'épreuve des violences alimentaires*. Seuil.
- Calisto Friant, M., Vermeulen, W. J. V., & Salomone, R. (2020). A typology of circular economy discourses: Navigating the diverse visions of a contested paradigm. *Resources, Conservation and Recycling*, 161, 104917. <https://doi.org/10.1016/j.resconrec.2020.104917>
- Ellen MacArthur Foundation. (2022, September 12). France's Anti-waste and Circular Economy Law. *Ellen MacArthur Foundation*. <https://www.ellenmacarthurfoundation.org/circular-examples/frances-anti-waste-and-circular-economy-law>
- Ferguson, J. (1994). *The anti-politics machine: 'development,' depoliticization, and bureaucratic power in Lesotho*. University of Minnesota Press.
- Foucault, M. (2010). *The birth of biopolitics: Lectures at the Collège de France, 1978-79* (M. Senellart, Ed.; Paperback ed). Palgrave Macmillan.
- Mies, A., & Gold, S. (2021). Mapping the social dimension of the circular economy. *Journal of Cleaner Production*, 321, 128960. <https://doi.org/10.1016/j.jclepro.2021.128960>
- Muchangos, L. S. D. (2022). Mapping the Circular Economy Concept and the Global South. *Circular Economy and Sustainability*, 2(1), 71-90. <https://doi.org/10.1007/s43615-021-00095-0>
- Pansera, M., Genovese, A., & Ripa, M. (2021). Politicising Circular Economy: What can we learn from Responsible Innovation? *Journal of Responsible Innovation*, 8(3), 471-477. <https://doi.org/10.1080/23299460.2021.1923315>

Rademeakers, K., Smit, T. A. B., Artola, I., Koehler, J., Hemkhaus, M., Ahlers, J., Van Hummelen, S., Chewprecha, U., Smith, A., & McGovern, M. (2021). *Circular economy in the Africa-EU cooperation: Continental report*. (Project: "Circular Economy in Africa-Eu cooperation"). Trinomics B.V., Tomorrow Matters Now Ltd., adelphi Consult GmbH and Cambridge Econometrics Ltd. <https://data.europa.eu/doi/10.2779/008723>

Ziegler, R., Bauwens, T., Roy, M. J., Teasdale, S., Fourrier, A., & Raufflet, E. (2023). Embedding circularity: Theorizing the social economy, its potential, and its challenges. *Ecological Economics*, 214, 107970. <https://doi.org/10.1016/j.ecolecon.2023.107970>

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**Abstract:**

Since the new Circular Economy Action Plan of the European Union 2020, the concept of Circular Economy (CE) has become increasingly relevant in the European-African “development” apparatus. Building on critical literature concerning both, CE and the “development” apparatus, this thesis examines the current CE policy discourse between Africa and the EU. Additionally, a case study explores a CE “development” project and its possible implications. The results show that the discourse is largely in-line with the previously characterized “development” discourse, being a-political, technological-focused and standardising/homogenising. The case study results in three themes: (i) the dumping narrative; (ii) multi-level governance and (iii) cherry-picking as problem construction. Integrating the results and existing literature, this paper demonstrates possible social justice implications, such as enhancing distributional injustice through disregarding certain risks/costs. Overall, the results show the importance, multiplicity and interconnectedness of social justice dimensions for CE within the “development” apparatus.

**Keywords:** Circular Economy; Development Apparatus; African-European Cooperation; Policy Discourse; Case Study

**Internship/Research Stay:**

This thesis was written while I was a visiting student at the Post Growth Innovation Lab of the University of Vigo, Spain. The Lab is concerned with interdisciplinary research “*enabling a sustainable, inclusive, and fair ecological transition away from the exploitative economic model that exists today*” (Post-Growth Innovation Lab, 2024). Among other projects, the Lab participates in the JUST2CE project (2021-2024) which researches just and responsible transition towards circular economy (JUST2CE, n.d.). This project, its approach and the results significantly inspired this thesis. I had the chance to learn from various seminars, discussions and workshops, spanning discipline from philosophy to science and technology studies.



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## List of Abbreviations

(M)SMEs	(Micro), Small and Medium Enterprises
ACEA	African Circular Economy Alliance
ACEF	African Circular Economy Facility
ACEN	African Circular Economy Network
AU	African Union
BMZ	Federal Ministry of Economic Cooperation and Development (Germany)
CE	Circular Economy
CEAP	Circular Economy Action Plan
CSOs	Civil Society Organisations
EAC	East African Community
ECA	United Nations Economic Commission for Africa
ECOWAS	Economic Community of West African States
EGD	European Green Deal
EMF	Ellen MacArthur Foundation
EPA	Environmental Protection Agency (Ghana)
EPR	Extended Producer Responsibility
GDG	Global Development Governance
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit, German Development Agency
GN	Global North
GS	Global South
HOC	Hand-over Centre
IO	International Organisation
JCE	Just Circular Economy
KfW	German Development Bank
MESTI	Ghanaian Ministry of Environment, Science, Technology and Innovation
MNCs	Multi-National Companies
MSPs	Multi-Stakeholder Partnerships
NCER	National Circular Economy Roadmap
NGO	Non-Governmental Organization
NORAD	Norwegian Agency for Development Cooperation
ODA	Official Development Assistance

PACE	Platform for Accelerating the Circular Economy
PPPs	Private-Public Partnerships
SDGs	Sustainable Development Goals
TCE	Technocratic Circular Economy
ULABs	Used Lead Acid Batteries
UN	United Nations
UNEP	United Nations Environment Programme
WCEF	World Circular Economy Forum
WEEE	Waste Electrical and Electronic Equipment
WEF	World Economic Forum

*“Paradoxically, a saint like [Albert] Schweitzer can give one a lot more trouble than King Leopold II, villain of unmitigated guilt, because along with doing good and saving African lives Schweitzer also managed to announce that the African was indeed his brother, but only his junior brother.”*

—(Achebe, 2018, p.21)

## **1. Introduction**

Recently the focus of European Circular Economy (CE) policies expanded to the realm of international cooperation. The new Circular Economy Action Plan (CEAP) of the European Union (EU), adopted in 2020, includes the goal of a partnership with Africa (European Commission, 2020, p.18). Consequently, CE has become increasingly important in “development” governance between both continents. Yet, CE faces its own challenges. Firstly, despite the increasing global popularity of the CE in policy, academic and advocacy spheres, the material circularity levels are globally below 10% and decreasing (Calisto Friant et al., 2020; Circle Economy, 2023; Martinez-Alier, 2021). Secondly, and more fundamentally, there is no agreed-upon definition of CE. Academia rather characterizes the concept as an umbrella term with various partially contradicting assumptions, varying not only in the understanding of 'economy' but also in terms of techno-optimism (Calisto Friant et al., 2020; Merli et al., 2018; Mies & Gold, 2021).

Based on this, a growing body of critical literature points out various problematic dimensions of current CE policies, such as missing social dimensions and their potential to reinforce existing inequalities through various mechanisms (see among others Hobson & Lynch, 2016; Mhatre et al., 2021; Mies & Gold, 2021). Coinciding, academia has a long tradition of approaching “development” critically, highlighting institutional limitations and instrumental effects (Escobar, 2012/1995; Ferguson, 1994). Yet so far there is little academic literature concerned with CE within the “development” context, and if it is addressed, then without a nuanced analysis of the CE discourse, nor building on the critical scholarship surrounding “development”. Often, it is empathized that CE will bring economic and environmental advantages or even propose a "triple win" by including social benefits (Käsner et al., 2024; Mandizvidza & Makhanda, 2024; Schröder et al., 2020).

Thus, this paper starts to situate the current discourse on CE in the “development” apparatus within two bodies of critical literature. Relying on the CE discourse typology of Calisto Friant et al. (2020) and building on the theoretical insights of Escobar (2012/1995) and Ferguson (1994) regarding the “development” discourse and its implications, the paper approaches two research questions. Firstly, *what is the CE policy discourse in the “development” apparatus between African and European actors?* By analysing central policy documents, the paper explores different dimensions of the problem construction, solution designs, implementing actors and disregarded aspects. Secondly, by exploring a case study of a circular “development” project, the paper aims to start to explore the questions: *What does the discourse do?* As this is an inherently complex question, that requires in-depth anthropology

research, the purpose of this paper is to start the exploration of the “development” actors’ perspectives and identify potential themes.

This paper contributes to the academic literature concerning CE by questioning the current double/triple win narrative of CE in “development”, through the exploration of nuances and complexities (see for instance Käsner et al., 2024; Mandizvidza & Makhanda, 2024; Schröder et al., 2020). This exploration is crucial for further in-depth studies, to recognize possible discourse lock-ins and to create space for alternative approaches. Furthermore, both “development” policies and CE policies inherently claim to increase social well-being. Yet, both realms are known for their potential downsides (Escobar, 1992; O’Hara & Rams, 2024). Thus, rather than simply hoping for the best, it is crucial to learn from the critical literature concerning both realms. Accordingly, this research contributes to exploring potential implications by considering social justice dimensions. Lastly, CE policies also claim to enhance environmental sustainability, yet depending on the underlying assumptions and policy instruments, these claims can create unrealistic expectations (Pansera et al., 2021). Therefore, a closer look at the current discourse helps to decrease the danger of greenwashing.

The paper is structured as follows: Section 2 reviews the relevant literature and explores the theoretical framework of both research questions. Section 3 describes the methodologies used for each question. Section 4 presents the results of both research steps and situates them within the existing academic literature. Lastly, Sections 4 and 5 discuss the results and conclude the paper with further research recommendations.

## **2. Literature Review**

This literature review first addresses the general discourse of CE, CE in the Global South (GS) and how it relates to social justice. Next, CE policies in Europe, and Africa and their cooperation are thematized. Lastly, building on the theoretical foundation of Escobar (2012/1995) and Ferguson (1994), the research questions are formulated and justified.

### **2.1 Circular Economy**

The idea of moving from a linear economic model (take-make-dispose) towards a circular approach, has several roots in various academic traditions (Calisto Friant et al., 2020). Among them are Boulding's (2011/1966) spaceman economy, the understanding of the potential limits of natural resources and planetary boundaries (Meadows et al., 1974; Steffen et al., 2015), biomimicry, industrial ecology, and sharing economy (Calisto Friant et al., 2020; Passaro et al., 2024; Ripa et al., 2021). Overall, CE aims to address resource scarcity and environmental problems by ‘closing’ economic processes, using output as inputs (Calisto Friant et al., 2020). Given this academic multiplicity and the wide area of CE policies, nowadays no widely accepted definition prevails. In fact, CE can be rather characterized as an umbrella term with many different and partly contradicting underlying assumptions and anticipations (Calisto Friant et al., 2020; Lazarevic & Valve, 2017; Merli et al., 2018; Mhatre et al., 2021; Mies & Gold, 2021).

Therefore, rather than defining CE, it is important to explore the current discourse. Calisto Friant et al. (2020) identify four discourse types along two dimensions: (i) a segmented/holistic approach to the embeddedness of CE and (ii) a sceptical/optimistic approach to technological innovation (see Table 1). The first dimension differentiates between a socially, ecologically and political integrated understanding of CE from an understanding of CE that assumes separateness of economic and technical aspects. The second dimension distinguishes the assumption of the (in)ability to decouple growth from ecological degradation in our current economic system.

Table 1. CE Discourse Typology. Adapted from Friant et al. (2020, p.11)

		Approach to social, economic, environmental and political consideration	
		Holistic	Segmented
Technical innovation and ecological collapse	Optimist	Reformist Circular Society	Technocentric Circular Economy
	Sceptical	Transformational Circular Society	Fortress Circular Economy

In Europe, the currently prevailing vision of CE is strongly shaped by the Ellen MacArthur Foundation (EMF) and it includes biophysical aspects and frames CE as an apolitical, technological-driven, ecomodernist practice (R. Passaro, Ghisellini, & Ulgiati, 2024; Ripa et al., 2021;

Schröder et al., 2019; Ziegler et al., 2023). This discourse of a circular economy neglects the socio-political dimension and implications but also assumes the possibility of green growth and decoupling and neglecting the rebound effect (Calisto Friant et al., 2020, 2024; Pansera et al., 2021). Consequently, several shortcomings of circular policies can be categorized: (i) CE policies tend to lack understanding of socio-political implications and therefore, lack democratic and inclusive practices; (ii) geopolitical dimensions are widely overlooked; and (iii) similarly, implications on labour as well as contributions of unpaid, informal and/or care work are neglected (Calisto Friant et al., 2024).

Alternatively, more and more scholars are proposing various holistic and embedded approaches to CE (Rask, 2022; Valencia et al., 2023). For instance, Hobson & Lynch (2016) call for a consideration of socio-political aspects of CE, which will also enable debates on the eco-modernist assumptions. Similarly, Mies & Gold (2021) argue for more social and normative aspects, Ashton et al. (2022) for justice and plurality of voices, and James (2022) justifies the need to embed CE and its tools in social life. Other voices call for a politicization of CE (see Pansera et al., 2021; Ripa et al., 2021).

Partially, these approaches can be categorized under the term circular society, which not only considers the circularity of resources but also of wealth, knowledge, power and technology and includes a wider set of actors (Calisto Friant et al., 2020; Jaeger-Erben et al., 2021). Yet, also this term has various understandings and assumptions (Jaeger-Erben et al., 2021). Moreover, some argue for the need to consider degrowth-oriented circular society approaches (Calisto Friant, Doezema, et al., 2023). Beyond academia, environmental organizations, such as Greenpeace, also critique the pro-growth, decoupling assumption, as well as the efficiency paradox, thus calling for a "slow circular economy", which emphasises the slowing of material flows as a prerequisite (Cobbing et al., 2023).

### **2.1.1 Circular Economy in the Global South<sup>1</sup>**

Only a few aspects seem to be widely accepted in the scholarly community concerning CE in the Global South (GS): First, many aspects of GS economies have inherently high levels of circularity, due to scarcities and global inequalities (Cobbing et al., 2023; Gihring et al., 2024; Mandizvidza & Makhanda, 2024; Muchangos, 2022). Second, in comparison with the Global North (GN), there is little research done on CE in the GS and/or produced by GS researchers (Muchangos, 2022; Nijman-Ross et al., 2023). Yet, while Muchangos (2022) points out that there is a need for research on regional implications of CE policies, Nijman-Ross et al. (2023) argue for Africa that more country-specific research is needed to avoid oversimplification.

One aspect that has comparatively much attention in the literature is (solid/e) waste and its management, especially through the “informal” sector (Gutberlet & Carengo, 2020; Martínez Álvarez & Jimenez, 2024; Meira et al., 2022; Muchangos, 2022; Nijman-Ross et al., 2023, 2023; Schröder et al., 2019). Additionally, in the formal conceptualisation of CE, indigenous ontologies and practices are widely neglected (Calisto Friant et al., 2020), famous examples are Kula, ubuntu, buen vivir or ecological swaraj (Calisto Friant et al., 2020; Kothari et al., 2014; O’Hara & Rams, 2024; Shumba, 2011). These ontologies are inherently pluralistic, inclusive and relational, thus differing substantially from the ways of being in the Western policy discourse. Yet, various embedded CE practices that are rooted in local ontologies are described (Mandizvidza & Makhanda, 2024; Martínez Álvarez & Jimenez, 2024; Schröder et al., 2019). In line with this, Sewchurran et al. (2024) argue that CE initiatives in the GS vary from the GN in terms of responsible and collaborative leadership and an organizing approach with an awareness of the wider systems.

### **2.1.2 Circular Economy and Justice**

To conceptualize the social implications and shortcomings of current CE policies, social justice becomes a relevant framework (Meira et al., 2022). The core theoretical concepts of justice pertinent to the CE discourse revolve around three types: (i) distributive justice, (ii) recognition justice, and (iii) procedural justice (Meira et al., 2022). Referring to justice as an issue of equity in the distribution of goods, rights and liberties was the predominant understanding of justice for several decades (Schlosberg, 2009). Rawls' (2005/1971) theory of justice as fairness is concerned with the ideal distribution, in which everyone should have the same political rights and the economic/social inequality within a society should be to the benefit of all. Understanding justice solely as an issue of distribution is criticized by

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<sup>1</sup> The concept of the Global South (GS) can have three meanings: (i) it can refer in a geographic sense to a state or space that is economically or otherwise marginalized; (ii) as a reterritorialized concept it can describe subjugated people (also in the geographical north); or (iii) it describes a resistance imaginary based on shared experiences and visions (Mahler, 2017). Thus, in this paper, GS is not a synonym for "developing" countries but can refer to countries, spaces and people globally.



theorists like Young (1990) and Fraser (2000) for missing out on the underlying causes of this distributional injustice (Schlosberg, 2009). Thus, understanding justice as recognition allows for the inclusion of the social/political/cultural dimensions, which mediate social relations. Recognition can be either conceptualized on an individual or structural level. To link distribution and recognition, justice can be also understood as fair institutional processes, such as democracy and participation (Schlosberg, 2009). All three types of justice are interconnected.

Similarly, Sen's (2009) capability approach is grounded in distributional aspects and moves beyond that by considering also the aspects that are necessary to enable a functioning life (Schlosberg, 2009). Sen (2009) argues that the emphasis should be on removing/ decreasing injustice, rather than defining what the ideal justice is. Similarly, integrating distribution, recognition and procedure Pansera et al. (2024) approach justice thematically: (i) environmental; (ii) labour and (iii) gender justice.

More recently, also restorative justice has been discussed (Malinauskaite & Jouhara, 2019; Meira et al., 2022). Based on the assumption of relationality, environmental restorative justice includes past (acknowledging and repairing) and future (particular and systematic prevention) dimensions (Forsyth et al., 2022). Furthermore, some authors also refer to neoliberal justice which is enhanced through market mechanisms, individual action, freedom and private property (Berry et al., 2022; Tutsirai et al., 2024).

Overall, there is some consensus in the critical CE literature, that there is a lack of all social justice dimensions (Ashton et al., 2022; Berry et al., 2022; Meira et al., 2022; Pansera et al., 2024; Ziegler et al., 2023) and that there is a danger of reinforcing the existing injustices when implementing circular economy policies (Berry et al., 2022; Calisto Friant, Vermeulen, et al., 2023; Martinez-Alier, 2021; Meira et al., 2022; O'Hara & Rams, 2024; Pansera et al., 2024). Yet, the academic discourses just started to explore the different types of justice within CE.

### Distributional Justice in CE

Distributional justice within CE considers the distribution of the risks/costs and benefits of a transformation (Kirchherr, 2021; Meira et al., 2022). For instance, negative health consequences for communities connected to dangerous CE practices (Calisto Friant, Doezema, et al., 2023; Martinez-Alier, 2021). In the GS, especially informal workers and surrounding communities are affected by CE projects, for instance through displacement, harsh working conditions, or health consequences (Gutberlet & Carezzo, 2020; Meira et al., 2022; Schröder et al., 2019). Also internationally, burden of CE-initiatives can be unequally distributed (Pansera et al., 2024). Concerning future distributional justice, Simons (2023) fears costs for Africa if due to CE transitions, the need for African minerals and raw materials declines. Others argue that this decline in dependency on raw material price volatility will be beneficial, or that a decline is unlikely due to an increased need for renewable energy transition (Käsner et al., 2024; Schröder et al., 2019).

Moreover, distributional justice can also include accessibility to circular services and goods, due to monetary, infrastructure limitations, or the digital divide (Ziegler et al., 2023). Leibold et al. (2021) find that distributional justice concerning food is just present in certain narratives of CE in France, others do not show any justice considerations. Using an intersectional perspective, Rask (2022) finds that distributional aspects of CE in Gothenburg are only recognized for the 'other', for instance in faraway poor countries, not within the own context.

### Recognition Justice

Recognition justice within CE is concerned with perspectives, voices and social groups that have been marginalized or completely neglected (Liu et al., 2023; Meira et al., 2022; Ziegler et al., 2023). Among them are informal<sup>2</sup> sectors, even though, especially informal waste workers are starting to be increasingly discussed (Ashton et al., 2022; Calisto Friant, Doezema, et al., 2023; Dewick et al., 2022; Gutberlet & Carenzo, 2020; Ziegler et al., 2023). Additionally, little attention is given to gender perspectives, the participation of minorities and indigenous people and their ontologies and non-profit activities (Calisto Friant et al., 2020; Meira et al., 2022; Pansera et al., 2024). Wuyts & Marin (2022) describe this lack of recognition justice as “nobodying” of actors and activities, for instance, repairing work done in Flanders by non-white workers. Similarly, Kębłowski et al., (2020) find that non-profit and citizen-led circular activities are not considered in urban circular planning in Brussels. Interestingly, Arthur et al. (2023) find in the context of urban Ghana that instead of the usual invisibilization of the informal waste workers, the roles of the local consumers have been overlooked. Beyond simply overlooking, Gregson et al. (2015) argue that EU policies frame certain activities as dirty/wrong, disregarding complexities and power-relations underlying the ‘clean’ CE-practices. Overall, Kirchherr (2021) points out that over 90% of CE scholarship is concerned with GN countries and thus the social impacts on communities in the GS are overlooked.

### Procedural justice

Procedural justice relates to an inclusive decision-making process and democratic practices (Kirchherr, 2021; Meira et al., 2022). For instance, Arfaoui et al. (2022), concerned with CE projects in Northern France, argue that the inclusion of all relevant stakeholders is necessary but not sufficient. It also needs facilitative leadership, effective interaction, info-sharing and a regulatory framework. Additionally, procedural injustice also relates to the framing of the roles, for instance as passive consumers or labour providers (Ziegler et al., 2023). Also in GS countries, Gutberlet & Carenzo (2020) argue that on a project level, participation and inclusive decision-making are needed. However, other authors also raise

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<sup>2</sup> The concept of "informality", widely used especially in the development policy discourse, has also been widely critiqued (Bremner, 1976; Rosaldo, 2021). While it can help boost visibility for otherwise overlooked and marginalized groups, it also homogenizes a very heterogeneous group of actors and creates faulty dualism between formal and informal economies (Rosaldo, 2021).

international, geopolitical injustices issues. For instance, when the East African Community decided to ban second-hand cloth imports, the USA removed some benefits from the African Growth and Opportunity Act (Otlhogile & Shirley, 2023; Schröder et al., 2019). Generally, the lack of international procedural justice contributes to a global (toxic) waste market in which the costs are disproportionately carried by the GS (Arthur et al., 2023; Pansera et al., 2024; Schröder et al., 2019).

#### Other justice dimensions

Lastly, environmental restorative justice becomes increasingly relevant. Also in the context of the circular practices of Waste-to-Energy approaches, restorative justice could play a crucial role (Malinauskaite & Jouhara, 2019). Similarly, next to distributional, procedural and retributive justice Bastos Lima (2022) finds that in the transition towards a bioeconomy in Brazil, India, and Indonesia, also restorative justice is lacking. Considering CE narratives in the US context, Berry et al. (2022) find that justice is little considered, and if justice is present, then it often refers to “neoliberal justice” which advocates for win-win scenarios, private property rights and freedom. Berry et al. (2022) argue that this is insufficient for a fair transition. Aligning Pansera et al. (2024) find, that labour is often quantified into number of additional jobs, relying on narrow conceptualization of labour, creating usually passive roles for workers and unions, devaluing care/reproductive work.

Overall, CE itself cannot be characterized as particularly just or unjust. Rather, certain discourses on CE do or do not consider certain types of justice. Nonetheless, it is generally argued that it needs an inclusive, multi-faceted, contextualized understanding of justice (Ashton et al., 2022; Berry et al., 2022). Possible consequences of disregarding justice dimensions are demonstrated in the French case of food waste:

#### **2.1.2.1 Circular Economy and Justice in France: the case of food waste**

Widely cited as an example par excellence for a Circular Economy (CE) policy that takes into account the social dimension is the French law against food waste (Ellen MacArthur Foundation, 2022). This law aimed to decrease food waste by banning throwing away unsold food products and encouraging food donations with tax incentives (Condamine, 2020). At first glance, this seems like a perfect solution: while reducing food waste, the hungry are fed. As a consequence, a for-profit niche market was created in a space previously occupied by non-profits (Leipold et al., 2021). Companies and Startups, such as "Too Good To Go", aim to create business opportunities by selling those resources that were previously considered waste. Additionally, Bonzi (2023), based on several years of anthropological fieldwork, describes a professionalisation of charity, as they now need to handle higher quantities, but also fulfil stricter requirements.

This development has several implications for social justice. First, it increases distributional injustice, as waste becomes an institutionalized option to stop hunger (Bonzi, 2023). This creates psychological violence, as marginalized people understand that all society has to offer them is their

waste (Bonzi, 2023). But it also creates physical health consequences, as it is very difficult to have a balanced diet based on donated goods (for instance, a huge overrepresentation of sweet, baked goods) (Bonzi, 2023). Secondly, procedural injustice is worsened. Bonzi (2023), refers to Mauss's theory of the gift economy, which describes the need to (i) give (ii) accept and (iii) reciprocate (Mauss, 1990/1950). This procedure is violated, as the receivers of food aid are denied any possibility of reciprocity; instead, the state implemented tax returns for donations. This reinforces social hierarchies and denies any participation. Lastly, also recognitional justice is not improved, as the rooted causes and structural aspects are not recognized, neither in the food production nor in the income distribution (Bonzi, 2023; Leipold et al., 2021).

This example shows the importance of going beyond the inclusion of a social dimension in CE policies. To conceptualize the socio-political implication, it needs reflection through a multi-faceted justice lens.

## **2.2 Circular Economy Policies**

### **2.2.1 Circular Economy Policies in Europe**

In Europe, the first CE Action Plan (CEAP) was published by the European Commission in 2015 and the second CEAP as an important part of the European Green Deal (EGD), was published in 2020 (European Commission, 2020). It introduces measures across the entire lifespan of products, addressing aspects such as design, circular economy practices, promotion of sustainable consumption, waste prevention, and maximizing resource retention within the EU economy (European Commission, 2020). Next to the criticism concerning CE policies in Europe on several levels (outlined above), CE policies as part of the EGD and their effects on the GS are also criticized. Vela Almeida et al. (2023) argue that the EDG reinforces a “*colonial and capitalist logic*” (p.2) through four main mechanisms: First, through the continued pro-growth approach. Second, via the moral hubris expressed through climate diplomacy and exemplified by the injustice towards the GS through the carbon border adjustment mechanism (see Corvino, 2023; Eicke et al., 2021). Third, the a-politicization of sustainable solutions (see also Equinox, 2021; Samper et al., 2021) excludes any historical responsibility and overlooks the costs of marginalized communities and the importance of their participation (Equinox, 2021). Lastly, the ensuring of economic interest, for instance, through the Critical Raw Materials Act provides also benefits for the European aerospace and weapons industry (Petitjean & Verheecke, 2023). Thus, Vela Almeida et al. (2023) conclude that it is important to question the underlying assumptions of the EGD.

### **2.2.2 Circular Economy Policies in Africa**

As in other parts of the world, CE policies are increasingly popular in the African continent on multiple levels (Käsner et al., 2024; Mandizvidza & Makhanda, 2024; Rademeakers et al., 2021). Generally, CE policies are promoted not only by governmental bodies but also by non-governmental entities and the

private sector, with a notable emphasis on Small and Medium Enterprises (SMEs) (Käsner et al., 2024; Mandizvidza & Makhanda, 2024).

Nationally, 52 African countries have policies that relate to CE, and many of those policies are concerned with waste management and recycling practices (Mandizvidza & Makhanda, 2024; Nijman-Ross et al., 2023). There is also a tendency towards developing national CE roadmaps or action plans, see Appendix 1. The consultation process for these roadmaps includes, in many instances funding and/or actors from Europe (Abuja, 2023; Andrianalizaha, 2024; Ghana Today, 2023). Regionally, the East African Community (EAC) is most active, particularly in creating circular policies concerned with second-hand materials and plastic. Other regional communities are primarily concerned with policy dialogues, at times supported by European-funded programs such as SWITCH Arica Green (Rademeakers et al., 2021). Continentally, the African-wide commitment to move towards a CE was demonstrated in 2019 with the Durban Declaration from the 17<sup>th</sup> African Ministerial Conference on the Environment (Käsner et al., 2024; Mandizvidza & Makhanda, 2024). This was followed by the African Union Working Group on CE, which led to the development of the Continental Circular Economy Action Plan (2024-2034), notably with the technical support and funding of the EU (ACEN Foundation, n.d.; Sacko, 2023). Additionally, African CE alliances, networks, and platforms have formed and aim to enhance CE policies and initiatives. To varying degrees, these multistakeholder networks include actors and/or funding from European public or private actors.

It is essential to recognize that these policy processes are not isolated internationally but are interconnected, particularly with European actors and processes across multiple levels. Consequently, the policy space between Africa/African countries and Europe/European countries is examined in the following section.

### **2.2.3 Circular Economy Policies in-between**

Circular Economy policies and initiatives exist in various realms and levels of cooperation between European and African actors, such as within translocal networks (see Spekkink et al., 2022), or within resourced focused “development” projects based on the “best of two worlds approach” (Rams, 2024), or international Multistakeholder Partnerships (MSPs), networks or alliances (Käsner et al., 2024; Mandizvidza & Makhanda, 2024). Importantly, since 2020 the EU has plans to enhance their cooperation with African countries regarding CE (Rademeakers et al., 2021).

Despite these processes, there is little academic attention to circularity in global “development” governance. So far, CE is assumed to bring economic and environmental advantages, or even a triple win, adding social benefits (Käsner et al., 2024; Mandizvidza & Makhanda, 2024; Schröder et al., 2020). Economically, CE shall create inclusive economic growth, decrease dependency on resource exports, and increase value-added activities and economic diversification in African countries (Käsner et al., 2024). These optimistic hopes are validated by macro-econometric input-output modelling (see Rademeakers et al., 2021). However, this demand-driven model can be also problematized as it is generally optimistic concerning green growth and builds mainly on higher efficiency and productivity

gains (see Bimpizas-Pinis et al., 2024). Beyond economic aspects, CE is also expected to decrease pollution and improve health outcomes (Gower & Schröder, 2016; Schröder et al., 2019). Within this line of arguments, international cooperation to enhance CE is conceptualized as knowledge sharing, technique transfers and investment possibilities (Käsner et al., 2024; Mandizvidza & Makhanda, 2024). Yet, some risks have also been identified: (i) greenwashing; and (ii) social justice concerns (Mandizvidza & Makhanda, 2024). Especially the second point, that CE transition could reinforce existing inequalities and injustices, has been empathized by many (Calisto Friant et al., 2024; Meira et al., 2022).

Nonetheless, overall, the academic literature concerned with CE in the context of “development” does not consider the complexities inherent in the CE concept (see section 2.1), thus there is no differentiation of the various discourse types or how they are connected to different actors. Even so, as Luo et al. (2021) argue for the cooperation between China and the EU, a depoliticized CE discourse limits communication options and thus, can even hinder cooperation. Similarly, there is little research on the actual empirical effects of CE “development” activities.

However, the possibility of neglecting the social dimension or reinforcing injustices has led to two approaches being discussed. First, Schröder et al. (2020), less concerned with justice, and more concerned with the inclusion of social dimensions, proposes to combine CE with the Human Development approach. Thus, creating an additional circular dimension to the Human Development Index (HDI). This shall combine the strength of both, enhancing environmental and social “development” issues. Yet, this idea can be problematized, not only since the HDI has been widely criticized, for instance for having an arbitrary methodology with random trade-offs (Ravallion, 2012). But also, as Purvis & Genovese (2023) argue a just CE transition needs to politicise the indicators used and additionally seek alternative ways to assess CE objectives.

Second, an approach that takes into account these social justice issues is the concept of ‘just transition’ (Bastos Lima, 2022; Otlhogile & Shirley, 2023). Originating from workers union activism in the GN, Otlhogile & Shirley, (2023) argue that this concept, if African-led, can support just CE approaches in Africa. Additionally, Bastos Lima (2022) explains that a just transition towards a bioeconomy needs to consider all four types of justice: (i) distributional; (ii) procedural; (iii) redistribution and (iv) restorative. In line with this, Passaro et al. (2024, p.11) describe a just CE transition as a transition that “*should pursue shared objectives that balance social, economic and environmental considerations and should be implemented in the most equitable, participatory and inclusive way possible.*” Approaching a conceptualization of just CE (JCE), Pansera et al. (2024) argue, it should be rooted repairing ecologies and an understanding of climate debt, empower the roles of workers and value care/reproductive activities,

## 2.3 Theoretical foundation and research questions

As a first step, it is important to analyse the current policy discourse(s) and their consequences with nuances. This analysis will build on the following theoretical foundations. First, it is important to note that GN-GS relations are complex and interconnected, based on unequal exchange, knowledge appropriation and other neo-colonial structures and with official ODA flows being neglectingly low (Hickel et al., 2022; Martinez-Alier, 2021). Despite the rise of post-development approaches, with their aim to find alternatives to “development” (Escobar, 1992; Ziai, 2017), “development” agencies and cooperations, increasingly multilateral and through multistakeholderism, are still a policy reality (Escobar, 2012/1995; Haug & Taggart, 2024) and “development” is still an organizing concept in the policy domain (Cowen & Shenton, 2016).

Secondly, the paper builds on the critical analysis of the “development” apparatus by Ferguson (1994) and Escobar (2012/1995). Ferguson (1994) describes two camps in the academic discourse towards "development", with one being sympathetic, viewing it as a collective effort for the "underdeveloped". The other approaches "development" from a very critical, neo-Marxist viewpoint, as a promotion of imperial capitalism. Rather than continuing this debate, Ferguson (1994) asks how the “development” discourse is characterized, what the discourse does and why. He finds that “development” creates a discourse that is substantially different from the academic discourse, due to its institutional setting and which constructs social interventions as apolitical, technical and standardized (p.69-73). Consequently, within the “development” apparatus, failure can be seen as a norm. Yet, it creates instrument effects that happen to be in line with existing power dynamics (p.255). These instrument effects are, in the case of Lesotho in the late 80s: (i) expanding bureaucratic state power and (ii) the depoliticizing effects on poverty and governance. Based on the same understanding of Foucault's (2010/1978-79) disembodied notion of power and discourse, Escobar (2012/1995) considers the "development" apparatus more generally. First, by looking at how the discourse developed since World War II, through which mechanisms and framed by which conditions. He argues, in line with Ferguson (1994) that the professionalization of “development” institutions, creates a depoliticized, technical discourse that homogenizes the poor and excludes topics of justice. Second, by examining how the discourse, its organization of knowledge and power structure works, how it constructed problem definition, solutions, concepts and mapping the (in)visibility of actors and concepts. For instance, he finds that female farmers were widely invisible in the “development” world, and often negatively affected by this exclusion (p.171).

Consequently, the unit of analysis is the "development" apparatus, described by Ferguson (1994, p.17) as structures, which are multi-layered, complex and, at times, incompatible. Actors’ interests act through and interact with a set of complex cultural and social structures, creating the basis for an “anthropological puzzle” as Ferguson (1994, p. 17) calls it. To conceptualize the "development" apparatus it is crucial to acknowledge the substantial changes in the Global Development Governance

(GDG) since the 1980s, due to a rise of public-private partnerships (PPPs) and multi-stakeholder partnerships (MSPs)<sup>3</sup> (Erdem Türkelli, 2022; Haug & Taggart, 2024). Currently, the GDG (also called GDG 2.0) is characterized by actor and institutional pluralism, hybridization, accountability issues and one-sided material resource flows (Erdem Türkelli, 2022; Haug & Taggart, 2024). Thus, beyond the focus on "development" agencies, this paper includes MSPs and private sector actors. Geographically, the scope of this paper is limited to African and European actors. Thematically, the focus is on policies that enhance CE in Africa.

Based on this understanding of the "development" apparatus and the complexities surrounding the concept of CE, the first important research question to ask, focusing on the macro-level, is: *What is the CE policy discourse in the "development" apparatus between African and European actors?* Given the depoliticizing leanings of both concepts, it is likely that the CE discourse within the "development" apparatus aligns with these tendencies. Yet, while CE in GN rather neglects the social dimensions nearly completely (Mies & Gold, 2021), social aspects with a technical framing tend to be included in "development" policies (Ferguson, 1994). Also, since Ferguson (1994) analysed the "development" apparatus in the late 80s, and Escobar (2012/1995) in the early 90s, GDG and its institutional setting changed, which could influence the characteristics of the discourse. Answering this question will not only help to close a research gap, since so far, a differentiated understanding of CE in the "development" policy context is missing. But, by relying on critical and nuanced approaches towards both concepts, this paper also contributed to starting to identify the assumptions of the current debate.

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<sup>3</sup> While there is no legal definition of PPPs or MSPs and the terms are sometimes used interchangeably, this paper, in line with Erdem Türkelli (2022), refers to PPPs if it's bilateral, and MSPs if three or more stakeholders are involved.



Next, focusing on the micro-level, it is crucial to understand what the discourse(s) actually do(es). Thus, this paper starts to explore this dimension through a case study of a “development” project situated within e-waste processes in Accra, Ghana. Building on research that examines the transition to CE in Ghana, focusing on two e-waste recycling markets, conducted under the JUST2CE project by Arthur et al. (2023), the case study explores the perspectives of “development” practitioners and agencies. However, to fully understand the *“anthropological puzzle”*, it requires more perspectives and further on-site research. Thus, this paper just starts to explore the second question without any ambition to answer it fully.

### 3. Methodology

Methodologically each research question has its own approach, outlined below.

#### 3.1 Step One: What is the discourse?

##### 3.1.1. Sampling strategy

To operationalize the “development” apparatus and to sample relevant policy documents, this paper applies the following strategy: Firstly, using Käsner et al. (2024) and Mandizvidza & Makhanda (2024) research as a starting point, a timeline of CE governance on the African continent is developed (see Figure 1, detailed timeline in Appendix 2). Secondly, drawing from this

timeline, actors and funding sources are identified, listed, and categorized (full table in Appendix 3). Based on this, a map of relevant stakeholders and policy documents is created (see Figure 2). This was



Figure 1. Timeline

done by linking the actors' cooperation for reports and presentations or processes described in public announcements. Additionally, actors' networks/partnerships published on their websites are included. Thirdly, from the map, policy documents/reports are identified for analysis, based on the following criteria: (i) their thematic relevance: concerned with circular economy policies in Africa and (ii) being part of the “development” apparatus, which is characterized by network governance and multistakeholderism: they must be produced jointly by actors within GN and GS, this may include authorship, funding or consultation. Next, the selection is prioritized based on their relevance in the policy process, which is embeddedness in the network measured through the highest scores of Betweenness Centrality of the reports in the stakeholder map. The five policy reports that fulfil both criteria and have the highest scores are analysed in depth (see Table 2, and the full list in the Appendix 4).

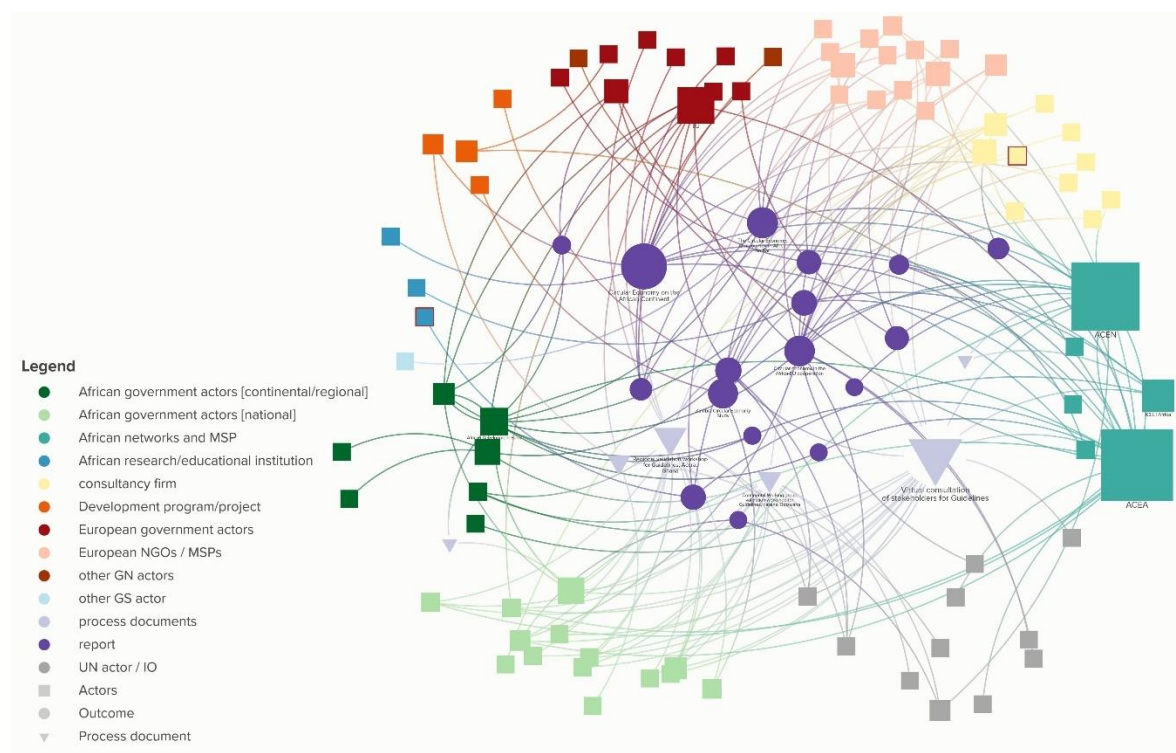


Figure 2. Stakeholder analysis created with kumo.io. Further representations are [here](#).

Table 2 Overview of selected documents

Title	Between-ness	Main Organization	Year	Criteria 1	Criteria 2
Circular economy in the Africa-EU cooperation	0.030004373	European Commission	2021	✓	✓
Circular Economy on the African Continent	0.016518625	GRID Arendal	2021	✓	✓
The Circular Economy: Our Journey in Africa So Far	0.010425299	Footprints Africa	2021	✓	✓
Guidelines for Accelerating the Circular Economy Transition in Africa	0.010172951	UNEP	2023	✓	✓
Zambia Circular Economy Study	0.006526941	Zambia	2023	✓	✓

### **3.1.1. Critical Discourse Analysis**

Critical discourse analysis builds on the premise that the policy cycle has a discursive nature, thus socially constructed and historically and institutionally embedded (Fairclough, 2013; Johansson & Henriksson, 2020; Lindekilde, 2014). Thus, a policy discourse can be defined as “*an interrelated set of texts, and the practices of their production, dissemination, and reception, which brings an object into being.*” (Lindekilde, 2014, p. 198). In other words, a discourse is a structured, complex practice that has real effects (Ferguson, 1994, p. 18). To consider the whole policy cycle, tracing the power struggles that start already at the problematization of certain issues (Bacchi, 2012), this paper follows the example of Johansson & Henriksson (2020, p.150) by formulating these guiding questions: (i) What problems should be addressed? (ii) As consequences, which solutions are presented? This will be analysed based on the discourse typology for CE by Calisto Friant et al. (2020), as shown in Table 1. (iii) Who is considered for implementation? (iv) Which aspects are invisible/ left unproblematic? Here, especially the social justice implications (distributive, recognition, process) and the power relations are analysed. With this framework, the analysis builds on both inductive and deductive coding (full coding tree in Appendix 5).

## **3.2 Step Two: What does the discourse do?**

### **3.2.1 Case selection**

As basis for the case study serves one out of ten already conducted case studies from the JUST2CE project, published in 2023. Using a multidimensional social justice lens, these examine CE implementations and processes. From these, one case study was chosen based on (i) the geographical and time proximity to an aspect of the “development” apparatus and (ii) the availability of public, English/German documentation.

### **3.2.2 Case study**

A case study researches “*a single instance of some social phenomena*” (Babbie, 2016, p.302), which allows for in-depth description and analysis, often based on the use of multiple data sources and methods. This is especially important when the phenomenon is interlinked with its context (Merriam & Tisdell, 2016). This paper focuses on the “development” projects implemented by German actors in Ghana regarding the circularity of e-waste, starting from 2016 till date. The focus lies on the “development” practitioners' perspectives and on the e-waste scrap yard in Accra in the area of Agbogbloshie/Old Fadama.

Several data sources are used. First, public, online-accessible documents from key stakeholders and news articles from key events are identified and analysed (complete list, see Appendix 6). Second,

using criterion-based sampling with a focus on maximum variation, interview partners were identified. Semi-structured interviews of around 30-60 minutes were conducted. To protect their anonymity, the roles are only vaguely described. Among the interviewees connected to the German “development” project or its location(s) were academics, practitioners, and consultants. Also varied the time of involvement. Additionally, for background knowledge, in-depth interviews were conducted with three informants, which I know from my time spent in Accra [overall 1.5 years] and where an adequate level of rapport has been already developed.

*Table 3. Overview Interviewees*

Relation to case	Background	Location	Directly involved	Indirect / consultant	Overall
Number of Interviewees	3	2	2	2	9

The interviews were conducted online, recorded and transcribed. All participants agreed voluntarily to an informed consent. Inspired by grounded theory, the data analysis process was iterative and inductive (Charmaz, 2014). Initially, project reports and official statements were openly coded. Subsequently, transcripts and additional documents were integrated. Axial coding and categorization then differentiated context/information, problem/solution constructions, and attitudes/opinions towards the development project, eviction/demolition, and the e-waste sector (see the coding tree in Appendix 7).

### **3.3. Strength and limitations**

Regarding the first part, the sampling methodology ensures the importance of the policy documents in “development” governance and enhances validity. However, it is important to note that the sampling methodology relies on publicly available information, and it cannot be guaranteed that other not (yet) public processes/consultations would shape the stakeholder mapping. Moreover, it is important to keep in mind the following limitations. First, the scope of the research is very limited, not only due to the number of documents analysed but also because reports are just one modality of the expression of the policy discourse. Additionally, the document selection was limited to English documents.

As to the second part, while one case study enables in-depth results, the generalizability is very limited. The use of several sources of data allows for a certain level of triangulation, which ensures internal validation and consistency. However, given my location, other modes of observation and data collection could not be used.

Overall, during the research process, the internal validity was increased through the continuous supervision of two supervisors. Next, it is important to acknowledge the positionality of the researcher, who is situated and socialized primarily in the GN and relies on desk research. Due to the external limitation, the coding process cannot be enhanced through intercoder reliability and relies instead on several rounds of coding and reflexivity.

**4. Results**

The results section is organized into two parts. The first part presents the critical discourse analysis results. It starts with the policy documents and their context, followed by an analysis based on the first three guiding questions. Finally, it embeds the results in the policy and academic contexts, informed also by the fourth guiding question. The second part focuses on the case study. It first provides a detailed description of the case and its context. Then, three key themes are identified, and their potential implications are examined.


**4.1 The Discourse**

**4.1.1 Description and Context of the Policy Documents**

The stakeholder-map (Figure 2) reveals the complexity and interrelatedness of the apparatus surrounding CE policy, with actor size based on Betweenness Centrality measure. ACEN and ACEA are key stakeholders, alongside other slightly less central stakeholders, such as the EU. Overall, the map is characterised by many, small actors from various groups (various GN/GS government, many consultancy firms, various UN agencies and European NGOs/MSPs). All outcome documents are well embedded, especially the five selected reports with the highest measures.

The five documents have been published in 2021 and 2023. Considering the timeline of African CE policies, see Figure 1, all documents can be placed in the problem construction, agenda setting and policy formulation phase. None of these documents is binding in any way; rather, they shape the understanding of the problem and construct possible solutions and pathways. While all documents have been commissioned by different, individual organizations, they all have gone through a process of consultation with several stakeholders from the GN and GS. Most reports were directly funded by GN organizations. Similarly, most reports have been written by a private consultancy firm for the public/non-profit organization that commissioned it. In Table 4, each document and its context are briefly introduced.

*Table 4. Description of Policy Documents*

	<p>The European Commission published its Continental report “Circular Economy in Africa-EU cooperation”, which was written by the consultancy firm Trinomics, in 2021. Based on desk research and consultation with over 15 stakeholders, among them EU public authorities, ACEN, ACEA, EMF, Circle Economy and one African national authority representative and based on a macro-economic modelling exercise, this report describes the status quo and makes recommendations.</p>
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	<p>GRID Arendal is a Norwegian NGO that wrote the report "Circular Economy on the African Continent. Perspectives and Potential" in 2021 to promote the visibility of African CE, describe the enabling environment, review experience and formulate recommendations. For that, they partnered with the ACEN, Footprints, ICLEI Africa, NORAD, Rise African, Revolve Circular, and the European Environmental Bureau. Further, they also consider the consultancy Trinomics, other NGOs and Platforms, as well as African private universities.</p>
	<p>Footprints Africa, a British NGO, published their report "The Circular Economy: Our Journey in Africa So Far" in 2021. While this report also describes the current policy context, the focus is on presenting a collection of examples of African circular enterprises. To publish this mapping exercise, Footprints partnered with ACEN, Circle Economy, GRID, the consultancy shifting paradigms and consulted Mass Design.</p>
	<p>The "Guidelines for accelerating the Circular Economy in Africa" were published in 2023 by the UNEP in partnership with the African Union (AU), United Nations Economic Commission for Africa (ECA), Switch Africa Green and funded by the EU. These non-prescriptive guidelines are situated within the process of working towards an African Continental CEAP and have been developed through several sessions of regional/virtual consultation with more than 100 participants. Among them are national public authorities, private sector representatives, academics, ACEN, ACEA, EMF, Footprints, and further IOs. Written was the report by the consultancy firm, Dalberg.</p>
	<p>The Zambian Ministry for Small and Medium Enterprise Development partnered with the Ministry for Foreign Affairs of Finland and the Development Program AGS to publish the report "Zambia Circular Economy Study" in 2023. The study was conducted by Tandem Circular Consulting in collaboration with AGOVA (also a consultancy), ACEN and the ACEN Foundation. Further, more than 20 stakeholders from the private sector, the public authorities and other networks and initiatives have been consulted.</p>

## 4.1.2. Constructing the Problem

### Africa as a continent

First, the dominant discourse highlights the deficits of Africa: poverty, lack of food security, lack of infrastructure, lack of waste management and large ecological problems. Often these conditions are

explained by technical factors such as lack of economic growth or population growth. For instance, the EU (2021, p.2) writes: “(...) [economic] growth is often not high enough to substantially reduce poverty levels due to the strong population growth”. Only Footprints (2021, p.18) mentions the systemic aspect of poverty once. Yet, while framing these deficits as generally 'African', each report also mentions at least once the diversity of Africa, at times referring to culture, socio-economic contexts or national policies.

Second, there is a tension between portraying Africa as a victim or as a contributor to global challenges. All reports emphasize how Africa is affected by Climate Change, the COVID-19 pandemic and biodiversity loss, yet especially the EU report is keen to point out how Africa is contributing to local and global crises. For instance, the Greenhouse Gas (GHG) contribution of chemical fertilizer or insufficient waste management are highlighted:

*“These waste disposal practices, as a result of inadequate collection, treatment and recycling infrastructures, may have the following social and environmental impacts: (...) contribution to the generation of global GHG causing climate change and(...)” - EU, 2021, p.46*

This is underlined by strategic comparison with global or European standards. For instance, future waste outputs per person are compared to European levels, since they are expected to be in the same range. Yet, African GHG emissions are never directly compared to European levels.

Third, one focus is Africa and its agriculture, as exemplified by Footprints (2021, p.11): “83% of people in sub-Saharan Africa depend on the land for their livelihoods”. While the importance of agriculture is justified by statistical reference based on employment, livelihood or GDP, it is simultaneously described as inefficient, with low yields, high levels of waste and post-harvest losses. The reasons are often technical, such as a lack of modern infrastructure/technology or knowledge. Interestingly, while in the problem construction, agriculture entails both aspects, food production and cash crops, in the solution, agriculture is often automatically equated with food production. Thus, through circular agriculture, the increased yield will lead to more food security:

*“A circular economy helps to improve food security and agricultural productivity through regenerative farming practices & postharvest handling techniques, (...).” GRID, 2021, p.13*

Next, just as in any textbook describing the characteristics of a ‘developing’ economy, the African economy is largely portrayed as resource-rich, un-diversified and with low levels of productivity. Despite the immense complexity of our globalized economy, the current situations are explained by technical and simple causal relations:

*“Due to the low productivity levels, Africa is still a net importer of raw and processed food products, representing an average trade deficit of € 30.7 bn in 2017.”* EU, 2021, p.25

Consequently, Africa is framed as an importer that is often 'dependent'. In line with the importance of agriculture, the dependency on chemical fertilizers is highlighted in most reports, here exemplified by the *Zambian report (2023, p.4) "Zambia is currently reliant on imported chemical fertiliser, and imports over 635 000 tons"*. Also very often referred to are the imports of second-hand materials, such as cars or cloth. It is either framed as controversial or destructive. Additionally, unexploited economic opportunities are highlighted often. Rather neglected is the service sector. As one of the only reports, the *UNEP report (2023)* considers the service sector, yet finds that the only relevant aspect within this sector is tourism.

Lastly, while constructing the problem, all reports rely on arguments based on future trends. Most importantly, all heavily problematize the expected population growth. Since the growing population will have growing needs and thus, growing consumption, this trend is seen as a reason for a concern:

*“The population of Africa is forecast to double its 2017 levels by 2050, increasing pressure on the continent’s already stretched resources.”* UNEP, 2023, p.10

This population growth serves as a reason for many negative (future) developments, such as the expansion of agricultural land, unemployment, the housing crisis, food insecurity etc. Furthermore, also other trends, such as the generation of solid, plastic or e-waste, are used to construct future problems. For example, the *EU (2021, p.44)* writes: *“In 2015, Africa’s total municipal solid waste (MSW) generation amounted to 124 million tons, which is expected to more than double in 2035 (309 million tons).”* Additionally, future developments, such as access to finance and markets through sustainability taxonomies and criteria are considered.

### CE in Africa

Firstly, each report refers to the ‘traditional’ or indigenous mindset, culture or practice of circularity in Africa. The *EU (2021, p. 24)* writes, that *“the throw-away mentality has not yet gotten a foothold”*, while the *UNEP (2023, p. 5)* attests that CE *“is not new to the African way of life”*. Partly, these references are rooted in the idea of culture, assuming a linear cultural evolution towards Western consumerism culture. Building on the image of African societies being ‘not-yet’ there. Partly, the focus is on more material aspects: circularity to manage scarcity. The *Footprints (2021, p.6)* report states: *“Africa is home to many collaborative practices which are used to manage scarcity.”* Additionally, it is regularly pointed out that many African countries already have CE policies (always with the reference



to the Chatham-House data, cited above, Appendix 1) and that Africa, as a ‘not-yet-fully-developed’ continent, has no/less linear lock-in, compared to the GN.

Secondly, all identified barriers are rather technical, not political or societal. These are the most common barriers: (i) the current focus on waste dimensions and the connected narrow jurisdiction of mainly environmental administrators for CE. This limits coordination, enforcement and international alignments; (ii) which is also rooted in a general lack of knowledge, among policymakers, but also private sector actors and financial actors;

*“Everywhere around Africa there is lack of knowledge concerning the application of specific circular economy approaches.”* EU, 202, p.33

(iii) lack of finance as an enormous problem. Some reports point out that while there is some public funding, it needs more private and easily accessible finance; (iv) This is connected to the general unprofitability of CE initiatives, often due to cheap primary material prices, regulations and volatility of prices and supply.

### **4.1.3 The Proposed Solutions**

#### Holistic goals with segmented means

‘Holistic’ is a popular term in all reports, yet it is important to analyse what exactly is meant by it. It is mainly used for two meanings. First, a ‘holistic’ CE refers to the whole economy:

*“circular economy is a holistic concept that encompasses a systemic shift in the way in which economic activities are undertaken, which means that all sectors of the economy will be affected”* EU, 2021, p.22

Rather than including societal actors, non-economic activities and/or political dimensions, it simply refers to all sectors. While the importance of all sectors is emphasized by all reports, also all reports point out that there are certain key sectors or areas that have special potential. Overall, all reports highlight the importance of the waste sector. Most reports agree on the agriculture sector, the ICT and e-waste sector, the plastic and packaging sector, incl. manufacturing activities, as key sectors. Some reports also emphasize textiles. Lastly, mass timber and tourism are mentioned.

Second, when holistic topics are mentioned, then only as a consequence of a segmented implementation of CE. Potential benefits from CE are, next to environmental aspects, public health, employment, reaching the SDGs, less poverty and much more. Mostly, the explanations of how holistic goals are reached follow a purely economic approach. For instance, UNEP (2023, p.20) argues that CE is an opportunity for women since women are less productive in agriculture and circular agriculture requires fewer inputs; thus, it will be easier for women to participate in agricultural activities.

Nonetheless, the main societal benefit prioritized by all reports is the creation of new jobs. Very often, this potential is also quantified and compared to linear economy projections (business-as usual): 1.6 Mio additional jobs for Nigeria (UNEP, 2023, p.18); 17,300 new jobs for Rwanda (GRID, 2021, p.38); 11 Mio additional jobs in 2030 in Africa (EU, 2021, p.77). Most jobs are projected predominantly in agriculture. Less prominent but also mentioned is the improvement of working conditions through formalization or it is assumed that conditions improve automatically, due to increased transparency. Interestingly, the potential for improved conditions is often exemplified by sharing the success of workers' cooperatives and their struggle towards more rights. At the same time, these practices are not mentioned in the recommendation sections. There, workers or cooperatives are only considered, if at all, as passive receivers of training. Similarly, other more holistic means, such as establishing a sharing/service economy, are mentioned but not further explored.

Rather, there is a huge focus on segmented means focusing on economic activities, often related to materials. Thus, all levels of the R-hierarchy<sup>4</sup> are addressed, often focusing on the end stages. While design regulations are mentioned, the focus is more on waste collection, management, and, if possible, processing. Often it is argued that either the efficiency/productivity needs to be increased or new economic opportunities created, for example, new manufacturing activities. All this, while increasing international trade, as exemplified by this quote:

*“Remanufacturing hubs can be created in many African countries, restoring products back to their original state to send back to their markets or to resell to Europe and the Middle East”,*  
GRID, 2021, p.43

Often, it is argued that the labour-intensive steps can be done in African countries (which also creates jobs), while the more 'advanced' activities should be done in the GN. Next to holistic goals, also segmented goals are promoted, mainly increasing Gross Domestic Product (GDP) and green growth, accompanied by the assumption of decoupling.

### Techno-optimism, nearly always

Overall, all reports assume that technical innovation will benefit the environment and increase circularity, often framed as a win-win. The idea is that success will come not only from material innovations like bioplastics and new construction materials but also from improved waste management and agricultural storage technologies. One recommendation is, for instance, to use electric vehicles for safaris (UNEP, 2023, p.65).

However, there are exceptions to this optimism. All reports seem similarly sceptical towards chemical fertilizer and unanimously promote natural, regenerative circular farming. An especially

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<sup>4</sup> [R0 refuse, R1 reduce, R2 reuse/resell, R3 repair, R4 refurbish, R5 remanufacture, R6 re-purpose, R7 recycle materials, R8 recover energy, R9 remine]

popular organic technology is the use of Black Soldier Flies, either for fertilizers, compost, or fish feed. Yet, while there is this isolated scepticism towards chemical fertilizer, there is no systemic reflection on that. Rather, one product is just replaced with another, in the same optimistic mindset. The main function of organic fertilizer is still to increase productivity and be profitable for the producing company. Another exception is that in very isolated cases, environmental trade-offs are considered, for instance, by reflecting upon the effect of digitalization:

*“(...) digital solutions can provide answers to Africa’s socio-economic challenges, but digitisation - and the built-in obsolescence of many devices - has its own environmental implications.”* Footprints, 2021, p.12.

Overall, considering the predominately segmented perspective focusing only on economic aspects and optimistic approach towards technological innovation, the predominant CE discourse reflects the Technocratic Circular Economy (TCE) Type, described by Calisto Friant et al. (2020), see Table 1 Table 1. This finding is reinforced by the given definitions that focus on efficiency and resources, building on ecomodernist assumptions. For instance:

*“circular economy is a system-wide approach to adopting nature-positive practices that eliminate waste and maximize resource efficiency and value to develop strong and resilient economies.”* UNEP, 2023, p.13

### The policy process towards CE

The pathways towards the proposed type of Circular Economy are multiple, yet some aspects are unanimously proposed by all. First, all reports agree on the need for an enabling environment. However, how exactly this environment is described varies, while prevailingly, it refers to finance. The idea of economic stability and accessible finance sources is expressed in every report and results in a wide variation of possible suggestions, among them: green bonds, microloans, foreign direct investment (FDI), risk capital, Contracts for Difference Schemes. Often, the focus lies on accessing more private financial sources. Additionally, at times, political stability and a well-designed regulatory framework are also considered as enabling environments. Democratic principles, participatory and inclusivity aspects seem to be neglected. Only the EU (2021, p.16) report mentions once that:

*“Ideally, it [the enabling environment] includes a democratic system, low level of corruption and high level of governmental trust.”*

without following up on it. Secondly, all reports recommend making CE a priority, ideally by creating a roadmap/action plan and by coordinating the efforts well. In line with this, in most cases, research,

feasibility studies, data generation and monitoring activities are recommended. Thirdly, the policy process shall be collaborative, mostly referring to private sector representatives, and only in a few cases refers to including a broader set of stakeholders, such as CSOs:

*“The transition to a circular economy requires collaborative effort between governments, industry associations, private sector players, and financiers to create a viable enabling environment. “(UNEP, 2023, p.19).*

Thus, the reports agree that it should be collaborative, but overall, the transition should be private sector-led. Fourthly, all reports consider the continental and international dimensions of the CE policy process. Footprints (2021, p.4) states that *“the rest of the world has a lot to learn from Africa”* without further elaborating. More generally, it is framed as mutual knowledge sharing or explicitly stated that Africa should learn from the GN. The later framing is especially present in the EU (2021, p.32) report:

*“The EU can help African countries design policies by providing inspiration on the possibilities of second-hand materials, sharing best practices and helping develop quality standards (...)”*

To which extent it is considered useful to learn/take inspiration from the GN varies per report and per topic. GRID (2021, p.43) argues: *“Advancing towards CE (...) requires developing and propagating successful African case studies, rather than simply attempting to adapt best practices from other continents”*. More often, it is argued that technologies/business models/policies must be adapted to specific African contexts. Replicating circular initiatives from elsewhere is rarely advised. Beyond knowledge flows, only the GRID (2021, p.23) reflects marginally on geopolitical and institutional aspects of the international arena, referring to visibility and power relations:

*“Power relations, vested interests and institutional relationships impact the ability of actors in African countries to implement CE policies and business models.”*

### Policy Tools for the Circular Transition

By far, the most favoured policy tool is some version of capacity building, skill training and education. However, generally, the policy tools presented are diverse and reflect all types of tools, such as sticks, carrots and sermons<sup>5</sup>. Sermons include all kinds of awareness raising, certification schemes, knowledge sharing/capacity building and networking. Yet, more institutional aspects of information and its political consequences, such as open-source initiatives are not discussed. Rather, the UNEP (2023, p.56) suggests reducing intellectual property costs for SMEs. Carrot policies include subsidizing CE businesses and/or

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<sup>5</sup> The classification of policy instruments into "stick," "carrot," and "sermons" refers to regulations and penalties (stick), financial incentives like subsidies and tax credits (carrot), and informational campaigns and social norms (sermons) (Bemelmans-Videc et al., 2017).

disincentivising linear economic activities. While most reports also mention circular public procurement policies, the EU (2021) focuses on incentivising through trade agreements. Regarding the stick policies, bans are often suggested as a part of a wider strategy, but more generally a 'good' regulatory framework is recommended. Remarkably, even though in the problem construction, the existence of EPR policies in many African countries is acknowledged, only the UNEP (2023) report builds on it and recommends improvements and harmonization.

#### **4.1.4 Actors**

##### The Private Sector

As mentioned above, the transition shall be 'private sector led'. This means that the 'private sector' is framed as mainly one actor, disregarding the multiplicity and inherent contradictions. The UNEP (2023, p.49) writes: *“The private sector needs to drive innovation and develop viable circular business models.”* Moreover, the actor 'private sector' is not only leading/driving the transition but has the responsibility to do so:

*“(...) private companies have an important responsibility as they can help preserve such good practices or undermine them by introducing and promoting a ‘throw-away lifestyle’”* EU, 2021, p.18

If the private sector is considered more differentiated, then there are the following roles. Entrepreneurs and (M)SMEs are at times seen as innovative, but more frequently as passive and in need of support. Similarly, it is with farmers and workers. Thus, while working conditions and unemployment are asserted, they do not seem to have any active role, neither as implementors nor as stakeholders. Moreover, each report considers sector or business associations as important stakeholders. MNCs are also considered important stakeholders, and their role is very positively reflected. For instance, the Footprints (2021, p.29) writes about TOTAL as a partner in plastic waste management. The EU (2021, p.x) frames them as partners of governments for “development”:

*“(...) it is essential that international corporations weigh into the developments and work together with the governments to discuss how they can contribute to more circular economies in Africa.”*

##### The Public Authorities

In most cases, the national public authorities are seen as main actors and as enablers for the private sector. Also mentioned are the African Union and regional authorities such as ECOWAS, mainly for the sake of coordination and harmonisation. Additionally, “development” programs and agencies are seen as currently being very involved in creating dialogue, especially through the program SWITCH Africa

Green, funded by the EU. However, the future roles are more described as donors. Other financing institutions are “development” banks, especially the African Development Bank.

### The Public

The public is only considered in isolated cases and without clear roles. At times, individuals are considered as consumers and waste producers, as such the UNEP (2023) report recommends a public with the ability to make informed choices. In line with this, in most reports, the public is considered, similar to workers, as in need of training, if it is considered at all. Only the UNEP (2023) report considers the role of CSOs and NGOs as potential stakeholders. Their role is to contribute to the private sector-led transition and lobby the government to include them as stakeholders and to consider the SDGs.

### Platforms, Networks, Research

All reports highlight the importance of dialogue platforms/stakeholder-consultation concerned with CE. For that, most reports refer to actors that already exist, such as on an African level: ACEA and ACEN or on a Global Level: the Platform for Accelerating the Circular Economy (PACE), World Economic Forum (WEF), and World Circular Economy Forum (WCEF). Additionally, some argue for new platforms such as more PPPs that enable more networking and matchmaking, and/or a new EU-AU Task Force as a dialogue platform. It appears, the more the better.

Moreover, EMF, which is internationally very active in promoting CE, but does not have an African office (yet), is still shaping the discourse. Some reports build upon the EMF's understanding of CE, which aligns with the TCE discourse type. The UNEP report also considers EMF as a possible actor for measuring circularity. Next, research institutions are described as knowledge providers and data generators, emphasizing collaboration with the private sector and producing sector-relevant knowledge.

## **4.1.5 Discussion of Discourse**

The following sections situate the results in the policy context and the academic literature concerned with the “development” discourse and CE cooperation. Concerning the policy landscape, the stakeholder mapping (see Figure 2) resembles the long-term development towards GDG with a pluralism of actors and hybridization (Erdem Türkelli, 2022; Haug & Taggart, 2024). Notably, the centrality of MSPs is confirmed by the centrality of ACEA and ACEN in the mapping and by the importance of MSPs and similar platforms in the documents. Moreover, the focus on trade corresponds with current African policies, such as the African Continental Free Trade Area (Käsner et al., 2024). Differently, the sceptical approach towards chemical fertilizer in the CE discourse opposes previous African policies, which aimed to increase fertilizer levels per ha substantially, with a reassessment of this objective occurring only in 2024 (African Union, 2024). Interestingly, despite the constant problematization of chemical fertilizer dependency, it is overlooked that sub-Saharan African countries have the world's lowest usage levels (Malpass, 2022).

Considering the literature on the “development” discourse, many similarities can be identified. Ferguson (1994) describes the tendency of being a-political and technical, which is rooted in the assumption of governmentality, describing the role of government as neutral. Equally, the discourse characterizes the role of governments as technical, coordinating entities, barely considering the political dimension of governance, not mentioning political parties at all. Consequently, the barriers identified are predominately technical and, therefore within reach of technocratic policymakers. Non-technical barriers, such as unequal relations, power dynamics, competitive pressure, and systemic poverty, identified by academic research such as the JUST2CE research project (see Friant et al., 2023) are not/barely even mentioned. Next, the depoliticization of societal issues leads to a neglect of rather systemic solutions. Hence, while occupational safety and health standards of individual jobs/fields are problematized, other approaches, such as universal health care are not considered. Similarly, intellectual property rights are taken for granted, leaving no space for open-source concepts. While the list could go on, this TCE discourse leads to, what Luo et al. (2021) call, discourse lock-in. Moreover, the technical focus is also reflected in the type of innovations proposed which are predominantly resource-based.

In line with this, rooted in the professionalization of the “development” industry Escobar (2012/1995) and Ferguson (1994) describe a standardization tendency. The discourse analysed above has similar tendencies, best exemplified by the theme of organic circular agriculture. While this could enable spaces for various, localized practices and traditions, the policy discourse favours standardized solutions, such as Black Solider Flies. This organic ‘technology’ is proposed in all kinds of contexts, from fish farming in Eastern Africa to composting in West Africa. Subsequent, Escobar (2012/1995) also highlights the leaning towards homogenizing heterogeneous groups, such as the global poor. The discourse described above homogenises widely the informal sector but also ignores the complexities and contradictions inherent to the public and private sectors. Furthermore, Escobar (2012/1995) describes the prominence of the Malthusian view, framing poverty as a population issue, while also homogenizing the poor globally. Likewise, especially waste generation is framed as a population problem.

Beyond the “development” discourse, the results align well with the CE cooperation discourse between Europe and China, researched by Luo et al. (2021). Both policy discourses have a neo-liberal, trade-focused approach to CE. While the EU-China discourse, mainly relies on a win-win (environment and economic) framing, the EU-Africa discourse often adds the social dimension, advocating for a win-win-win scenario. Another slight difference is the level of emphasis on reciprocity, which is considerably higher in the EU-China discourse compared to EU-Africa. Luo et al. (2021) also identified sceptical narratives based on stakeholder interviews, however this is beyond the scope of this paper.

Another difference to the existing “development” discourse literature is the framing of ‘traditionality’. Ferguson (1994) finds that the discourse describes the target populations by the absence of modernity while simultaneously problematizing ‘traditionality’. The CE discourse shows an

important variation, as circularity is framed as a ‘traditional’ value, that aligns with the goal of “development” governance. However, this appreciation of ‘traditional’ values is only inconsistently applied. For instance, the UNEP (2023, p.63) states as a barrier: “*Limited financial resources to replace traditional methods, where needed, with efficient circular farming methods*”, indicating now that ‘traditional’ methods are linear and need to be overcome.

## 4.2. The Case Study

### 4.2.1 Description and Context

The German “development” project “*Environmentally and socially responsible handling of e-waste*” (GIZ, 2023) cooperates with the Ghanaian Ministry of Environment, Science, Technology and Innovation (MESTI) and the Environmental Protection Agency (EPA). It is closely related to an Initiative of the German Development Bank (KfW) and MESTI that focuses on incentivising hazardous e-waste collection. In the same context, North Rhine-Westphalia also financed a health centre (Federal Foreign Office, 2017). Overall, the project has a budget of 25 million euros (Federal Foreign Office, 2017) and the duration is from 2016-2026 (GIZ, 2023).

While some other European/US-American actors, have already been active in the field, the official German “Development” Cooperation entered the field of Ghanaian e-waste recycling after the conservative, German Minister for Economic Cooperation and Development, Müller, visited Accra and the biggest e-waste scrap yard in Accra in 2015 (Rams, 2024). This scrap yard, called Agbogbloshie, was already famous in international media, portraying the place as hell, a nightmare or a graveyard (Akese et al., 2022). It is/was central to the discourse on environmental injustice, symbolizing the awful consequences of the dumping practices of e-waste from GN countries (Rams, 2024). With this background, the initial goal of the project was the “*social transformation of Agbogbloshie*” (Rams, 2024, p.24). Beyond the location of Agbogbloshie, the objective is that “*the Ghanaian Government successfully implements a system for managing unwanted electrical and electronic items that is environmentally sound and socially responsible*” (GIZ, 2023, no page).

To reach these objectives, the KfW is implementing an incentives system for various e-waste types, such as cables, batteries (except ULABs) and thermoplastics, which was piloted in cooperation with the GIZ. In this context, the KfW finances the construction of a Hand-over-Centre (HOC) (KfW, 2017). The construction was started in 2021 (MESTI, 2021), with so far, no official announcement of completion. Beyond that, the GIZ’s component has 3 main areas: (1) advising MESTI and EPA with an emphasis on stakeholder dialogues and capacity building; (2) supporting the private sector through PPPs and capacity building and (3) supporting the formalization of informal actors and capacity building (GIZ, 2023).

Before analysing the project further, it is important to briefly outline some aspects of the context. First, in 2016, Ghana passed Act 917 which constitutes the first national regulations specifically for e-waste (Bimpong et al., 2023; Hazardous and Electronic Waste Control and Management Act, 2016).



However, the underlying policy, including the specific guidelines, and the implementation of the eco levy are still under development (Bimpong et al., 2023). Secondly, e-waste recycling in Ghana is characterised by minor roles of the formal private sector. Therefore, e-waste recycling is often described as inefficient and unsustainable (GIZ E-Waste Programme & MESTI-PIU, 2022). However, the informal sector is well organized, with many differentiated roles and codes of conduct, as well as complexities and potential (political) conflicts (Arthur et al., 2023; Rams, 2020; Weibert et al., 2023). Importantly, the sector is dominated by migrants from the Northern, rural parts of Ghana, who do these activities that have a societal stigma (Chasant, 2021; Rams, 2015). Nonetheless, the different roles are well integrated into the Global economy, as well as into the local economy (Rams, 2020, 2024). Thirdly, scrap yards, including Agbogbloshie, are often on public lands and on which they developed since the 1990s (Rams, 2015). Therefore, these places, like other informal settlements, are at risk of eviction/demolishing. For instance, Old Fadama, an area next to Agbogbloshie has been (threatened to be) partially evicted several times in the last 25 years, see Figure 3 (Azunre & Boateng, 2023). Notably, the scrap yard was completely demolished in 2021, with the sole exception of the GIZ buildings (Akese et al., 2022).

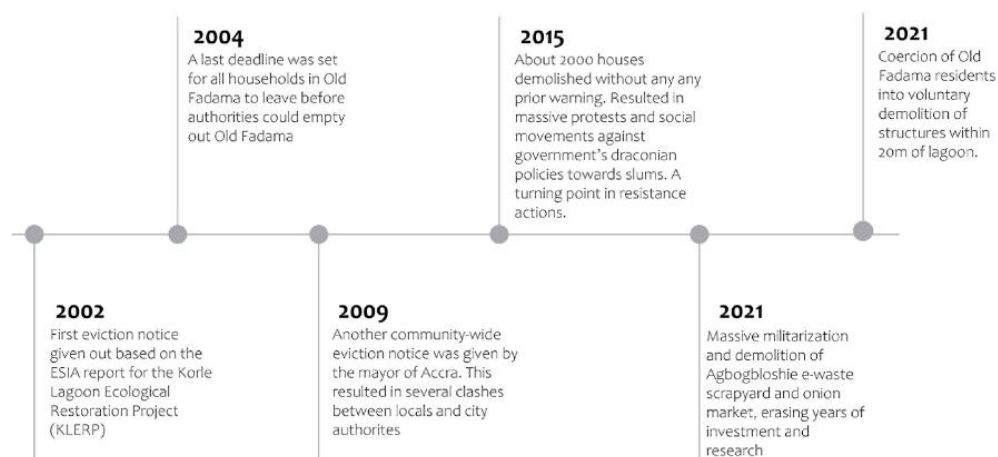


Figure 3. Timeline of eviction and threats of evictions in Old Fadama, taken from Azunre & Boateng (2023, p. 7).

Lastly, Ghanaian e-waste recycling attracts more donors like the Swiss Development Cooperation and the EU, along with others focusing on circularity, such as UNIDO (European Union External Action, 2018; SRI, 2022; UNIDO, 2022). Potentially creating a difficult-to-coordinate donor landscape, and possible contributing to meeting fatigue, described by interviewees. The subsequent section delves deeper into three project aspects, offering a foundation for hypothesis formulation and the exploration of further questions.

## 4.2.2 Project Aspects

### German Borla and the Dumping Narrative.

The dumping narrative frames Agbogbloshie and places like it, as a visualization of the externalities of our globalized electronic economy. The focus lies on the negative environmental and health consequences. And while this is not wrong, it simplifies certain complexities and creates invisibilities.

It creates a single story, as Adichie, (2009) would possibly call it. Some important aspects raised during the interviews are the following.

Firstly, it was important to my interview partners to highlight that these places, referred to as “dumpsites” are places where people (are trying to) make a living. They represent areas of intricate societal dynamics, traversing the boundaries between rural and urban Ghana while also struggling with societal stigma and the complexities of international markets. Secondly, one well-documented strategy, especially in the project’s reports, but also beyond, is to measure the inflows of waste. Often it is pointed out that the biggest inflows are second-hand goods, and that a certain percentage is broken by arrival (most estimates vary between 15-30% (GIZ E-Waste Programme & MESTI-PIU, 2022; Torchyan & Schuster, 2022)). My interview partners pointed out several times, that economically it makes sense to bring as much as possible functioning electronics to Ghana, to make more profit. Beyond arguing about percentages, the importance of second-hand flows may be better explained by the term “German Borla” or “Abokyire [oversees] Borla”, which are a standing term for all kinds of second-hand goods that come from the GN, used in many parts of Accra and possibly beyond. “Borla” is a locally used term for waste, used by Hausa, Twi and Ga-speakers alike. Thus, it does not equate “waste” with second-hand goods, but it refers to anything that mostly “*can't be used there [the GN], but we here [Ghana] we use them*” (Interview 7). It includes the relativity of the concept of ‘waste’, as well as an acknowledgement of power dynamics. To a certain extent, the awareness of global dynamics relates to the awareness of the food-aid receiver in the French case explored above. Thirdly, the dumping narrative and debating the measuring of inflows create an invisibility of the outflows. Partially, this can be explained by the difficulty of gaining access to this data (Rams, 2020).

Considering the motivation of the project, it is embedded in this narrative. Exemplified by referring to Agbogbloshie as “Elektronikmüllhalde”, which translates to electronic waste site, or similarly (Hedemann, n.d.). On the other hand, the project tries to nuance this narrative by pointing out the importance of second-hand inflows and by emphasizing local consumption. Based on the document analysis and interviews, possible consequences within Ghana and beyond can be identified. Firstly, the sole problematization of dumping in Ghana tends to overlook actors and associations within this space, as well as the role of local consumers, as pointed out by Arthur et al., (2023). The growing importance of neo-liberal circularity in the GN increases the framing of GN consumers as users, for take-back schemes, or only allowing for authorized repairs. This can further marginalize the actors in the GS, by simply overlooking their existence (Rams, 2024). Secondly, the focus on imports leads to a policy focus on borders and their control (Rams, 2024) which is in line with the recent amendments to the Basel Convention focusing on e-waste (Secretariat of the Basel Convention, n.d.). However, given that the second-hand trade of electronics and household goods is dominated by the diaspora, this can lead to a possible criminalization. At the same time, the international buyers of recycled resources from the informal sectors in Ghana, and elsewhere, are not considered at all. Thirdly, the dumping narrative made Ghana, and especially Agbogbloshie famous, yet in international comparison, the volumes of e-waste

are rather low. Thus, industries of scale focusing on specific e-waste streams have little interest in Ghanaian operations, due to the low volumes.

### Land, Evictions and Politics.

As explained above, evictions and demolitions are known realities for structures built on public land in Accra. Under the campaign “Make Accra Work Again” 2021, which aims to improve traffic and sanitation, the Greater Accra Region authorities announced they would relocate the onion market near Agbogbloshie. It was unknown to the scrap workers and to GIZ that the scrap yard would be also demolished (Chasant, 2021; Interviewee 1 and 4). After the demolition, only the GIZ were still standing, but lost their intended purpose. Later, also parts of Old Fadama have been ‘voluntarily’ demolished (Azunre & Boateng, 2023). This example illustrates the intricate nature of the "development" apparatus, as described by Ferguson (1994), which is characterized by multiple layers and partially incompatible elements. The GIZ did cooperate with national-level political actors (MESTI and EPA), yet regional-level actors have additional, incompatible interest.

To gain a holistic understanding of the situation, it is crucial to listen to all stakeholders involved, which is beyond the scope of this thesis. Yet, there are indications that conflicting interests between various stakeholders exist(ed). It seems that the German BMZ was discontent with the demolition (Interview 4), while the Ghanaian MESTI prioritized the formal private sector development (Interview 4), and the regional authorities have yet their agenda (Interview 1, 4). The situation seems similar to Ferguson’s (1994) descriptions of a “development” project trying to navigate the complexities of multi-level politics. He argues that the realities of those projects go beyond GN actors doing a project to ‘help’ GS governments. Yet, this is how it is often conceptualised. Also, in this case, the project assumed technical barriers to the e-waste governance in Ghana, such as lack of capacity, and lack of stakeholder inclusivity. Thus, the project aims to advise MESTI, and support capacity building of policy makers (GIZ, 2023). However, due to their institutional limits, “development” projects show an apparent blindness to multi-level politics and are unable to navigate these complexities.

As consequences, the following aspects are worth mentioning. First and foremost, thousands of workers lost their livelihood and properties (Chasant, 2021). Many were able to resettle either in Old Fadama, or scattered in other parts of Accra, yet under more difficult conditions, as space decreased, securities were lost and communities dispersed (Akese et al., 2022). Additionally, the fear of future evictions shapes significantly the political behaviour, contributing to a strategic and negatively-connotated understanding of politics (Yajalin, 2022; Interview 3). Secondly, the project went through a re-orientation, now focusing mainly on the formal private sector, PPPs and to a lesser extent formalization. Just after the demolition in 2021, the Scrap Worker Association of Agbogbloshie raised money for land outside of the city centre, and the GIZ project tried to facilitate the process (Rams, 2024; Interview 4). Yet, so far, the association has no official land title. Thirdly, Arthur et al. (2023) describes the distrust towards the researchers, who are seen as knowledge extractors that will report ‘false’

practices to the government, and thus threaten the livelihoods of informal workers (Interview 3 and 5). Thus, it seems that the workers became very much aware of the power of knowledge and narratives. The GIZ project reports partially confirm the fear of the workers, as many point out the current failures and dangers of ongoing practices. Partially, reports also emphasize the strength of the informal sector (for instance way higher collection rates of WEEE from households than in Europe). As this quote shows: *“Especially the positive sides of the often primitive but in many ways very effective informal recycling sector are often overlooked”* (Johannes, 2019, p.4), the positive aspect of effectiveness, is instantly relativised by also defining the sector as “primitive”.

### Who is actually cherry-picking?

Initially, the project seems to approach the problem analysis through a predominantly economical lens. Consequently, the main problem of e-waste management in Ghana is explained with the concepts of externalization and cherry-picking. Well-documented in various reports (GIZ E-Waste Programme & MESTI-PIU, 2022; Karcher et al., 2019; Schluep & Atiemo, 2019) and confirmed by some interview partners, is the following reasoning: The environmental and health hazards are caused by activities performed by the informal sector. A famous example is the burning of cables to remove the plastic/rubber from the metal. Thus, the informal sector is cherry-picking the components with the most value. The other materials are dumped/burned which externalizes social and environmental costs. This creates unfair conditions for competition for the formal sector, as this sector needs to follow legal procedures due to their permit. Based on this, an incentive system has been developed and piloted, that offers slightly higher prices for unburned cables (Manhart et al., 2020), and more recently, also other materials such as batteries or thermoplastics<sup>6</sup>. This economic lens is also used to explain the inadequate results of trainings by some actors.

However, other interview partners have different, more complex problem analyses. One could also argue that the better-off formal sector is doing the cherry-picking, by only accepting the metal from the cables. Thus, the formal sector is outsourcing hazardous activities to already marginalized communities. This creates a more complex interrelation between both sectors, that is characterized by power relations, but also by strategies of resistance of the informal sector. Additionally, interviewees pointed out the importance of socio-cultural-political aspects, for instance, the political alliances of different scrap workers associations. Considering historical perspectives, Rams (2020) points out the importance of demand and how it is co-produced by national policies. Lastly, one crucial dimension of the problem analysis is how the realities of many workers in the collection and the scrapyards are shaped by societal stigmatisation.

Rams (2024) observes that the incentive system did, indeed, collect a considerable amount of cables, yet the practice of burning cables was continued. The situation shows certain parallels to

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<sup>6</sup> Interestingly, till date, the materials have only been collected, not yet recycled. One could argue, that so far, the project slowed/reduced circularity, rather than enhance CE.

Ferguson's (1994) description of “development” interventions solely based on economic rational. He shows, with the bovine mystique, how an economic problem analysis can misrepresent societal complexities, and how certain project indicators seem to point out a success of a project yet are a symptom of something else. While it is certainly not useful to assume a bovine mystique for e-waste materials, the two different problem analyses above point out, that certain complexities might not be considered in the initial design of interventions.

Further research is required, but two possible perspectives can be identified. Firstly, interviewee 9 argued, based on the experience of pure water sachet incentive system, that social stigmatization can create potential ineffectiveness. While pure water sachets<sup>7</sup> are widely collected, this source of income has little reputation, thus, people that ‘can afford’ to throw away pure water sachets, still do so. Secondly, the re-orientation of the project after 2021, with a focus on formal and formalization of business, can possibly create a burden-shifting towards the informal sector. As Rams (2024) argues, describing a multi-stakeholder meeting in 2022, the informal sector is not only expected to gain permits but also to push the EPA towards creating the context, that would enable them to act according to the permit regulations: that the EPA provides a hazardous waste facility.

## **5. Discussion**

The discussion interlaces the results of the discourse analysis and the case study and explores the potential implications, drawing on circular economy literature on social and environmental justice. First, in examining distributional justice, several aspects are worth mentioning. Considering the TCE approach to circularity, assuming technical optimism and the possibility of decoupling leads to a disregard of certain risks/costs, such as possible rebound effects (Pansera et al., 2021; Zink & Geyer, 2017) or the violence of production and the challenges of recycling/disposal of e-vehicles for safaris (UNEP, 2023; DW, 2023; Prates et al., 2023).

Next, considering only technical barriers and the systematic overlooking of the inherent complexities and contradictions within the private sector can increase distributional injustices. The danger of underestimating the interests of linear industries, such as the fossil industry is well documented by Götze et al. (2022). They show how the fossil industry systematically financed/supported climate denialism. Regarding circularity, the fossil industry's interests in the ongoing UN plastic treaty negotiations focus on promoting recycling over reduction (‘UN Plastics Treaty’, 2024).

Furthermore, the tension between portraying African countries as victims or contributors to global environmental crises is related to the tension between blankly ignoring environmental injustice or making it a ‘single story’. On the one hand, the (historical) difference between GN and GS countries in GHG emissions is widely neglected, similarly individual-level differences. As Khalfan et al. (2023 p.x) show, “*Since the 1990s, the super-rich 1% burned twice as much of the carbon budget as the poorest*

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<sup>7</sup> In Ghana, large parts of the population buy the drink water in 500ml sachets, called pure water.

*half of humanity combined*". This context demonstrates the invalidity of the Malthusian view, as it completely ignores the role of wealth and historical emissions. Similarly, as indicated in the case study, a sole economic problem definition, without considering global supply chains and MNCs, leads to a framing of the urban poor as environmental degraders. This is common in the sustainable "development" framework (Broad, 1994). Leading a burden-shifting on several levels, such as increasing the burden on the informal waste collectors, but also putting the burden of sustainable waste management on GS governments, without considering the wider responsibility of MNCs.

On the other hand, as the case study but also the policy documents show, if the dumping narrative is made a single story, border enforcement strategies can disproportionately affect diasporic second-hand traders (Rams, 2024). At the same time, if combined with neo-liberal CE-initiatives, such as take-back schemes or authorized-repair-only, in the GN, it can further invisibilize GS actors, leading to decreased accessibility (Rams, 2024; Ziegler et al., 2023). This example shows how recognitional justice and distributional aspects overlap and reinforce each other.

Second, exploring recognitional justice aspects further, similarly to in the French case study (Section 2.1.2.1), root causes/processes are barely addressed. While it is recognized that there are distributional injustices concerning certain groups (informal waste workers, females), other justice dimensions are neglected. Also, the categorization is very broad, possibly neglecting the complexities within these categories. As the case study shows, other dimensions such as rural-urban migration and social stigmatization can be crucial. Thus, this broad categorization barely decreases the danger of invisibilization of certain groups, as described for instance by Wuyts & Marin (2022) or Vijayarasa & Liu (2021). Similarly, while the 'traditionality'/indigeneity of circularity is mentioned, there is no space to explore other ontologies/perspectives.

Thirdly, considering procedural justice several observations can be made. The importance of MSI becomes evident in the discourse and the projects. However, on the project level, respondents report meeting fatigue, relating it to institutional design aspects of the MSI approach, and Bimpong et al. (2023) report that the scrap worker association was partially informed and trained, and less involved in the design-process of the Act 917. On the continental level, similar tendencies can be described in the discourse. While private sector actors are always considered, citizens, CSOs, and unions are barely included as stakeholders. However, Arfaoui et al. (2022) show that beyond including all stakeholders, further design/implementation factors are crucial for a success of multi-stakeholder consultations. Beyond that, the tendency to depoliticize aligns with the role framing in the discourse, rarely considering the public as citizens, and mainly passively training-receiving consumers and workers. Pansera et al., (2024) show the importance of workers agency and that a just CE needs be based on active and empowered worker with a broad understanding of work (incl. care). Consequently, the goals of the CE policies are at risk of lacking public legitimacy. Additionally, the space for public debate and negotiation shrinks, reinforcing the discourse lock-in described by Luo et al. (2021), diminishing the ability to question the ecomodernist assumptions (Hobson & Lynch, 2016). Additionally, both in the discourse

and in the project, processes are characterized by little reciprocity, despite rhetorical phrases such as “Best of two worlds” or that the world should learn from Africa (Footprints, 2021; Rams, 2024).

Next, no dimensions of restorative justice have been considered. Yet, the danger of neglecting historical/ongoing injustice in terms of burden shifting has been explained above (see also Pansera et al., 2024). Differently, the concept of ‘neoliberal justice’ as described by Berry et al. (2022) in the US-context, is also very present in this discourse, and to some extent on the project level. Similar the academic literature, the quantity of jobs is highlighted over the quality (Guillibert et al., 2024; Pansera et al., 2024)

Overall, the discussion shows the complexity and interconnectedness of the social justice dimensions. Simply adding a social dimension, by adding the HDI to circular economy indicators (Schröder et al., 2020), neglects this complexity. The danger that CE policies reinforce existing injustices (Berry et al., 2022; Meira et al., 2022) is thus also present in the “development” apparatus. As argued before, it needs a just transition that is not only African-led (Otlhogile & Shirley, 2023) but that is also based on a multi-faceted, intersectional, contextualized understanding of all social justice dimensions (Ashton et al., 2022; Bastos Lima, 2022; Berry et al., 2022; Rask, 2022). Considering, environmental, labour and gender justice, is important, not just from an ethical perspective, but is necessary to make CE effective, as “*inequalities produce unsustainability*” (Pansera et al., 2024, p.5).

The JUST2CE project worked translating these findings into policy recommendations that enable a just transition (see for instance Pansera et al., 2023; R. Passaro et al., 2024). However, these policy recommendations are not specific to the “development” apparatus. While certain recommendations are always relevant, like designing policy with a decolonial lens, and integrating qualitative indicators (R. Passaro, Ghisellini, Barca, et al., 2024, p. 380), the context of “development” provides its own challenges.

The realm of policy recommendations for the “development” apparatus is highly debated. Ferguson (1994, p.285) argues that “*pointing out errors and suggesting improvements is an integral part of the process of justifying and legitimating “development” interventions*”. Thus, following Escobar (1992, 2012/1995) it would be necessary to look for ‘alternatives to development’ and build/join movements in the GS. Building on the idea of the Pluriverse, the multiplicity of ontologies and perspectives is crucial (Kothari et al., 2019). Slowly this critique gains a foothold in the “development” apparatus, opening debates about decolonizing aid/”development” cooperation (Knowledge and Learning GIZ, 2023). However, there are reasons to approach this trend critically (Khan, 2022). Overall, the process of decolonialization is violent (Fanon & Sartre, 2001, p.27), or it is at least uncomfortable and connected to structural changes (Mutumba, 2020). One possible first step for the “development” apparatus, could be, accompanied by further research, to raise awareness of its own institutional limitations.

Beyond those fundamental processes, the case study shows how GS policies, narratives and GN policies are interconnected. Thus, possible recommendations could be concerned with CE policies in

GN. When take-back schemes, authorized repairs, border controls and other policies are promoted, it is crucial to enhance the recognitional and procedural justice of various stakeholders, including consumers in the GS.

## **6. Conclusion**

This paper analyses the CE discourse and its possible implications in the European-African “development” apparatus. Through stakeholder mapping of the recent policy processes, five key documents have been identified. The critical discourse analysis shows that the problem is constructed with an emphasis on African deficits and future developments, specifically population growth. The CE solutions are mainly situated within TCE discourse types, thus limited to the economic sphere and building upon ecomodernist assumptions. Notably, there is one exception in all documents: demonising chemical fertilizer and advocating towards organic circular farming. The main argument for circularity is the creation of jobs. The discourse also approaches the policy process rather a-politically by focusing on technical barriers, aiming to enhance coordination and focus on stakeholder consultation. While this process always includes the private sector and public representatives, the role of citizens and civil society is rather vague and barely visible. When situation these findings in the literature on the discourse of the “Development Apparatus” and research on CE cooperation, many similarities can be identified, and possible implications are drawn. Particularly interesting is to analyse the non-said aspects. Among them are the absence of non-technical barriers that are identified in the academic literature (Calisto Friant, Doezema, et al., 2023). Next, the discourse ignores the complexities and inherent contradictions of the private sector, constructing a supposedly homogeneous actor. Moreover, the depoliticizing nature of the discourse creates a potential for a discourse lock-in, which leaves solutions unexplored and assumptions unchallenged (Hobson & Lynch, 2016; Luo et al., 2021). Lastly, current environmental injustice dimensions are not/barely considered, enabling potential burden shifting.

As a second step, this paper analysed the German “development” project in Ghana concerning e-waste management as a case study. To start understanding what the discourse actually does, document analysis and stakeholder interviews were conducted, focusing on the German understanding of the ongoing project. The analysis showed three important themes as a starting point for further investigation. Firstly, the project is situated within, and at the same time trying to nuance the “dumping narrative”. This narrative creates possible implications beyond Ghana, as it can further invisibilize GS actors. Next, the complexity of multi-level politics, land rights and societal stigmatization, indicate potential institutional limits of the a-political approach of “development” projects. Lastly, the partially conflicting problem construction and the solutions, create space for further research and the potential of burden shifting. In the discussion, the results are related to the three social justice dimensions, showing potential for increases in injustice through several mechanisms, such as disregarding certain risks or solutions through discourse lock-ins or increasing recognitional injustice by overly homogenizing the informal sector. Significantly, the concept of neoliberal justice, highlighted by Berry et al. (2022) with an



emphasis on job creation, is highly prevalent on both levels, the project and the continental-wide discourse.

Overall, these results enable a more nuanced understanding of the current CE discourse in the “development” apparatus, thus starting to understand the underlying assumptions of the win-win-win narrative as well as possible blind spots of the current predominant analysis. These nuances enable starting points for further investigation. For instance, the divergence in stance on chemical fertilizers between CE policies and other policies within the AU (African Union, 2024) raises questions about the underlying rationale and its implications for stakeholders. Overall, by also analysing the non-said dimensions, this paper complements the predominant win-win(-win) discourse (Käsner et al., 2024; Mandizvidza & Makhanda, 2024; Schröder et al., 2020).

Beyond discourse, this paper started to elaborate on possible consequences through a case study. However, given the limited data and time, the identified themes are just a starting point for further work on the “anthropological puzzle”. This further research will be crucial to identify the institutional limitation of the “development” apparatus regarding CE and to avoid instrumental effects. In the spirit of this paper, policy recommendations are approached with humility. This paper offers scientific insights into the current discourse but acknowledges societal and political dimensions of circularity, making technocratic policy advice contradictory. However, the results can be a valuable insight for the design of the policy process, as the importance of all social justice dimensions and their interconnectedness is demonstrated. Research from a Post-Normal Science perspective could potentially provide deeper insights into managing the inherent complexities (Giampietro & Funtowicz, 2020).

## References

- Abuja, Z. A. (2023, September 29). Nigeria Partners With EU On Circular Economy Roadmap. *Voice of Nigeria*. <https://von.gov.ng/nigeria-partners-with-eu-on-circular-economy-roadmap/>
- ACEN Foundation. (n.d.). African Union Circular Economy Action Plan. *ACEN Foundation*. Retrieved 15 May 2024, from <https://acenfoundation.org/project/african-union-circular-economy-action-plan/>
- Adichie, C. N. (2009, October 7). *The danger of a single story*. <https://www.youtube.com/watch?v=D9Ihs241zeg>
- African Union. (2024). *African Fertilizer and Soil Health Summit. Concept Note*. African Union. [https://au.int/sites/default/files/newsevents/conceptnotes/43470-CN-Concept\\_Note\\_for\\_AFSH\\_Summit\\_19.01.2024.pdf](https://au.int/sites/default/files/newsevents/conceptnotes/43470-CN-Concept_Note_for_AFSH_Summit_19.01.2024.pdf)
- Akese, G., Beisel, U., & Chasant, M. (2022, July 21). Agboglobshie: A Year after the Violent Demolition. *Africanarguments*. <https://africanarguments.org/2022/07/agboglobshie-a-year-after-the-violent-demolition/>
- Andrianalizaha, H. (2024, February 6). With African Development Bank support, Uganda takes first step to embedding circular economy model into national strategy [https://www.afdb.org/en/news-and-events/press-releases/african-development-bank-support-uganda-takes-first-step-embedding-circular-economy-model-national-strategy-68536]. *African Development Bank*.
- Arfaoui, N., Le Bas, C., Vernier, M.-F., & Vo, L.-C. (2022). How do governance arrangements matter in the circular economy? Lessons from five methanation projects based on the social-ecological system framework. *Ecological Economics*, 197, 107414. <https://doi.org/10.1016/j.ecolecon.2022.107414>
- Arthur, K. N. A., Bani, P. S., Alorzukey, S., Gbande, F. Y., Babo, S. R. S., & Appiah, G. K. (2023). CASE STUDY GHANA FINAL REPORT JUST2CE PROJECT. In Universitat Autònoma de Barcelona (Ed.), *10 CASE STUDY REPORTS JUST2CE PROJECT: Vol. D2.2* (pp. 214–234). JUST2CE project. [https://just2ce.eu/wp-content/uploads/2023/06/WP2\\_D2.2-10-CASE-STUDY-REPORTS.pdf](https://just2ce.eu/wp-content/uploads/2023/06/WP2_D2.2-10-CASE-STUDY-REPORTS.pdf)
- Ashton, W. S., Fratini, C. F., Isenhour, C., & Krueger, R. (2022). Justice, equity, and the circular economy: Introduction to the special double issue. *Local Environment*, 27(10–11), 1173–1181. <https://doi.org/10.1080/13549839.2022.2118247>
- Azunre, G. A., & Boateng, F. G. (2023). Symbolic legitimization of evictions in post-colonial African cities: A review from Ghana's Old Fadama. *Habitat International*, 135, 102809. <https://doi.org/10.1016/j.habitatint.2023.102809>
- Bastos Lima, M. G. (2022). Just transition towards a bioeconomy: Four dimensions in Brazil, India and Indonesia. *Forest Policy and Economics*, 136, 102684. <https://doi.org/10.1016/j.forpol.2021.102684>
- Bemelmans-Videc, M.-L., Rist, R. C., & Vedung, E. (Eds.). (2017). *Carrots, sticks & sermons: Policy instruments and their evaluation*. Routledge, Taylor and Francis Group.
- Berry, B., Farber, B., Rios, F. C., Haedicke, M. A., Chakraborty, S., Lowden, S. S., Bilec, M. M., & Isenhour, C. (2022). Just by design: Exploring justice as a multidimensional concept in US circular economy discourse. *Local Environment*, 27(10–11), 1225–1241. <https://doi.org/10.1080/13549839.2021.1994535>
- Bimpizas-Pinis, M., Genovese, A., Kaltenbrunner, A., Kesidou, E., Purvis, B., Ramos Torres Fevereiro, J. B., Valles Codina, O., & Veronese Passerella, M. (2024). Chapter 16. Using input-output stock-flow consistent models to simulate and assess 'circular economy' strategies. In E. R. Passaro, P. Ghisellini, S. Barca, M. C. Friant, & M. Pansera, *Circular Economy for Social Transformation: Multiple Paths to Achieve Circularity*. JUST2CE. [https://just2ce.eu/wp-content/uploads/2024/02/D1\\_1-JUST2CE-Final-Version.pdf](https://just2ce.eu/wp-content/uploads/2024/02/D1_1-JUST2CE-Final-Version.pdf)
- Bimpong, F. A. K., Asibey, M. O., & Inkoom, D. K. B. (2023). Ghana's recently introduced e-waste regulatory policy: A hope for a better e-waste sector? *Waste Management & Research: The Journal for a Sustainable Circular Economy*, 0734242X231204457. <https://doi.org/10.1177/0734242X231204457>
- Bonzi, B. (2023). *La France qui a faim. Le don à l'épreuve des violences alimentaires*. Seuil.

- Boulding, K. E. (2011). The Economics of the Coming Spaceship Earth. In H. Jarrett (Ed.), *Environmental Quality in a Growing Economy Essays from the Sixth RFF Forum* (1st ed., p. 11). Routledge. <https://www.routledge.com/Environmental-Quality-in-a-Growing-Economy-Essays-from-the-Sixth-RFF-Forum/Jarrett/p/book/9781617260278> (Original work published 1966)
- Breman, J. (1976). A Dualistic Labour System? A Critique of the ‘Informal Sector’ Concept: I: The Informal Sector. *Economic and Political Weekly*, 11, 1870–1876.
- Broad, R. (1994). The poor and the environment: Friends or foes? *World Development*, 22(6), 811–822. [https://doi.org/10.1016/0305-750X\(94\)90055-8](https://doi.org/10.1016/0305-750X(94)90055-8)
- Calisto Friant, M., Doezema, T., & Pansera, M. (2023). *CROSS-CASE COMPARISON REPORT*. [https://just2ce.eu/wp-content/uploads/2023/10/JUST2CE\\_D2.3\\_Cross\\_Comparison\\_report.pdf](https://just2ce.eu/wp-content/uploads/2023/10/JUST2CE_D2.3_Cross_Comparison_report.pdf)
- Calisto Friant, M., Ripa, M., & Doezema, T. (2024). Chapter 3. A Framework to Critically Understand the Multidimensional Social Justice Implications of a Circular Economy Transition. In E. R. Passaro, P. Ghisellini, S. Barca, M. C. Friant, & M. Pansera, *Circular Economy for Social Transformation: Multiple Paths to Achieve Circularity*. JUST2CE. [https://just2ce.eu/wp-content/uploads/2024/02/D1\\_1-JUST2CE-Final-Version.pdf](https://just2ce.eu/wp-content/uploads/2024/02/D1_1-JUST2CE-Final-Version.pdf)
- Calisto Friant, M., Vermeulen, W. J. V., & Salomone, R. (2020). A typology of circular economy discourses: Navigating the diverse visions of a contested paradigm. *Resources, Conservation and Recycling*, 161, 104917. <https://doi.org/10.1016/j.resconrec.2020.104917>
- Calisto Friant, M., Vermeulen, W. J. V., & Salomone, R. (2023). Transition to a Sustainable Circular Society: More than Just Resource Efficiency. *Circular Economy and Sustainability*. <https://doi.org/10.1007/s43615-023-00272-3>
- Charmaz, K. (2014). *Constructing grounded theory* (2nd edition). Sage.
- Chasant, M. (2021, August 22). Agbogbloshe Demolition The End of An Era or An Injustice. *Muntaka*. <https://www.muntaka.com/agbogbloshe-demolition/>
- Chatham House. (2022). *Policies* [dataset]. <https://circulareconomy.earth/about>
- Circle Economy. (2023). *The circularity gap report 2023* (pp. 1–64). Circle Economy. <https://www.circularity-gap.world/2023>
- Cobbing, M., Miller, E., & Omotoso, Y. (2023). *Growing the Alternatives. Societies for a future beyond GDP. Chapter 2*. Greenpeace International. <https://www.greenpeace.org/static/planet4-international-stateless/2023/11/d133ea13-growing-the-alternatives-chapter-2-v2.pdf>
- Condamine, P. (2020). *France law for fighting food waste. Food Waste Prevention Legislation*. Zero Waste Europe. [https://zerowasteurope.eu/wp-content/uploads/2020/11/zwe\\_11\\_2020\\_factsheet\\_france\\_en.pdf](https://zerowasteurope.eu/wp-content/uploads/2020/11/zwe_11_2020_factsheet_france_en.pdf)
- Corvino, F. (2023). The Compound Injustice of the EU Carbon Border Adjustment Mechanism (CBAM). *Ethics, Policy & Environment*, 1–20. <https://doi.org/10.1080/21550085.2023.2272237>
- Cowen, M., & Shenton, R. (2016). The Invention of Development. In D. Gasper & A. L. St Clair (Eds.), *Development ethics*. Routledge, Taylor and Francis Group.
- Dewick, P., De Mello, A. M., Sarkis, J., & Donkor, F. K. (2022). The puzzle of the informal economy and the circular economy. *Resources, Conservation and Recycling*, 187, 106602. <https://doi.org/10.1016/j.resconrec.2022.106602>
- DW. (2023, September 16). How cobalt mining made life unbearable in this Congo town. *Deutsche Welle*. <https://www.dw.com/en/how-cobalt-mining-made-life-unbearable-in-this-congo-town/video-66831960>
- Eicke, L., Weko, S., Aperi, M., & Marian, A. (2021). Pulling up the carbon ladder? Decarbonization, dependence, and third-country risks from the European carbon border adjustment mechanism. *Energy Research & Social Science*, 80, 102240. <https://doi.org/10.1016/j.erss.2021.102240>
- Ellen MacArthur Foundation. (2022, September 12). France’s Anti-waste and Circular Economy Law. *Ellen MacArthur Foundation*. <https://www.ellenmacarthurfoundation.org/circular-examples/frances-anti-waste-and-circular-economy-law>
- Equinox. (2021). *Towards Climate Justice. Rethinking the European Green Deal from a racial justice perspective*. Equinox. <https://www.equinox-eu.com/wp-content/uploads/2021/06/Towards-Climate-Justice-Equinox.pdf>

- Erdem Türkelli, G. (2022). Multistakeholder Partnerships for Development and the Financialization of Development Assistance. *Development and Change*, 53(1), 84–116. <https://doi.org/10.1111/dech.12687>
- Escobar, A. (1992). Imagining a Post-Development Era? Critical Thought, Development and Social Movements. *Social Text*, 31/32, 20. <https://doi.org/10.2307/466217>
- Escobar, A. (2012). *Encountering development: The making and unmaking of the third world*. Princeton University Press. (Original work published 1995)
- European Commission. (2015). *COM(2015) 614 final COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Closing the loop—An EU action plan for the Circular Economy*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52015DC0614>
- European Commission. (2020). *COM/2020/98 final: COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS A new Circular Economy Action Plan For a cleaner and more competitive Europe*. <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2020:98:FIN>
- European Union External Action. (2018). E-waste Management in Ghana: From Grave to Cradle | EEAS. *The Diplomatic Service of the European Union*. [https://www.eeas.europa.eu/node/50575\\_en](https://www.eeas.europa.eu/node/50575_en)
- Fanon, F., & Sartre, J.-P. (2001). *The wretched of the earth* (C. Farrington, Trans.; Reprinted). Penguin Books. (Original work published 1963)
- Federal Foreign Office. (2017, March 14). Germany supports Government of Ghana with 25 Million Euros to tackle environmental impact of E-waste. *German Embassy Accra*. <https://accra.diplo.de/gh-en/ewaste-project-launch/1164856>
- Ferguson, J. (1994). *The anti-politics machine: 'development,' depoliticization, and bureaucratic power in Lesotho*. University of Minnesota Press.
- Forsyth, M., Pali, B., & Tepper, F. (2022). Environmental Restorative Justice: An Introduction and an Invitation. Chapter 1. In B. Pali, M. Forsyth, & F. Tepper (Eds.), *The Palgrave Handbook of Environmental Restorative Justice*. Springer International Publishing. <https://doi.org/10.1007/978-3-031-04223-2>
- Foucault, M. (2010). *The birth of biopolitics: Lectures at the Collège de France, 1978-79* (M. Senellart, Ed.; Paperback ed). Palgrave Macmillan. (Original work published 1978-79)
- Fraser, N. (2000). Rethinking Recognition. *New Left Review*, 3, 107–120.
- Ghana Today. (2023). *MESTI develops roadmap to transition Ghana to a circular economy*. <https://ghanatoday.gov.gh/news/mesti-develops-roadmap-to-transition-ghana-to-a-circular-economy/>
- Giampietro, M., & Funtowicz, S. O. (2020). From elite folk science to the policy legend of the circular economy. *Environmental Science & Policy*, 109, 64–72. <https://doi.org/10.1016/j.envsci.2020.04.012>
- Gihring, K., Käsner, S.-A., & Timson, S. (2024). Chapter 13. The Link between the Sustainable Development Goals and the Circular Economy on the African continent. In E. R. Passaro, P. Ghisellini, S. Barca, M. C. Friant, & M. Pansera, *Circular Economy for Social Transformation: Multiple Paths to Achieve Circularity*. JUST2CE. [https://just2ce.eu/wp-content/uploads/2024/02/D1\\_1-JUST2CE-Final-Version.pdf](https://just2ce.eu/wp-content/uploads/2024/02/D1_1-JUST2CE-Final-Version.pdf)
- GIZ. (2023). *Environmentally and socially responsible handling of e-waste*. <https://www.giz.de/en/worldwide/123767.html>
- GIZ E-Waste Programme, & MESTI-PIU. (2022). *Baseline Study (Environmentally Sound Disposal and Recycling of E-Waste in Ghana (E-Waste Programme))*. GIZ. <https://www.giz.de/en/downloads/giz2022-en-baseline-study-ghana.pdf>
- Gower, R., & Schröder, P. (2016). *Virtuous Circle: How the circular economy can create jobs and save lives in low and middle-income countries*. Tearfund. [https://www.researchgate.net/publication/306562812\\_Virtuous\\_Circle\\_how\\_the\\_circular\\_economy\\_can\\_create\\_jobs\\_and\\_save\\_lives\\_in\\_low\\_and\\_middle-income\\_countries?enrichId=rgreq-ac5096efa81b660a3229eb3ab7c16239-](https://www.researchgate.net/publication/306562812_Virtuous_Circle_how_the_circular_economy_can_create_jobs_and_save_lives_in_low_and_middle-income_countries?enrichId=rgreq-ac5096efa81b660a3229eb3ab7c16239-)

- XXX&enrichSource=Y292ZXJQYWdlOzMwNjU2MjgxMjtBUzozOTkwMTE5MjEwNTU3NDdAMTQ3MjE0MzI2MzI0Mg%3D%3D&el=1\_x\_2&\_esc=publicationCoverPdf
- Gregson, N., Crang, M., Fuller, S., & Holmes, H. (2015). Interrogating the circular economy: The moral economy of resource recovery in the EU. *Economy and Society*, 44(2), 218–243. <https://doi.org/10.1080/03085147.2015.1013353>
- Guillibert, P., Leonardi, E., & Van Vossol, J. (2024). Chapter 19. LABOUR IN THE TRANSITION TO THE CIRCULAR ECONOMY A CRITICAL LITERATURE REVIEW ON JUST TRANSITION AND CIRCULAR ECONOMY. In E. R. Passaro, P. Ghisellini, S. Barca, M. C. Friant, & M. Pansera, *Circular Economy for Social Transformation: Multiple Paths to Achieve Circularity*. JUST2CE. [https://just2ce.eu/wp-content/uploads/2024/02/D1\\_1-JUST2CE-Final-Version.pdf](https://just2ce.eu/wp-content/uploads/2024/02/D1_1-JUST2CE-Final-Version.pdf)
- Gutberlet, J., & Carenzo, S. (2020). Waste Pickers at the Heart of the Circular Economy: A Perspective of Inclusive Recycling from the Global South. *Worldwide Waste*, 3(1), 6. <https://doi.org/10.5334/wwwj.50>
- Haug, S., & Taggart, J. (2024). Global Development Governance 2.0: Fractured accountabilities in a divided governance complex. *Global Policy*, 15(1), 128–134. <https://doi.org/10.1111/1758-5899.13261>
- Hazardous and Electronic Waste Control and Management Act, Pub. L. No. ACT 917, ACT 917 (2016). <https://faolex.fao.org/docs/pdf/gha205550.pdf>
- Hickel, J., Dorninger, C., Wieland, H., & Suwandi, I. (2022). Imperialist appropriation in the world economy: Drain from the global South through unequal exchange, 1990–2015. *Global Environmental Change*, 73, 102467. <https://doi.org/10.1016/j.gloenvcha.2022.102467>
- Hobson, K., & Lynch, N. (2016). Diversifying and de-growing the circular economy: Radical social transformation in a resource-scarce world. *Futures*, 82, 15–25. <https://doi.org/10.1016/j.futures.2016.05.012>
- Jaeger-Erben, M., Jensen, C., Hofmann, F., & Zwiers, J. (2021). There is no sustainable circular economy without a circular society. *Resources, Conservation and Recycling*, 168, 105476. <https://doi.org/10.1016/j.resconrec.2021.105476>
- James, P. (2022). Re-embedding the circular economy in Circles of Social Life: Beyond the self-repairing (and still-rapacious) economy. *Local Environment*, 27(10–11), 1208–1224. <https://doi.org/10.1080/13549839.2022.2040469>
- Johannes, G. (2019). *Manual Dismantling of Cars on the Old Fadama Scrapyard* (Environmentally Sound Disposal and Recycling of E-Waste in Ghana (E-Waste Programme)). GIZ. <https://www.giz.de/en/downloads/giz2022-en-manual-dismantling-of-cars-ghana.pdf>
- JUST2CE. (n.d.). *About Us*. JUST2CE. A Just Transition to Circular Economy. Retrieved 23 May 2024, from <https://just2ce.eu/about-us/>
- Käsner, S.-A., Gihring, K., Desmond, P., & Schneck, C. (2024). Chapter 21. Circular Economy Transitions in Africa: A policy perspective. In E. R. Passaro, P. Ghisellini, S. Barca, M. C. Friant, & M. Pansera, *Circular Economy for Social Transformation: Multiple Paths to Achieve Circularity*. JUST2CE. [https://just2ce.eu/wp-content/uploads/2024/02/D1\\_1-JUST2CE-Final-Version.pdf](https://just2ce.eu/wp-content/uploads/2024/02/D1_1-JUST2CE-Final-Version.pdf)
- Kębłowski, W., Lambert, D., & Bassens, D. (2020). Circular economy and the city: An urban political economy agenda. *Culture and Organization*, 26(2), 142–158. <https://doi.org/10.1080/14759551.2020.1718148>
- Khalfan, A., Nilsson Lewis, A., Aguilar, C., Persson, J., Lawson, M., Dabi, N., Jayoussi, S., & Acharya, S. (2023). *Climate Equality: A planet for the 99%*. Oxfam International. <https://doi.org/10.21201/2023.000001>
- Khan, T. (2022, February 4). The narrative of decolonization of development aid. Are non-Western alternatives the real issue? *IDEES*. <https://revistaidees.cat/en/the-narrative-of-decolonization-of-development-aid/>
- Kirchherr, J. (2021). Towards circular justice: A proposition. *Resources, Conservation and Recycling*, 173, 105712. <https://doi.org/10.1016/j.resconrec.2021.105712>
- Knowledge and Learning GIZ. (2023, May 11). Decolonisation and Development. *Medium*. <https://medium.com/@knowledgeandlearning/decolonisation-and-development-ad86fc48e7bd>

- Kothari, A., Demaria, F., & Acosta, A. (2014). Buen Vivir, Degrowth and Ecological Swaraj: Alternatives to sustainable development and the Green Economy. *Development*, 57(3–4), 362–375. <https://doi.org/10.1057/dev.2015.24>
- Kothari, A., Salleh, A., Escobar, A., Demaria, F., & Acosta, A. (Eds.). (2019). *Pluriverse: A post-development dictionary*. Tulika Books and Authorsupfront.
- Lazarevic, D., & Valve, H. (2017). Narrating expectations for the circular economy: Towards a common and contested European transition. *Energy Research & Social Science*, 31, 60–69. <https://doi.org/10.1016/j.erss.2017.05.006>
- Leipold, S., Weldner, K., & Hohl, M. (2021). Do we need a ‘circular society’? Competing narratives of the circular economy in the French food sector. *Ecological Economics*, 187, 107086. <https://doi.org/10.1016/j.ecolecon.2021.107086>
- Liu, Z., Schraven, D., de Jong, M., & Hertogh, M. (2023). The societal strength of transition: A critical review of the circular economy through the lens of inclusion. *International Journal of Sustainable Development & World Ecology*, 30(7), 826–849. <https://doi.org/10.1080/13504509.2023.2208547>
- Luo, A., Zuberi, M., Liu, J., Perrone, M., Schnepf, S., & Leipold, S. (2021). Why common interests and collective action are not enough for environmental cooperation – Lessons from the China-EU cooperation discourse on circular economy. *Global Environmental Change*, 71, 102389. <https://doi.org/10.1016/j.gloenvcha.2021.102389>
- Mahler, A. G. (2017). *Global South* (pp. 9780190221911–0055). <https://doi.org/10.1093/obo/9780190221911-0055>
- Malinauskaite, J., & Jouhara, H. (2019). The trilemma of waste-to-energy\_ A multi-purpose solution. *Energy Policy*. <https://doi.org/10.1016/j.enpol.2019.02.029>
- Malpass, D. (2022, December 21). A transformed fertilizer market is needed in response to the food crisis in Africa. *World Bank Blogs*. <https://blogs.worldbank.org/en/voices/transformed-fertilizer-market-needed-response-food-crisis-africa>
- Mandizvidza, C., & Makhanda, R. (2024). Chapter 20. Circular Economy (CE) in African countries. In E. R. Passaro, P. Ghisellini, S. Barca, M. C. Friant, & M. Pansera, *Circular Economy for Social Transformation: Multiple Paths to Achieve Circularity*. JUST2CE. [https://just2ce.eu/wp-content/uploads/2024/02/D1\\_1-JUST2CE-Final-Version.pdf](https://just2ce.eu/wp-content/uploads/2024/02/D1_1-JUST2CE-Final-Version.pdf)
- Martínez Álvarez, B., & Jimenez, A. (2024). Chapter 18. The relevance of gender justice: How gender is shaping sustainability and circular economy. In E. R. Passaro, P. Ghisellini, S. Barca, M. C. Friant, & M. Pansera, *Circular Economy for Social Transformation: Multiple Paths to Achieve Circularity*. JUST2CE. [https://just2ce.eu/wp-content/uploads/2024/02/D1\\_1-JUST2CE-Final-Version.pdf](https://just2ce.eu/wp-content/uploads/2024/02/D1_1-JUST2CE-Final-Version.pdf)
- Martinez-Alier, J. (2021). Mapping ecological distribution conflicts: The EJAtlas. *The Extractive Industries and Society*, 8(4), 100883. <https://doi.org/10.1016/j.exis.2021.02.003>
- Mauss, M. (1990). *The gift: The form and reason for exchange in archaic societies*. Whitney Museum of American Art. (Original work published 1950)
- Meadows, D. H., Club of Rome, & Potomac Associates (Eds.). (1974). *The limits to growth: A report for the club of rome’s project on the predicament of mankind* (2. ed). Universe books.
- Meira, T., Barca, S., D’Alisa, G., & Guilibert, P. (2022). *Framing Circular Economy in the context of Global Environmental Justice* (D 1.2; JUST2CE, p. 53). [https://just2ce.eu/wp-content/uploads/2023/06/WP1-%E2%80%93Deliverable-1.2\\_Framing-Circular-Economy-in-the-context-of.pdf](https://just2ce.eu/wp-content/uploads/2023/06/WP1-%E2%80%93Deliverable-1.2_Framing-Circular-Economy-in-the-context-of.pdf)
- Merli, R., Preziosi, M., & Acampora, A. (2018). How do scholars approach the circular economy? A systematic literature review. *Journal of Cleaner Production*, 178, 703–722. <https://doi.org/10.1016/j.jclepro.2017.12.112>
- MESTI. (2021, March 18). Construction of E-waste Handover Centre. *MESTI NEWS*. <https://mesti.gov.gh/construction-e-waste-handover-centre/>
- Mhatre, P., Panchal, R., Singh, A., & Bibyan, S. (2021). A systematic literature review on the circular economy initiatives in the European Union. *Sustainable Production and Consumption*, 26, 187–202. <https://doi.org/10.1016/j.spc.2020.09.008>
- Mies, A., & Gold, S. (2021). Mapping the social dimension of the circular economy. *Journal of Cleaner Production*, 321, 128960. <https://doi.org/10.1016/j.jclepro.2021.128960>

- Muchangos, L. S. D. (2022). Mapping the Circular Economy Concept and the Global South. *Circular Economy and Sustainability*, 2(1), 71–90. <https://doi.org/10.1007/s43615-021-00095-0>
- Mutumba, Y. (2020, July 6). *Yvette Mutumba on Why Decolonizing Institutions ‘Has to Hurt’* (P. Larios, Interviewer) [Frieze]. <https://www.frieze.com/article/yvette-mutumba-why-decolonizing-institutions-has-hurt>
- Nijman-Ross, E., Umutesi, J. U., Turay, J., Shamavu, D., Atanga, W. A., & Ross, D. L. (2023). Toward a preliminary research agenda for the circular economy adoption in Africa. *Frontiers in Sustainability*, 4, 1061563. <https://doi.org/10.3389/frsus.2023.1061563>
- O’Hara, P., & Rams, D. (2024). INTRODUCTION – CIRCULAR ECONOMIES Between the promise of renewal and unequal global circulation. In P. O’Hare & D. Rams (Eds.), *Circular Economies in an Unequal World: Waste, Renewal and the Effects of Global Circularity* (1st ed.). Bloomsbury Publishing Plc. <https://doi.org/10.5040/9781350296664>
- Otlhogile, M., & Shirley, R. (2023). The evolving just transition: Definitions, context, and practical insights for Africa. *Environmental Research: Infrastructure and Sustainability*, 3(1), 013001. <https://doi.org/10.1088/2634-4505/ac9a69>
- Pansera, M., Barca, S., Martinez Alvarez, B., Leonardi, E., D’Alisa, G., Meira, T., & Guillibert, P. (2024). Toward a just circular economy: Conceptualizing environmental labor and gender justice in circularity studies. *Sustainability: Science, Practice and Policy*, 20(1), 2338592. <https://doi.org/10.1080/15487733.2024.2338592>
- Pansera, M., Genovese, A., & Ripa, M. (2021). Politicising Circular Economy: What can we learn from Responsible Innovation? *Journal of Responsible Innovation*, 8(3), 471–477. <https://doi.org/10.1080/23299460.2021.1923315>
- Pansera, M., Ibanez, M., Miliadi, V., Zaharis, N., Celebi, D., Purvis, B., Else, T., Gihring, K., Käsner, S.-A., Mono, K., Barca, S., Leonardi, E., Boniburini, I., Ghisellini, P., & Passaro, R. (2023). *Policy Briefs on Responsible Circular Economy* (WP3-Deliverable 3.4; JUST2CE). [https://just2ce.eu/wp-content/uploads/2024/03/Attachment\\_0-35.pdf](https://just2ce.eu/wp-content/uploads/2024/03/Attachment_0-35.pdf)
- Passaro, R., Ghisellini, P., Barca, S., Friant, M. C., & Pansera, M. (2024). *Circular Economy for Social Transformation: Multiple Paths to Achieve Circularity*. JUST2CE. [https://just2ce.eu/wp-content/uploads/2024/02/D1\\_1-JUST2CE-Final-Version.pdf](https://just2ce.eu/wp-content/uploads/2024/02/D1_1-JUST2CE-Final-Version.pdf)
- Passaro, R., Ghisellini, P., & Ulgiati, S. (2024). Chapter 1. Circular economy model, principles and just transition perspectives. In R. Passaro, P. Ghisellini, M. Pansera, S. Barca, & M. Calisto Friant (Eds.), *Circular Economy for Social Transformation: Multiple Paths to Achieve Circularity* (1.1).
- Petitjean, O., & Verheecke, L. (2023). *BLOOD ON THE GREEN DEAL* (p. 34). Corporate Europe Observatory and Observatoire des Multinationales.
- Post-Growth Innovation Lab. (2024). *About*. Post-Growth Innovation Lab. <https://postgrowth-lab.uvigo.es/about/>
- Prates, L., Karthe, D., Zhang, L., Wang, L., O’Connor, J., Lee, H., & Dornack, C. (2023). Sustainability for all? The challenges of predicting and managing the potential risks of end-of-life electric vehicles and their batteries in the Global South. *Environmental Earth Sciences*, 82(6), 143. <https://doi.org/10.1007/s12665-023-10806-5>
- Purvis, B., & Genovese, A. (2023). Better or different? A reflection on the suitability of indicator methods for a just transition to a circular economy. *Ecological Economics*, 212, 107938. <https://doi.org/10.1016/j.ecolecon.2023.107938>
- Rademakers, K., Smit, T. A. B., Artola, I., Koehler, J., Hemkhaus, M., Ahlers, J., Van Hummelen, S., Chewpreecha, U., Smith, A., & McGovern, M. (2021). *Circular economy in the Africa-EU cooperation: Continental report*. (Project: “Circular Economy in Africa-Eu cooperation”). Trinomics B.V., Tomorrow Matters Now Ltd., adelphi Consult GmbH and Cambridge Econometrics Ltd. <https://data.europa.eu/doi/10.2779/008723>
- Rams, D. (2015, August 7). Rambo-style urban management. *Open Democracy*. <https://www.opendemocracy.net/en/rambostyle-urban-management/>
- Rams, D. (2020, September 3). Agboglobshie: Dumping no more. *Discard Studies*. <https://discardstudies.com/2020/03/09/agboglobshie-dumping-no-more/>
- Rams, D. (2024). Chapter 1: THE CIRCULAR ECONOMY OF METALS AND THE CHALLENGES OF ITS GLOBALIZATION IN GHANA. In P. O’Hare & D. Rams (Eds.), *Circular Economies in an Unequal World: Waste, Renewal and the Effects of Global*

- Circularity* (1st ed., pp. 23–46). Bloomsbury Publishing Plc.  
<https://doi.org/10.5040/9781350296664>
- Rask, N. (2022). An intersectional reading of circular economy policies: Towards just and sufficiency-driven sustainabilities. *Local Environment*, 27(10–11), 1287–1303.  
<https://doi.org/10.1080/13549839.2022.2040467>
- Ravallion, M. (2012). Mashup Indices of Development. *The World Bank Research Observer*, 27(1), 1–32. <https://doi.org/10.1093/wbro/lkr009>
- Rawls, J. (2005). *A Theory of Justice: Original Edition*. Harvard University Press.  
<https://doi.org/10.2307/j.ctvjf9z6v> (Original work published 1971)
- Ripa, M., Pansera, M., Barca, S., Bimpizas-Pinis, M., Celebi, D., Doezema, T., Genovese, A., Girei, E., Jimenez, A., Suárez Eiroa, B., & Sousa, J. (2021). *D2.1 Multidimensional Framework for the Case Studies* (D2.1; JUST2CE). <https://just2ce.eu/wp-content/uploads/2022/02/D2.1-JUST2CE.pdf>
- Rosaldo, M. (2021). Problematizing the “informal sector”: 50 years of critique, clarification, qualification, and more critique. *Sociology Compass*, 15(9), e12914.  
<https://doi.org/10.1111/soc4.12914>
- Sacko, J. (2023). *Statement By H.E. Amb. Josefa Sacko Commissioner for Agriculture, Rural Development, Blue Economy and Sustainable Environment At the opening of the 5th Ordinary Session of the Specialized Technical Committee (STC) on Agriculture, Rural Development, Water and Environment* [Statement]. African Union.  
<https://au.int/en/speeches/20231117/statement-he-amb-josefa-sacko-commissioner-agriculture-rural-development-blue>
- Samper, J. A., Schockling, A., & Islar, M. (2021). Climate Politics in Green Deals: Exposing the Political Frontiers of the European Green Deal. *Politics and Governance*, 9(2), 8–16.  
<https://doi.org/10.17645/pag.v9i2.3853>
- Schlosberg, D. (2009). *Defining environmental justice: Theories, movements, and nature* (1. publ. in paperback). Oxford University Press.
- Schröder, P., Anantharaman, M., Anggraeni, K., Foxon, T. J., & Barber, J. (2019). Chapter 1 Introduction: Sustainable lifestyles, livelihoods and the circular economy. In *The Circular Economy and the Global South* (1st ed., p. 238). Routledge.
- Schröder, P., Lemille, A., & Desmond, P. (2020). Making the circular economy work for human development. *Resources, Conservation and Recycling*, 156, 104686.  
<https://doi.org/10.1016/j.resconrec.2020.104686>
- Secretariat of the Basel Convention. (n.d.). *E-waste*. Basel Convention. Retrieved 11 May 2024, from <https://www.basel.int/Implementation/Ewaste/Overview/tabid/4063/Default.aspx>
- Sen, A. (2009). *The idea of justice*. Belknap Press of Harvard University Press.
- Sewchurran, K., Andersson, G., & Davids, L. M. (2024). Chapter 8. A Diversity of Paths Towards Social Transformation Through the Concept of a Circular Economy. In E. R. Passaro, P. Ghisellini, S. Barca, M. C. Friant, & M. Pansera, *Circular Economy for Social Transformation: Multiple Paths to Achieve Circularity*. JUST2CE. [https://just2ce.eu/wp-content/uploads/2024/02/D1\\_1-JUST2CE-Final-Version.pdf](https://just2ce.eu/wp-content/uploads/2024/02/D1_1-JUST2CE-Final-Version.pdf)
- Shumba, O. (2011). Commons thinking, ecological intelligence and the ethical and moral framework of Ubuntu: An imperative for sustainable development. *Journal of Media and Communication Studies*, 3(3), 84–96.
- Spekkink, W., Rödl, M., & Charter, M. (2022). Repair Cafés and Precious Plastic as translocal networks for the circular economy. *Journal of Cleaner Production*, 380, 135125.  
<https://doi.org/10.1016/j.jclepro.2022.135125>
- SRI. (2022). About us. *Sustainable Recycling Industries*. <https://www.sustainable-recycling.org/about-sri/>
- Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., Biggs, R., Carpenter, S. R., De Vries, W., De Wit, C. A., Folke, C., Gerten, D., Heinke, J., Mace, G. M., Persson, L. M., Ramanathan, V., Reyers, B., & Sörlin, S. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347(6223), 1259855.  
<https://doi.org/10.1126/science.1259855>
- Tutsirai, M., Andrew, C., & Mandizvidza, C. (2024). Chapter 4. Conditions and constraints for a just transition: Definition and role of the social and justice dimension. In E. R. Passaro, P.



- Ghisellini, S. Barca, M. C. Friant, & M. Pansera, *Circular Economy for Social Transformation: Multiple Paths to Achieve Circularity*. JUST2CE. [https://just2ce.eu/wp-content/uploads/2024/02/D1\\_1-JUST2CE-Final-Version.pdf](https://just2ce.eu/wp-content/uploads/2024/02/D1_1-JUST2CE-Final-Version.pdf)
- UNIDO. (2022, June 7). UNIDO, Canada and Ghana launch Ghana Circular Economy Centre to support the country's transition to a circular economy. *UNIDO*. <https://www.unido.org/news/unido-canada-and-ghana-launch-ghana-circular-economy-centre-support-countrys-transition-circular-economy>
- Valencia, M., Bocken, N., Loaiza, C., & De Jaeger, S. (2023). The social contribution of the circular economy. *Journal of Cleaner Production*, 408, 137082. <https://doi.org/10.1016/j.jclepro.2023.137082>
- Vela Almeida, D., Kolinjivadi, V., Ferrando, T., Roy, B., Herrera, H., Vecchione Gonçalves, M., & Van Hecken, G. (2023). The “Greening” of Empire: The European Green Deal as the EU first agenda. *Political Geography*, 105, 102925. <https://doi.org/10.1016/j.polgeo.2023.102925>
- Vijayarasa, R., & Liu, M. (2021). Fast Fashion for 2030: Using the Pattern of the Sustainable Development Goals (SDGs) to Cut a More Gender-Just Fashion Sector. *Business and Human Rights Journal*, 7(1), 45–66. <https://doi.org/doi:10.1017/bhj.2021.29>
- Weibert, A., Ahiataku, S. J., Dawuni, G. R., Aal, K., Misaki, K., & Wulf, V. (2023). Looking Past the Miracle Box: An Exploration of Tools and Practices along the e-waste Value Chain in Ghana. *Proceedings of the ACM on Human-Computer Interaction*, 7(GROUP), 1–13. <https://doi.org/10.1145/3567565>
- Wuyts, W., & Marin, J. (2022). “Nobody” matters in circular landscapes. *Local Environment*, 27(10–11), 1254–1271. <https://doi.org/10.1080/13549839.2022.2040465>
- Yajalin, J. E. (2022). Understanding Political Participation From the Margins: The Perspectives of Migrant Slum Dwellers in Agbogbloshie, Ghana. *Journal of Asian and African Studies*, 002190962211446. <https://doi.org/10.1177/00219096221144687>
- Young, I. M. (1990). *Justice and the Politics of Difference*. Princeton University Press. <https://doi.org/10.2307/j.ctvcm4g4q>
- Ziai, A. (2017). Post-development 25 years after *The Development Dictionary*. *Third World Quarterly*, 38(12), 2547–2558. <https://doi.org/10.1080/01436597.2017.1383853>
- Ziegler, R., Bauwens, T., Roy, M. J., Teasdale, S., Fourrier, A., & Raufflet, E. (2023). Embedding circularity: Theorizing the social economy, its potential, and its challenges. *Ecological Economics*, 214, 107970. <https://doi.org/10.1016/j.ecolecon.2023.107970>
- Zink, T., & Geyer, R. (2017). Circular Economy Rebound. *Journal of Industrial Ecology*, 21(3), 593–602. <https://doi.org/10.1111/jiec.12545>

## Appendices

### 1. CE policies in Africa

National Policies	Countries
<b>CE Roadmaps</b> (in preparation)	Senegal <sup>8</sup> , Morocco <sup>9</sup> , Ghana <sup>10</sup> , Nigeria <sup>11</sup> , Rwanda <sup>12</sup> , Angola <sup>13</sup> ; Under NCER multi-country project 2023-24 <sup>14</sup> : Chad, Ethiopia, Cameroon, Benin, Uganda <sup>15</sup>
<b>CE -Related Policies</b> [any CE / green growth policies, with CE principles]	Tunisia, Egypt, Algeria, Gabon, Kenya, Rwanda, Madagascar, Morocco, Senegal, Nigeria, Ghana, South Africa
<b>Product policies</b> [related to design, manufacture, distribution/import/bans]	Angola*, Benin, Burkina Faso, Burundi, Cameroon, Cap Verde, Cote d'Ivoire, Democratic Republic of Congo, Egypt, Eritrea, Ethiopia, Gabon, Guinea-Bissau, Kenya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Republic of Congo, Rwanda, Sao Tome and Principe*, Senegal, Seychelles, Somalia, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe
<b>Extended producer responsibility policies</b>	Cape Verde, Cote d'Ivoire, Egypt*, Gambia, Ghana, Madagascar, Mali, Mauritius, Mozambique, Nigeria, Rwanda, Sao Tome and Principe*, Senegal, Tanzania*, Uganda, Zambia, Zimbabwe, South Africa
<b>Waste management and recycling policies</b>	Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central Africa Republic, Chad, Comoros, Cote d'Ivoire, Democratic Republic of Congo, Djibouti, Egypt, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Republic of Congo, Rwanda, Sao Tome and Principe*, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia
<b>Fiscal policies</b>	Algeria, Benin, Botswana, Burkina Faso, Cape Verde, Ghana, Guinea, Lesotho, Mauritius, Namibia, Seychelles, South Africa
<b>Without any</b>	South Sudan, Equatorial Guinea

Overview CE related policies in Africa. Adapted from Rademakers et al. (2021, p.13); countries marked with \* are updated with information from (Chatham House, 2022)

<sup>8</sup> <https://aps.sn/la-sonaged-se-dote-dun-plan-strategique-de-developpement-a-lhorizon-2028/>

<sup>9</sup> <https://www.revuefreg.fr/index.php/home/article/view/871>

<sup>10</sup> <https://acenfoundation.org/project/circular-economy-action-plan-and-roadmap-in-ghana/>

<sup>11</sup> <https://www.afdb.org/en/topics-and-sectors/topics/circular-economy/nigeria-circular-economy-working-group-ncewg>

<sup>12</sup> <https://www.environment.gov.rw/news-detail/rwanda-launches-national-circular-economy-action-plan-and-roadmap>

<sup>13</sup> <https://www.circularinnovationlab.com/angola-national-circular-economy-roadmap>

<sup>14</sup> [https://www.africa21.org/wp-content/uploads/Journalist-Training-CE-Slides\\_November-2023-Kamau.pdf](https://www.africa21.org/wp-content/uploads/Journalist-Training-CE-Slides_November-2023-Kamau.pdf)

<sup>15</sup> <https://www.afdb.org/fr/news-and-events/events/lancement-du-processus-delaboration-de-la-feuille-de-route-de-leconomie-circulaire-de-louganda-68181>

## 2. Detailed Timeline

Year	Action	Actors
2015	Creation ACEN	ACEN
2016/17	Creation of ACEA by Nigeria, Rwanda, South Africa	ACEA, Nigeria, Rwanda, South Africa, WEF
2019	17 <sup>th</sup> African Ministerial Conference on the Environment: Durban Declaration	
2020	Establishment of Expert Working Group for AU CEAP	
	Workshop on Urban CE for Africa by Africa	ICLEI Africa, ACEN
2021	Report: “Five Big Bets for the Circular Economy”, identification of key sectors	ACEN with Dalberg, AfDB, & WEF Funded by: Denmark
	Report: “Circular Economy on the African Continent”	GRID with ACEN, Footprints Africa, ICLEI Africa, NORAD, Rise Africa, Revolve Circular, EEB
	Report “Influential mission on Circular Economy in Africa”	Netherlands Enterprise Agency with Holland Circular Hotspot, ACEN
	Report “Circular Economy in the African-EU cooperation”	EU, Trinomics, adelphi cambridge econometrics, ACEN, TOMA now
	Report: “The Circular Economy: Our Journey in Africa So Far”	Footprints Africa, ACEN Circle Economy, GRID Arendal shifting paradigms, AfDB Circular Economy Institute
	Report “Circular economy in Africa: examples and opportunities”	Ellen MacArthur Foundation with Chatham House ICLEI Africa University of Lagos
	Report: “Increasing Circularity in Africa's Mining Sector”	ACEA, Konrad Adenauer Stiftung Dalberg
	Report: „Increasing Circularity in Africa's Plastics Sector”	ACEA, Circular Economy Innovation Partnership Dalberg
2022	CE Action Plan for Rwanda;	Rwanda, UNDP
	Report: “A catalogue of circular economy ideas for local governments”	ACE Africa with ICLEI Africa, Stellenbosch University, Embassy of Finland
	Launch of African Circular Economy Facility	ACEF with AfDB, Finland, Nordic Development Fund

	Virtual consultation of stakeholders for Guidelines	ACEN, ACEN Foundation, ACEA, Ellen MacArthur Foundation, Footprint Africa, ICLEI Africa, Southern African Development Community, UNECA, World Bank, ARSO, Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Mauritius, Nigeria, Rwanda, South Africa, Uganda
	Regional validation workshop for Guidelines, Accra, Ghana	Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Mauritius, Rwanda, South Africa, Tanzania, Uganda, UK, Zambia, Dalberg, EU, UNECA, UNEP, African Guarantee Fund, ARSO, UNEP
	Report: "Sector Report Circular Economy Senegal"	Dutch Enterprise Agency with Trinomics GIGA, ACEN
	Continental Working group validation workshop for Guidelines, Kasane, Botswana	Cote d'Ivoire, Ghana, Mauritius, Nigeria, South Africa, Tanzania, Uganda, African Organisation for Standardisation, AU, International Union for Conservation of Nature (IUCN), UNDP, UNECA, UNEP, Dalberg
	The World Circular Economy Forum, Kigali, Rwanda	ACEA, ACEN, Sitra + 16 partner
2023	Report: "Guidelines for accelerating the Circular Economy transition in Africa"	UNEP with AU, UNECA, Switch Africa Green, Funded by European Union
	Report: "Zambia Circular Economy Study"	ACEN, Funded by AGS, Finland
	Report: "The African Circular Economy Facility. The enabler of the circular transition in Africa"	AfDB, ACEF, Finland, Nordic Development Fund
	CEAP Ghana [not (yet) public]	Ghana, ACEN
	The "Eksina" plan, Circular Economy, Senegal [not yet public]	Senegal
	World Circular Economy Forum, Helsinki	
	Launch Platform for CE and Extended Producer Responsibility, Botswana	Government of Botswana with Africa Rise, International Telecommunication Union, Funded by EU
	Two workshops on continental CE Action plan: Mombasa and Addis Ababa	AU, EU, African country representatives

	Launch of continental CE Action Plan for the African Union [not (yet) public]	AU, EU
2024 and ongoing	Launch of CE roadmap for Uganda	Uganda, ACEA, ACEF, AfDB
	World Circular Economy Forum 2024, Brussel	
	NCER multi-country project 2023-24: Chad, Ethiopia, Cameroon, Benin, Uganda	AfDB, ACEF, ACEA
	CE Action Plan for Nigeria	ACEN, EU
	CE Roadmap for Angola	Circular Innovation Lab
	Report: “Study on Circular Economy in Tunisia”	ACEN, UNDP, Trinomics, ASF Consulting, ACEN Foundation

### 3. List of all Actors, Process Documents and Outcomes

Number	Label	Type	Group	betweenness
1	African Circular Economy Alliance (ACEA)	actor	African networks and MSP	0.049701613
2	African Circular Economy Network (ACEN)	actor	African networks and MSP	0.047092553
3	Virtual consultation of stakeholders for UNEP Guidelines	process	process	0.036352337
4	Circular economy in the Africa-EU cooperation	outcome	report	0.030004373
5	African Development Bank	actor	African government actors [continental/regional]	0.02860448
6	Regional validation workshop for UNEP Guidelines, Accra, Ghana	process	process	0.023339147
7	Dalberg	actor	consultancy	0.016672218
8	Circular Economy on the African Continent	outcome	report	0.016518625
9	ICLEI Africa	actor	African networks and MSP	0.015527672
10	Continental Working group validation workshop for UNEP Guidelines, Kasane, Botswana	process	process	0.012647007
11	Uganda	actor	African government actors [national]	0.011867478
12	European Union (EU)	actor	European government actors	0.01116999
13	The Circular Economy: Our Journey in Africa So Far	outcome	report	0.010425299
14	Guidelines for Accelerating the Circular Economy Transition in Africa	outcome	report	0.010172951
15	Rwanda	actor	African government actors [national]	0.009625308
16	Trinomics B.V.	actor	consultancy	0.007863483

17	Africa Circular Economy Facility (ACEF)	actor	African government actors [continental/regional]	0.007055841
18	Sitra, Finland	actor	European government actors	0.006861959
19	United Nations Development Programme (UNDP) Africa	actor	UN actor / IOs	0.00673962
20	African Circular Economy Network (ACEN) Foundation	actor	European NGOs / MSPs	0.006604937
21	Zambia Circular Economy Study	outcome	report	0.006526941
22	Dutch Enterprise Agency, Netherlands	actor	European government actors	0.005776546
23	Ellen MacArthur Foundation (EMF)	actor	European NGOs / MSPs	0.004926449
24	Rise Africa	actor	Development program/project	0.00461071
25	United Nations Environment Programme (UNEP) Africa	actor	UN actor / IOs	0.004060286
26	African Union (AU)	actor	African government actors [continental/regional]	0.004013751
27	Circular Economy Innovation Partnership	actor	African networks and MSP	0.003744864
28	Footprints Africa	actor	European NGOs / MSPs	0.003609601
29	Chatham House	actor	European NGOs / MSPs	0.003519721
30	Five Big Bets for the Circular Economy in Africa	outcome	report	0.003495044
31	United Nations Economic Commission for Africa (UNECA)	actor	UN actor / IOs	0.003380121
32	A Catalogue of Circular Economy Ideas for Local Governments	outcome	report	0.003217642
33	Ghana	actor	African government actors [national]	0.003176842
34	Botswana	actor	African government actors [national]	0.002976783
35	International Telecommunication Union (ITU)	actor	UN actor / IOs	0.002976783
36	Holland Circular Hotspot	actor	European NGOs / MSPs	0.002959315
37	Circular economy in Africa: examples and opportunities	outcome	report	0.002888536
38	Nordic Development Fund	actor	European government actors	0.00267584
39	Stellenbosch University	actor	African research/educational institution	0.002671486
40	Accelerating Circular Economy (ACE) Africa	actor	African networks and MSP	0.002671486
41	GIGA Initiative	actor	other GN actors	0.002661496
42	Konrad Adenauer Stiftung	actor	European NGOs / MSPs	0.002607352
43	University of Lagos	actor	African research/educational institution	0.002606738
44	Zambia	actor	African government actors [national]	0.00256022
45	Sector Report Circular Economy Senegal	outcome	report	0.002502896
46	South Africa	actor	African government actors [national]	0.002449442

47	Platform for Accelerating the Circular Economy	actor	European NGOs / MSPs	0.002335683
48	Botswana Launches Platform for Circular Economy and Extended Producer Responsibility	process	process	0.002311165
49	Report: Influential mission on Circular Economy in Africa "Developing actions towards Transitions"	outcome	report	0.002111985
50	African Organisation for Standardisation (ARSO)	actor	African government actors [continental/regional]	0.002097548
51	Mauritius	actor	African government actors [national]	0.002097548
52	Côte d'Ivoire	actor	African government actors [national]	0.002097548
53	GRID Arendal	actor	European NGOs / MSPs	0.002074542
54	The Africa Circular Economy Facility. The enabler of the circular transition in Africa	outcome	report	0.002029448
55	Circle Economy	actor	European NGOs / MSPs	0.001793055
56	Increasing Circularity in Africa's Mining Sector	outcome	report	0.001779323
57	Nigeria	actor	African government actors [national]	0.001718589
58	Denmark	actor	European government actors	0.001680275
59	Increasing Circularity in Africa's Plastics Sector	outcome	report	0.001502054
60	Workshop on Urban Circular Economy for Africa by Africa	process	process	0.001475699
61	Tanzania	actor	African government actors [national]	0.00145708
62	AGS	actor	Development program/project	0.001396735
63	AGOVA	actor	consultancy	0.001396735
64	Tandem Circular Economy Consultancy	actor	consultancy	0.001396735
65	Switch Africa Green	actor	Development program/project	0.001168454
66	With African Development Bank support, Uganda takes first step to embedding circular economy model into national strategy	process	process	0.001138742
67	Burkina Faso	actor	African government actors [national]	0.001134281
68	Ethiopia	actor	African government actors [national]	0.001134281
69	Kenya	actor	African government actors [national]	0.001134281
70	Royal Society of Arts (RSA)	actor	European NGOs / MSPs	0.001040826
71	Big Circle	actor	other GS actor	0.001040826
72	Shifting Paradigms	actor	consultancy	0.001040826
73	Circular Economy Institute	actor	other GN actors	0.001040826

74	Circular Economy initiatives African Development Bank	outcome	report	0.000985539
75	Rwanda National Circular Economy Action Plan and Roadmap	outcome	report	0.000865863
76	African Leadership University	actor	African research/educational institution	0.000814761
77	NORAD Norway	actor	European government actors	0.000814761
78	European Environmental Bureau	actor	European NGOs / MSPs	0.000814761
79	Africa Comicate	actor	African networks and MSP	0.000814761
80	Revolve Circular	actor	European NGOs / MSPs	0.000814761
81	International Union for Conservation of Nature	actor	UN actor / IOs	0.000789336
82	United Kingdom	actor	European government actors	0.000597504
83	African Guarantee Fund	actor	European government actors	0.000597504
84	Circular economy: Africa's perspectives	outcome	report	0.000516765
85	TOMA now	actor	consultancy	0.000493973
86	International Resource Panel	actor	UN actor / IOs	0.000493973
87	Cambridge Econometrics	actor	consultancy	0.000493973
88	Organisation for Economic Co-operation and Development (OECD)	actor	UN actor / IOs	0.000493973
89	Institute for European Environmental Policy	actor	European NGOs / MSPs	0.000493973
90	Adelphi	actor	consultancy	0.000493973
91	United Nations Industrial Development Organization (UNIDO)	actor	UN actor / IOs	0.000493973
92	Southern African Development Community	actor	African government actors [continental/regional]	0.000469729
93	World Bank (WB)	actor	UN actor / IOs	0.000469729
94	Prevent Waste Alliance	actor	Development program/project	0.000335526
95	Circular Economy - How Governments can Strategize CE Developments	outcome	report	0.000157646
96	Global Environment Facility (GEF)	actor	UN actor / IOs	0
97	ASF Consulting	actor	consultancy	0
98	World Economic Forum (WEF)	actor	European NGOs / MSPs	0
99	Angola	actor	African government actors [national]	0
100	Global Green Growth Institute	actor	UN actor / IOs	0
101	Circular Innovation Lab	actor	consultancy	0
102	Expert Working Group for AU Circular Economy Action Plan (CEAP)	actor	African government actors [continental/regional]	0
103	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Germany	actor	European government actors	0
104	African Ministerial Conference in the Environment	actor	African government actors [continental/regional]	0



#### 4. Eligibility Analysis of all Documents

Title	Between-ness	Main Organization	Partner /consulted	Year	Criteria 1 Relevance	Criteria 2 GN & GS
Circular economy in the Africa-EU cooperation <a href="#">[link]</a>	0.030004373	European Commission	Trinomics, Adelphi, Cambridge econometrics, ACEN, TOMA now + EU, AfDB, UNEP, OECD, Dalberg, IEEP, International Resource Panel, EMF, Chatham house, Rwanda, UNIDO, Circle Economy	2021	✓	✓
Circular Economy on the African Continent <a href="#">link</a>	0.016518625	GRID Arendal	ACEN, Footprints Africa, ICLEI, Norad, Rise Africa Revolve Circular, Trinomics Circular Economy Innovation Partnership, Africa Comicade African Leadership University, EEB	2021	✓	✓
The Circular Economy: Our Journey in Africa So Far <a href="#">link</a>	0.010425299	Footprints Africa	ACEN, Circle Economy GRID Arendal, Shifting Paradigms, AfDB, Circular Economy Institute, Big Circle, RSA	2021	✓	✓
Guidelines for Accelerating the Circular Economy Transition in Africa <a href="#">link</a>	0.010172951	UNEP	AU, ECA, SWITCH Africa green, Dalberg, EU	2023	✓	✓
Zambia Circular Economy Study <a href="#">link</a>	0.006526941	Zambia	AGS, Tandem Circular Consulting, AGOVA, Trinomics, ACEN, ACEN Foundation, Finland	2023	✓	✓
Five Big Bets for the Circular Economy in Africa <a href="#">link</a>	0.003495044	ACEA	Dalberg, AfDB, WEF, Denmark	2021	✓	✓
A Catalogue of Circular Economy Ideas for Local Governments <a href="#">link</a>	0.003217642	ACE	ICLEI Africa, Stellenbosch University, Finland	2022	✓	✓

Circular economy in Africa: examples and opportunities <a href="#">link</a>	0.002888536	EMF	Chatham House, ICLEI Africa, University of Lagos	2021	✓	✓
Sector Report Circular Economy Senegal <a href="#">link</a>	0.002502896	Netherlands Enterprise Agency	Trinomics, GIGA Initiatives, ACEN Foundation	2022	✓	✓
Report: Influential mission on Circular Economy in Africa "Developing actions towards Transitions" <a href="#">link</a>	0.002111985	Netherlands Enterprise Agency	Holland Circular Hotspot, ACEN	2021	✓	✓
The Africa Circular Economy Facility. The enabler of the circular transition in Africa <a href="#">link</a>	0.002029448	AfDB	ACEF, Finland, Nordic Development Fund	2023	✓	✓
Increasing Circularity in Africa's Mining Sector <a href="#">link</a>	0.001779323	ACEA	Konrad Adenauer Stiftung, Dalberg	2021	(✓)	✓
Increasing Circularity in Africa's Plastics Sector <a href="#">link</a>	0.001502054	ACEA	Circular Economy Innovation Partnership, Dalberg	2021	(✓)	✓
Circular Economy initiatives African Development Bank <a href="#">link</a>	0.000985539	AfDB	ACEF, ACEA	2023	✓	

## 5. Coding Tree of the Discourse Analysis

Problem construction	Africa	Agriculture Challenges As contributor As diverse African Economy Future
	African CE	Advantages Barriers: Policy & Context Existing CE initiatives Existing CE policies Disadvantages of CE
	Global	Trends Issues

		Intern. Cooperation
Solution	CE- Discourse Type	Definition of CE Holistic Segmented Optimistic Sceptical Reformist Circular Society Transformative Circular Society Technical Circular Economy Fortress Circular Economy
	Enabling environment	Financial Political
	Policy Process	International aspect Collaboration & Consultation M&E, research Context specific
	Policy Tools	Stick: Regulations Carrot: Incentives Preaching: Info-based
Actors	Public Authorities	African Public Authorities: Continental, Regional, National, Local European Authorities Development Agencies/program
	Private Sector	MNCs (M)SMEs Sectors & Sector Associations, Farmer, worker, informal, cooperatives
	Society	Individuals Consumer CSOs
	Other	Finance Platforms Research Institutions EMF
Context	African	Policy Trends
	European	Policy Trends
	Global	Trends History
Invisible & open codes	Inconsistency	Traditional ≠circular Holistic = economy
	Strategic	(no) Comparison with EU Illegal waste flows
	Absurd/ simplified	Sus. Tourism Linear transition Informal sector Population & scarcity
	Invisible/left out	Stakeholder only private sector Gender

## 6. List of Case Study Documents

Title	Author	Organization	Date	Type	Linked organizations
(UPDATE) TRANSFORMING AGBOGBLOSHIE: FROM TOXIC DUMP INTO MODEL RECYCLING CENTER	Sarah Berg	Pure Earth	01.06.2015	Blog	
Agbogbloshie Demolition: The End of An Era or An Injustice?	Muntaka Chasant	Muntaka.com	12.04.23	Blog	
Agbogbloshie: A Year after the violent Demolition	Grace Akese, Uli Beisel, Muntaka Chasant	African Arguments	21.07.2022	Blog	
Agbogbloshie: Dumping no more	Dagna Rams	Discard Studies	03.09.2020	Blog	
Rambo-style urban management	Dagna Rams	Open Democracy	07.08.2015	Blog	
Members of ESPA		ESPA Ghana		List	
Action plan on circular economy transition soon	Maclean Kwofi	Graphic.com.gh	02.11.2022	News	
Agbogbloshie scrap dealers ask for alternative space after demolition exercise	Nii Ayikwei Okine	Citi newsroom	02.07.2021	News	
Environment Ministry launches E-Waste incentive payment system		Ghana Today	2021	News	
Ghana: U.S.\$2.4 Billion Required to Implement Roadmap to Circular Economy	Jonathan Donkor	Ghanaian Times	08.03.2023	News	
in Agbogbloshie with the e-waste convicts		Time news	03.06.2023	News	
MESTI develops roadmap to transition Ghana to a circular economy		Ghana Today	2023	News	
Work on \$30m e-waste recycling facility at Agbogbloshie to begin this year	Doreen Andoh	Graphic.com.gh	12.08.2018	News	
Baseline Study. Assessing the baseline of the e-waste sector in Ghana	GIZ E-Waste Programme, MESTI-PIU,	GIZ	04.2022	Report	MESTI
Business Cases for Selected Recycling Technologies in Support of an Optimal Recycling Chain in Ghana	Manuele Capelli Mathias Schluep	GIZ	11.2019	Report	MESTI, World Resource Forum, VHS, Demontage und Recycling Zentrum, SARWA, GWR, Recycling Zentrum Frankfurt
Downstream Technology Option for E-waste Recycling	Fabian Ottiger Patricia Schröder, Mathias Schluep	GIZ	11.2019	Report	MESTI, World Resource Forum, VHS, Demontage und Recycling Zentrum, SARWA, GWR, Recycling Zentrum Frankfurt

E-Waste Training Manual	Katharina Lenz, Richard Afoblikame, Susanne Yvonne Karcher, Lawrence Kotoe, Elisabeth Smith, Patricia Schröder, Sonia Valdivia	GIZ	2019	Report	MESTI, World Resource Forum, VHS, Demontage und Recycling Zentrum, SARWA, GWR, Recycling Zentrum Frankfurt, RECLITE, EPA Ghana, National Youth Authority, Chance for children
Handbook on the Re-use of End-of-Life Lithium-Ion Batteries from E-Waste (WEEE) within the Ghanaian Context	KHACHATUR TORCHYAN, XAVIER SCHUSTER,	GIZ	11.2022	Report	MESTI
Incentive Based Collection of E-Waste in Ghana	Andreas Manhart, Bennett Akuffo, Kweku Attafuah-Wadee, Sampson Atiemo, Alexander Batteiger, Johanna Jacobs, Nana Osei	GIZ	04.2020	Report	MESTI, Öko-Institute, GreenAd, Mountain Research
Manual Dismantling of Cars on the Old Fadama Scrapyard. A process analysis and recommendations for improvement	Guido Johannes, MESTI-PIU,	GIZ	6.2019	Report	MESTI
Operationalization Model for an Optimal Recycling System in Ghana	Mathias Schluep, Sampson Atiemo	GIZ	10.2019	Report	MESTI, World Resource Forum, Mountain Research Institute, VHS, Demontage und Recycling Zentrum, SARWA, GWR, Recycling Zentrum Frankfurt
Political and Ethnic Conflicts in Agbogbloshie/Old Fadama- Executive Summary	Dagna Rams, David Aladago	GIZ	3.2021	Report	MESTI
Socio-economic assessment and feasibility study on sustainable e-waste management in Ghana	Siddharth Prakash, Andreas Manhart	Öko-Institut	08.2010	Report	EPA, GreenAd, NVMP, Netherlands Ministry of Housing, Spatial Planning and the Environment
Strategies for the Formalization of Scrap Businesses on the Old Fadama Scrap Yard	Andreas Manhart, Markus Spitzbart	GIZ	01.2020	Report	MESTI, Öko-Institute
SUBSTANTIVE ANALYSIS- ACCRA		JUST2CE		Report	
Technical principles and framework conditions for the recycling of e-waste thermoplastics	BERND BUNGERT	GIZ	12.2022	Report	MESTI

Transition to sound recycling of ewaste and car waste in developing countries - Lessons learned from implementing the Best-of-two-Worlds concept in Ghana and Egypt	Dr. Matthias Buchert, Andreas Manhart, Dr. Georg Mehlhart, Stefanie Degreif, Daniel Bleher, Tobias Schleicher	Öko-Institut	23.03.2016	Report	German Federal Ministry of Education and Research, Umicore, Johnson Controls Power Solutions, Vacuumschmelze GmbH & Co.KG, CEDARE, City Waste Recycling
Agbogbloshie Onion Sellers give 7 weeks ultimatum to relocated to Adjen Kotoku		AMA	21.05.2021	Statement	
Anstoss auf dem Schrottplatz	Philipp Hedemann	GIZ		Statement	
Chinese Recycling Giant Explores Partnership with Ghana For Circular Economy Advancement		MESTI	16.01.2024	Statement	
Construction of E-Waste Handover Centre		MESTI	18.03.2021	Statement	
Construction of Fence wall at the Agbogbloshie reclaimed Land		Greater Accra Region	03.07.2023	Statement	
Decongestion Exercise in Agbogbloshie ends		Greater Accra Region	14.07.2021	Statement	
Dr. Kwaku Afriyie Authorizes ITMO for Waste Recycling: COP28 Milestone		MESTI	03.12.2023	Statement	
Germany supports Government of Ghana with 25 Million Euros to tackle environmental impact of E-waste.		German Embassy Accra	12.03.2017	Statement	
REHABILITATION OF OLD FADAMA ROAD		Greater Accra Region	13.10.2023	Statement	
Residents of Old Fadama demolish structures along Korle Lagoon to plant trees, commend AMA boss for support		AMA	12.08.2021	Statement	
Scrap recycling done right		KFW	08.03.2017	Statement	
TEBEL GHANA LIMITED, A WASTE MANAGEMENT COMPANY, HAS FUMIGATED THE AGBOGBLOSHIE MARKET TO RID THE PLACE OF PESTS AND RODENTS.		Greater Accra Region	01.09.2021	Statement	
UNIDO, Canada and Ghana launch Ghana Circular Economy Centre to support the country's transition to a circular economy		UNIDO	07.06.2022	Statement	Canada, MESTI
Transcript 1			04.2024	Transcript	
Transcript 2			04.2024	Transcript	
Transcript 3			04.2024	Transcript	
Transcript 4			05.2024	Transcript	
Transcript 5			05.2024	Transcript	
Transcript 6			05.2024	Transcript	
Transcript 7			05.2024	Transcript	
Transcript 8			05.2024	Transcript	
Transcript 9			05.2024	Transcript	
ENHANCING CONFLICT RESOLUTION AND PEACE BUILDING IN THE GREATER ACCRA SCRAP DEALERS ASSOCIATION		Mountain Research Institute		Website	GIZ

Environmentally and socially responsible handling of e-waste		GIZ	04.2023	Website	
Establishing waste management and the circular economy – conserving resources		GIZ	07.2021	Website	
Recycling of waste electrical and electronic equipment in Ghana		Fraunhofer Umsicht	2024	Website	German Federal Ministry for the Environment

## 7. Coding Tree of Case Study

Development Project	Goals	Waste Management	Successful implication
		Environmental	Resource efficient Climate/environmental friendly, win-win-win
		Continuity	
	Actors	German	GIZ, KfW, NRW, BMZ, Umwelt Ministerium
		Ghanaian	MESTI, EPA
		Implementing	Project Implementation Unit (PIU) Öko Institute, Fraunhofer UMSICHT, Blackforest Solutions GmBH, German RETech Partnership e.V Mountain Research Institute (MRI), GreenAd
		Stakeholder	GASDA, GBESDA, Formal recycling association (EWROTA), international companies Other Ghanaian Ministries, Accra Metropolitan Assembly
		Other donors	Swiss; EU, UNIDO, Canada; WB
	Structure	KfW & HOC	Collection, Incentives, Focusing on dangerous material flows; re-channel into formal Currently, Tenders Price distortion, testing, problem
		GIZ	Advice Capacity dev Coordination Dialogue, stakeholder consultation, co-production Health care Peace building Research, feasibility Community engagement
		EAG2	
		Solutions	Reports
		Technical advice	Waste to Energy Sorting, mechanical recycling only
		General characteristics	CE and waste management needed. Develop formal sector, jobs Formalisation Safety More technology
	Process	Changes after 2021	PPPs, focus on formal, Learning process Vacant clinic
		Conflict / changes of interest	Initial focus on informal sector (under Müller); too much Later in-line with MESTI “Ghana must decide” BMZ not happy Ghana as global leader
	Attitude towards Dev. Project(s)	General	Do no harm, Unintended consequences, Can't do it themselves
		General problematic	Training = useless Institutional limits Power imbalance, Akufo-Addo: Ghana Beyond Aid Failure as norm Linearity of Dev. Projects, Previously Top-Down
		Towards specific project (ok)	Humility More good than bad Learning process
		Towards specific project (problematic)	Unacknowledged knowledge Meeting fatigue

Eviction / Demolition	Process	Reasoning	Make Accra work Again; Floods
		Information flows	MESTI not aware GIZ not informed before
		Other	Violence, Self-evictions Old Fadama
	Opinion		For the best Bad means, good ends No media attention Power as politics
	Consequences	Living situation	Worsen situation; Land rights Looking for a place; relocated to Old Fadama; Scatter
		Beyond	Fear (of Government) knowledge = power Fear of research
On project		Destruction of “dev.” Efforts	
E-waste sector	Characteristics	Waste characteristics	Low volumes; increasing
		Technical	Inefficiency; not good ; technical issue Lack of infrastructure Lack of knowledge; lack of tools Difficulty to gain data Demand; limited local demand Flexible Mining B2B recycling
		Socio-economic	Unintegrated informal sector, dimension Rural urban migration, remittances Economic situation of actors (poor vs. not that poor); exploitation; high prices; low income; low margin Experience; knowledge of informal workers History
		Societal stigma	Thieves Fear of stigmatization Drug addiction Societal status
		Politic and organization	Political dimension of Associations; NPP and NDC Informal organization Conflict Scrap Worker Association No Associations Power relations
		Dangers	environmental impact, health impacts, partial PPE
		Informal formal relations	Complexity
	Informal = problematics		Informal as partially criminal Cherry Picking = informal sector; unfair; illegal Permitting; Governmental oversight Formal sector as underdeveloped
	Formal = problematic		Cherry Picking = formal sector
	Value chain		Big MNCs Importers Collection Separation, mainly sorting; mainly manual; low VA cables Middle men; weighting Secondary Materials Market; international Upcycle/Manufacture with secondary materials in Ghana Money laundering (?)
	Narrative	Dumping narrative	
Anti-dumping		Inflows	Donation (Diasporic) second-hand trade; profit-driven = waste avoidance; measuring inflows measure Ghanaian Waste; increasing; population and wealth growth German Borla
		Actors	Making a living
		Outflows	Invisibility of outflows
Consequences			Responsibility on Government, not Industry Injustice in access, Invisibilities of GS actors Racial divide, Border policies, criminalization
Legal Context	Current	Ghanaian Law	Domestic finance, eco levy ACT 917 ITMO
		Deficit	Policy deficit



			Enforcement
		International	EU battery directive EU standards
	Process		Categorizing recycling chain Define roles
	History	Ghanaian policies	Privatization Ban export
Other	CE		Causing history to die out Environmental pollution everywhere

## 8. Blank Consent Form

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### Interview consent form

**Project name:** Circular Economy in the context of "development", case study e-waste management in Accra

You are invited to participate in a research study being conducted by Sara Zimmermann, a master's student of the Global Development Policy program under the supervision of Dr. Mario Pansera and doc. Mgr. Miroslav Syrovátka, Ph.D. You will be asked to complete an interview, which should take approximately 30 minutes. Your participation is voluntary, and you can withdraw from the research at any time.

**Research goal:** This research aims to explore the Circular Economy discourse in the "development" apparatus between African and European actors and what consequences this discourse has. To explore how the discourse is translated into concrete development projects, a case study explores the German development projects "Environmentally and socially responsible handling of e-waste" from 2016-2026 and connected activities. The findings of this research may be published in my master's thesis or any connected publication.

**Confidentiality:** I will do everything I can to protect your privacy as well as possible. The transcript will be anonymized and only accessible to the thesis supervisors, mentioned above. No confidential information or personal data from or about you will be released so that someone will be able to identify you. In the research you are referred to by a made-up name (pseudonym) unless you have given permission to use your name for quotes.

**Data Storage:** Anonymous data or pseudonyms will be used in the thesis and any related documentation. The audio recordings, forms and/or other documents that are created or collected in the context of this thesis will be stored securely. The research data is stored for a period of five years. Data will be deleted or made anonymous so that they can no longer be traced to a person at the end of this period, at the latest.

If you would like more information about this project or if you have any issues related to the project, please contact:

Sara Zimmermann, email: [sara.zimmermann97@gmx.de](mailto:sara.zimmermann97@gmx.de)

Or any of the two supervisors:

Dr. Mario Pansera, email: [mario.pansera@uviqo.gal](mailto:mario.pansera@uviqo.gal)

doc. Mgr. Miroslav Syrovátka, Ph.D., email: [miroslav.syrovatka@upol.cz](mailto:miroslav.syrovatka@upol.cz)

**Consent**

I, ....., consent to participate in the above research project. I understand that my involvement is voluntary, and my responses will be confidential.

Ticking the 'Yes' box below indicates that, having read the information provided, you give your consent.

- Yes
- No

Ticking the 'Yes' box below indicates that, I give permission to make audio recordings during the interview and to process my answers in an anonymous transcript.

- Yes
- No

Participant signature: \_\_\_\_\_

Date: \_\_\_\_\_

Researcher signature:  \_\_\_\_\_

Date: 24.04.24 \_\_\_\_\_