

Circular Implementation Of Sustainable Development Goals (SDGS)

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ABSTRACT

The failure of the linear economic paradigm in maintaining material value demonstrates the limitations of waste management approaches and sustainability accountability practices that are still predominantly oriented towards formal reporting. This study aims to understand how the circular economy is interpreted and lived as a form of sustainability accountability by actors at the community level and how this interpretation relates to the achievement of the Sustainable Development Goals (SDGs). The study used a qualitative approach with Alfred Schutz's Social Phenomenology at the Lamber Waste Bank in Makassar City. Data were obtained through in-depth interviews, participant observation, and documentation, then analyzed through units of meaning, noema-noesis, stock of knowledge, because motive, and in-order-to motive. The findings show that the circular economy is interpreted not merely as a waste management technique, but as a process of transformation of consciousness that changes the position of waste from residue to a source of economic, social, and ecological value. At the practical level, sustainability accountability is lived through honest weighing, transparency in savings book records, consistency of service, and relationships of trust between actors. This interpretation shows that the achievement of SDGs at the local level takes place through the internalization of sustainability values into daily actions, especially those related to SDGs 8, 11, 12, and 13. This research contributes by proposing the concept of lived sustainability accountability as a form of accountability rooted in ethical awareness, intersubjective experiences, and everyday social practices, not merely in reporting formalities.

INTRODUCTION

The contemporary global environmental crisis is a direct consequence of the dominance of the linear economic paradigm (take-make-dispose) which exploits natural resources in an extractive manner and treats them unfairly. material post-consumption as residue not worth

(Dasgupta, 2021) . In Indonesia, this crisis is clearly reflected in data from the Ministry of Environment and Forestry's National Waste Management Information System (SIPSN) (2025), which recorded waste generation reaching 34.21 million tons per year, with 40.26% of it not being adequately managed. At the local level, Makassar City is facing a waste emergency at the Antang Landfill, which receives 800–1,300 tons of waste per day, reaching overcapacity (Hardiyanti, 2026). This phenomenon confirms that the waste problem is not simply a physical limitation of infrastructure, but rather a result of ecological blindness (Andreas Lako, 2021). and the crisis of accountability in the modern economic system.

In the accounting discipline, conventional accounting fails to represent ecological impacts because it only focuses on short-term monetary measures for the benefit of shareholders (Krasodomska & Zarzycka, 2024). Awareness of this limitation drives the urgency of sustainability accountability . However, the writing And practice sustainability accountability as far as This Still shackled by orientation reporting Formal corporate reporting (corporate sustainability reporting , ESG disclosure) is vulnerable to being trapped in mere administrative compliance (Descalzo et al., 2026) . There is a fundamental research gap where the meaning of sustainability accountability that grows from the lived experience of communities at the grassroots level has not been widely revealed.

The circular economy emerged as a regenerative paradigm that maintains material value (value retention) throughout its life cycle (Stahel, 2019) The presence of community-based waste banks has become an important social arena where the restoration of material value and the reconstruction of accountability take place. Therefore, this study aims to uncover the concrete manifestation and meaningful structure of sustainability accountability in circular economy practices at the Lamber Waste Bank in Makassar City and how these practices realize the achievement of the Sustainable Development Goals (SDGs). (SDGs). (Puntillo et al., 2025).

On the other hand, the circular economy literature places more emphasis on the creation and preservation of material value as the core of the shift from a linear to a circular system (Geissdoerfer et al., 2017). This perspective explains the importance of waste reduction, reuse, material recovery, and value creation throughout the material life cycle. However, explaining how community actors interpret these practices as socially and ethically responsible actions still requires further exploration at the lived experience level.

Thus, there are two areas that have not been fully addressed in the literature. First, sustainability accountability studies tend to place accountability within the realm of reporting and formal mechanisms, while the lived experience and subjective awareness of actors have not been central to the analysis. Second, circular economy studies have emphasized material transformation and value creation, but have not adequately explained how the transformation of meaning and awareness among actors forms the basis for ongoing circular practices. This area is the focus of this research. (Dillard & Vinnari, 2019).

Therefore, this research does not view the circular economy merely as a technical mechanism for material management, but rather as a social phenomenon that enables the formation of lived sustainability accountability practices . Through Alfred Schutz's Social Phenomenology, this research seeks to explore how experience, stock of knowledge, because motive, and in-order-to motive shape actors' interpretations of waste, recording, trust, and sustainability responsibilities (Ebrahim, 2003) . With this position, the research's contribution lies not in simply adding examples of waste bank practices, but in reconstructing the relationship between subjective awareness, intersubjectivity, accountability practices, and circular economy actions at the community level.

Based on these arguments, this study aims to understand the structure of meaning and form of lived sustainability accountability in circular economy practices at the Lamber Waste Bank in Makassar City and interpret its relevance to the achievement of SDGs 8, SDG 11, SDG 12, and SDG 13 (Ministry of National Development Planning/National Development Planning Agency (Bappenas), 2023; Krasodomska & Zarzycka, 2024; Puntillo et al., 2025).

RESEARCH METHODS

Data analysis was conducted in stages, placing the informant's experience as the basis for forming a structure of meaning. The first stage was carried out by identifying meaning units , namely parts of the narrative that directly represent the informant's experience regarding waste, weighing, recording, services, beliefs, and sustainable actions. The second stage was carried out by interpreting the relationship between noema as an object or experience present in consciousness and noesis as a process of consciousness that gives meaning to that experience. The third stage explored the stock of knowledge , namely the knowledge and experience that actors have and become the background for forming meaning regarding circular economy practices. The fourth stage identified because motives as the background experience that drives action and in-order-to motives as the orientation of the goals to be achieved through that action (Muzzetto, 2006).

To maintain traceability of interpretation, the analysis process is conducted through an analytical chain: informant quote → meaning unit → noema → noesis → stock of knowledge → because motive/in-order-to-motive → meaning structure. With this procedure, interpretations are not placed as stand-alone researcher opinions, but are traced back to the empirical experiences of informants. The final synthesis is carried out by comparing patterns of meaning between informants to find intersubjective structures that explain the formation of lived sustainability accountability. (Dreher, 2012)

Data validity is maintained through credibility, transferability, dependability, and confirmability. Credibility is strengthened through researcher involvement in the research context and member checking; transferability through the presentation of adequate contextual

descriptions; dependability through documentation of the research process; and confirmability through triangulation of interviews, observations, and documentation. (Nindito, 2013)

RESULTS AND DISCUSSION

1.1 Transformation Awareness: From Rubbish As Residue Becomes Source Mark

The results of the phenomenological analysis show that the implementation of a circular economy begins with the deconstruction of the meaning of waste. In the linear paradigm, waste is interpreted as an unused residue. However, through the Lamber Waste Bank, the community experiences a reconstruction of meaning, where waste is understood as a resource with ecological, social, and economic value.

"...Previously, people saw waste as something that had to be thrown away because it was considered to have no value. After they understood the concept of a waste bank, that perspective began to change. Waste is no longer positioned as the end of the consumption process, but as the beginning of a new cycle of value..." (Saharuddin Ridwan, ASOBSI).

Changes in people's behavior towards waste after the introduction of waste banks are in line with the first premise of the Symbolic Interactionism Theory formulated by (Blumer, 1969) namely that "people act towards things based on the meaning that the objects have for them ." When the meaning of waste is socially transformed from "discarded goods" to "materials of economic value," the pattern of people's actions also changes from throwing away to sorting and saving.

The informant's statement also shows that the object of consciousness no longer stops at "waste as discarded goods," but has transformed into "material that still has potential value." Within the noema framework, waste presents itself as an object that is physically the same, but acquires a different position of meaning. This change demonstrates that the transformation of the circular economy does not begin with material changes alone, but rather with changes in how the object is presented and recognized in consciousness.

On the noesis side, these changes demonstrate a process of awareness that connects sorting activities with potential economic, social, and ecological benefits. Waste, previously perceived as something to be disposed of immediately, is now understood as a resource that can be stored, weighed, recorded, and converted into value. Thus, sorting is no longer simply a household hygiene measure but one oriented toward sustainability. This understanding does not emerge in a vacuum. The community's stock of knowledge about waste was initially shaped by experiences within a linear consumption system, namely using goods and then discarding them. The presence of waste banks introduces new experiences that expand this knowledge through the practices of weighing, recording, storing, and exchanging value. Thus, these new experiences gradually reconstruct the knowledge that the community uses to understand waste.

"because motive" perspective, the act of sorting is related to previous experiences when waste was deemed worthless and should be discarded. Meanwhile, the "in-order-to" motive develops when the act of sorting begins to be directed toward the goal of gaining economic benefits while creating a better residential environment. This means that a circular economy emerges through the relationship between past experiences, current meanings, and future action orientations.

This interpretation demonstrates that circular economic transformation at the community level is a transformation of consciousness before material transformation. This finding broadens the understanding of the circular economy, which has traditionally emphasized value retention, by demonstrating that maintaining material value requires prior changes in how people interpret those materials. In this context, awareness becomes a social prerequisite for the continuation of circular practices.

1.2 Savings Books as Materialization of Relational Trust and Accountability

The second finding shows that accountability at Lamber Waste Bank does not primarily come through formal financial reports, but rather through simple record-keeping practices that can be directly viewed and verified by customers. Agus Salim explained:

"A savings book isn't just a record of transactions, but rather proof that every piece of trash deposited has a value that's been transparently calculated and recorded. This transparency is what builds public trust."

The informant's statement confirms the view (H. Roberts et al., 2017) that accountability is essentially a social practice based on transparency. At the Lamber Waste Bank, accountability is not realized through complex financial reports, but through simple records that can be directly accessed and verified by citizens. Savings balance figures transform accounting from merely a language of business to a language of trust. Furthermore, innovations such as the *garbage exchange program* demonstrate the creation of shared value that integrates aspects of people, planet, and profit (Elkington, 1997). At this point, the savings book becomes phenomenologically important because it brings together three elements: a material object in the form of numbers, an actor's awareness of honesty, and an intersubjective relationship in the form of trust. The integration of these three forms one of the foundations for the formation of lived sustainability accountability.

Noematically, a savings book is a material object that records the amount and value of waste deposits. However, noetically, this object acquires a broader meaning as evidence that transactions between managers and customers are conducted transparently. Thus, the numbers in a savings book not only represent economic value but also serve as a medium for building trust. This meaning demonstrates a shift in accounting function from merely representing transactions to a relational mechanism. When customers can directly see the results of weighing and recording, the numbers gain legitimacy through intersubjective experience.

Accountability thus occurs not only because of administrative obligations, but also because of social relationships that demand honesty and openness.

1.3 Lived Sustainability Accountability: Reconstructing the Meaning of Accountability at the Community Level

Based on a phenomenological synthesis of informants' experiences, this study proposes the concept of lived sustainability accountability to explain a form of accountability that extends beyond the obligation to produce sustainability information, but rather manifests as awareness and practice in everyday life. This concept builds on the finding that honesty in weighing, transparency in recording, consistency in service delivery, and environmental responsibility do not exist as separate procedures but are instead maintained through intersubjective experiences and trust between actors. (Rauteda, 2026)

Thus, the main difference between reported sustainability accountability and lived sustainability accountability lies not solely in the form of the instrument used, but in the source and method of accountability. Reported accountability primarily gains legitimacy through documents, indicators, standards, and verification mechanisms, while lived sustainability accountability gains legitimacy through direct experience, relationships of trust, ethical awareness, and consistency of action. This difference does not imply that formal reporting is unimportant, but rather that the quality of accountability cannot be fully explained by what is reported. (Larrinaga & Bebbington, 2021)

The findings of this study indicate that sustainability accountability has a micro-social dimension that forms before sustainability practices are converted into formal information. At the Lamber Waste Bank, awareness of the value of waste drives sorting; this action generates transactions that require recording; transparent recording builds trust; and trust sustains participation in circular practices. This sequence demonstrates that lived sustainability accountability is formed through a dynamic relationship between awareness, action, transparency, and intersubjectivity. (Hidayah et al., 2025)

Therefore, this research's contribution is not simply the introduction of a new term, but rather a perspective that demonstrates that sustainability accountability can be understood as a phenomenon with both subjective and intersubjective dimensions. Accountability is not simply something "reported" to others, but rather something that is first "lived" through actions deemed correct, transparent, and responsible by the community.

Table 1. Comparison Paradigmatic: Reported Accountability vs Live Sustainability Accountability

Dimension s	Reported Sustainability Accountability (Conventional/Corporate)	Live Sustainability Accountability (Reconstruction Results Thesis)
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Orientation Center	Compilation document formal (Sustainability Report, ESG Rating).	Practice social And action real daily life in community level .
The Main Mechanism	Audit external, standard indicator (GRI, ISSB), bureaucratic compliance.	Honesty weighing, bookkeeping transparent, trusting relationship.
Actor Driver	Management peak, auditor, sustainability executive .	Manager bank rubbish, citizens/customers, local communities, academics.
Nature of Relationship	Vertical-asymmetric (Accountability to capital owners/regulators).	Horizontal-intersubjective (Collective responsibility of fellow citizens & nature).
Results Main (Value)	Legitimacy market capital And confession business reputation .	Integration 4 Dimensions Mark: Economy, Social, Ecological, and Moral/Spiritual.

1.4 Economy Circular as Form Realization SDGs in Level Local

This research demonstrates that the community-based circular economy movement at Lamber Waste Bank represents a concrete localization of the 2030 SDGs Agenda. This connection is realized without the need for the community to normatively cite SDG technical terms, but rather through the internalization of sustainability values :

1. SDG 8 (Decent Work and Economic Growth): Waste banks create inclusive economic incentives by converting waste savings into micro-business capital and fulfilling basic necessities (basic necessities).
2. SDG 11 (City And Community Sustainable): Decline volume rubbish in a way drastic from household level reduces the city's logistical burden and prevents dependence on landfills Antang.
3. SDG 12 (Responsible Consumption and Production): Communities internalize value retention behaviors (sorting, reusing, and recycling) that break linear consumption patterns.
4. SDG 13 (Addressing Climate Change): Reducing the generation of inorganic and organic waste directly reduces greenhouse gas emissions (methane and carbon) from waste accumulation in landfills.

However, this community-based circularity ecosystem is not free from structural obstacles that test its resilience in the field. The operational experience of BSU Lamber and the ASOBSI network shows that highly dynamic fluctuations in the selling price of recycled

materials in the stall/industrial market, delays in the disbursement of collection funds, and limited capacity of logistics pickup fleets often trigger waste accumulation at the site unit and risk a sudden decrease in community participation. These obstacles emphasize that achieving the SDGs at the local level is not a sterile process or running smoothly without obstacles, but rather a socio-economic contestation that continuously demands governance resilience. The sustainability of this circular ecosystem is supported by the integration of five main institutional pillars (Ostrom, 2015) : namely: policy, institutions, financing, community empowerment, and appropriate technology.

CONCLUSION AND SUGGESTIONS

This research shows that the circular economy at the Lamber Waste Bank in Makassar City is interpreted by actors not simply as a technical mechanism for waste management, but as a process of transforming consciousness that changes the human relationship with post-consumer materials. Waste, previously positioned as residue, acquires a new meaning as a source of economic, social, and ecological value. This change in meaning forms the basis for the emergence of actions to sort, store, weigh, record, and convert waste into new forms of value.

Phenomenological findings also indicate that sustainability accountability at the community level exists as a lived practice through honest weighing, transparent savings bookkeeping, consistent service delivery, and trust between actors. Thus, accountability operates not only through formal reporting mechanisms but also through subjective awareness and intersubjective relationships that sustain sustainability practices in everyday life.

The main contribution of this research lies in reconstructing the concept of lived sustainability accountability , namely a form of sustainability accountability that gains meaning through lived experience, ethical awareness, concrete actions, and relationships of trust within the community. This concept broadens the understanding of sustainability accountability by showing that accountability needs to be seen not only from what organizations report, but also from how sustainability responsibilities are experienced and realized by actors in everyday practice.

These practices are relevant to the localization of the SDGs, particularly SDGs 8, 11, 12, and 13, as sustainability values are translated into community economic, social, and ecological activities. However, this study was not intended to measure the quantitative achievement of each SDG indicator. The findings are more appropriately understood as explaining how SDG values take concrete form through circular economy practices at the community level.

This research is limited to a single research site and the perspectives of informants representing institutional, practitioner, and academic reflections. Future research could broaden the context through cross-community studies and involve customers and

communities as actors who directly experience circular practices. Integrating a phenomenological approach with ecological impact measurements, such as life cycle assessments, could also be conducted to more comprehensively reconcile the dimensions of social meaning with material and ecological measurements.

Theoretical and Practical Implications: Theoretically, this study expands the boundaries of sustainability accounting by incorporating Schutz's social phenomenology approach to explain the micro-social dimensions of accountability. Practically, it is recommended that local governments (Environmental Services) shift their policy orientation from simply increasing the budget for landfill fleets to strengthening the community-based waste bank ecosystem.

Limitations and Directions for Further Research: This research is limited to a qualitative-phenomenological context in one urban location (Makassar). Future research is recommended to expand the scope of the study to include cross-cultural comparisons (e.g., rural or coastal communities) and integrate circularity accounting measurements based on ecological impact quantification (life cycle assessment /LCA) combined with social meaning.

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