

Circular Solutions Driving Decent Work and Economic Advancement: Observations from SDG 8

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Abstract

This study aims to explore circular solutions for economic growth and decent work, drawing insights from SDG 8. Adopting a circular economy approach can advance sustainability by unlinking economic expansion from resource exhaustion and environmental harm. The principles of circularity contribute positively to SDG 8 by generating fresh employment prospects, stimulating inventive solutions, and realizing broad-based economic progress. Collaboration among stakeholders - government, private sector, civil society, and the public - is vital for successful implementation. Through collective efforts, Indonesia can move towards a more sustainable and inclusive economy, prioritizing decent work opportunities and environmental responsibility.

Keyword: Circular economy, SDG 8, Economic Growth, Decent Work

1. INTRODUCTION

Sustained economic growth and decent work are key elements in achieving global development goals. In the Context of the Sustainable Development Goals (SDG), goal number 8 has been set to promote inclusive economic growth and decent work for all (Frey, 2017). Almost all countries are trying to achieve this goal, of course, with the encouragement of innovation, regulations and other equipment needed to achieve this goal. In recent years, the circular economy has emerged as an attractive approach to achieving sustainable economic growth and creating decent jobs (Suwignyo et al., 2021). The circular economy promotes the efficient use of natural resources, reduces waste and extends product life cycles through practices such as recycling, recovery and reuse. This is in contrast to the traditional linear economic model which generates high waste and relies on limited natural resources (Velenturf & Purnell, 2021). In the context of Sustainable Development Goals (SDG) Number 8, it is important to explore how circular solutions can contribute to decent job creation and sustainable economic growth (Rai et al., 2019). Through the use of circular practices, such as recovery and recycling, the circular economy can create new job opportunities in sectors such as recycling, repair and reuse. In addition, through innovation and sustainable business development, a circular economy can help create productive jobs and generate inclusive economic growth (Ghisellini et al., 2017).

In this article, we will further explore circular solutions that can make a significant contribution to achieving Sustainable Development Goals (SDG) number 8. We will analyze some of the lessons learned from successful implementation of circular practices and case studies that relevant. In addition, we will also discuss challenges and opportunities in advancing the circular economy agenda in the context of Sustainable Development Goals (SDG) Number 8. It is hoped that this article will provide a deeper understanding of the role of the circular economy in achieving sustainable economic growth and decent work, as well as provide insights for policy makers, practitioners and other stakeholders on steps that can be taken to advance the circular economy agenda. in support of Sustainable Development Goals (SDG) number 8.

Data on the impact of utilizing the circular economy in Indonesia, through the 2022 report of the Ministry of National Development Planning (Bappenas) (Bappenas, 2022), shows that the circular economy carried out in Indonesia through 36 initiators from various actors such as the government, business actors and NGOs shows a positive impact from the circular economy, namely:

Table 1. The Impact of Utilizing the Circular Economy

No	Sector	Impact
1	Operational Cost Savings	> Rp. 431.91 billion
2	Job Creation	+ 14,270 people
3	Emission Reduction	> 1.4 Million Tonnes CO2E
4	Energy Saving	> 4.8 Million MWH
5	Decreased Water consumption	> 252 thousand m3
6	Waste Reduction	> 827 thousand tons

In Table 1 above, the magnitude of the impacts and benefits of implementing a circular economy is known. At several points, it appears that the circular economy can create jobs for more than 14,270 workers, where the processes and stages of the circular economy have an impact on empowering the workforce. Of course, this data is a strong reason for writing this paper so that we can further explore the implementation of the circular economy and its relationship to Sustainable Development Goals (SDG) number 8.

2. RESEARCH METHODS

The writing of this article is based on the method of literature study (Alamsyahbana et al., 2023). Literature study refers to previous research (Kurnia et al., 2023) with relevant research topics or problems. This method involves an analysis of relevant literature, research articles, reports and other sources on the circular economy, the goals of SDG 8, and other related approaches regarding the concept, theory, implementation, benefits, and challenges of the circular economy in the context of SDG 8. (Ghisellini et al., 2016)

3. RESULT AND ANALYSIS

3.1. Result

After find some data source to support this research, here is the data result regarding this research such as composition, map of Indonesia's plastic waste trade and circular economy initiators in Indonesia shown below:

Table 2. Composition of Waste in Indonesia by Type

No	Name	Value / percent	Total Waste 19.45 million tonnes
1	Leftovers	41.55	8.081 million tonnes of waste
2	Plastic	18.55	3.607 million tonnes of waste
3	Wood/Twigs	13,27	2.581 million tonnes of waste
4	Paperboard	11.04	2.147 million tonnes of waste
5	Metal	2.86	556 thousand tons of waste
6	Cloth	2.54	494 thousand tons of waste
7	Glass	1.96	381 thousand tons of waste
8	Rubber/Leather	1.68	326 thousand tons of waste
9	Other types of trash	6.55	1.273 million tonnes of waste

Source: Ministry of Environment and Forestry (KLHK), 2022

Table 3. Map of Indonesia's Plastic Waste Trade (January – November 2022)

No	Country	Status (Import) in USD	No	Country	Status (Export) in USD
1	Dutch	US\$ 11,214,904	1	Ireland	US\$ 1,686,614
2	German	US\$ 4,879,316	2	Belgium	US\$ 1,072,744
3	Belgium	US\$ 3,401,720	3	United States of America	US\$ 844,254
4	Australia	US\$ 2,528,596	4	Vietnamese	US\$ 487,924
5	United States of America	US\$ 2,249,537	5	Italy	US\$ 336,771
6	Singapore	US\$ 2,239,669	6	Spanish	US\$139,216
7	Slovenia	US\$ 1,101,237	7	Portugal	US\$107,525
8	Japan	US\$ 937,034	8	China	US\$102,549

Source: UN Comtrade, 2022

Table 4. Circular Economy Initiators in Indonesia

No	Sector	Executor Name	Impact
1	Government	MYCL (mycotech Lab)	Environmentally friendly waste treatment, where laboratory waste that is usually disposed of is now being sought to minimize its amount and be used for other derivative industries
		Jakarta International Stadium	The use of environmentally friendly synthetic grass in accordance with standards and post-event integrated waste management in the field
		Ministry of PUPR	Prioritizing the assignment of jobs in the ministry based on environmental care, from planning to selecting project implementers for the Ministry of Public Works and Public Housing.
2	Private	PT Sido Muncul, Tbk	Conduct research in using the remaining production results into materials that can be reprocessed
		PT Tirta Investama (Danone-Aqua)	Using waste treatment effectively and efficiently
3	NGO	Urutsewu Independent Energy Village, Boyolali	Utilizing village potential by using waste as an independent energy source, in addition to preserving nature, can also increase the number of workers in the village in managing self-sustaining energy urutsewu, in Boyolali
		Plastic Free Market, Local Government Collaboration	It is a movement initiated by the local government to carry out a plastic waste-free policy, in which traders and buyers use containers other than plastic to carry groceries

Source: Ministry of National Development Planning, 2022

3.2. Discussion

Circular Economy Implementation

The implementation of a circular economy in Indonesia can contribute significantly to the achievement of SDG Number 8 which includes decent work and sustainable economic growth. Several steps that can be taken to implement a circular economy in Indonesia are as follows:

1. Promoting Effective Recycling and Waste Management Practices:

Governments can strengthen policies and regulations that encourage broader recycling practices in various sectors, including the management of solid waste, e-waste and plastic waste. This can involve developing adequate recycling infrastructure, training the associated workforce, and incentives for industries participating in recycling practices (Kementerian Lingkungan Hidup dan Kehutanan, 2019).

Based on table 2 and table 3, it is known that the economic potential that may arise in waste management, especially plastic waste which is waste that can be recycled has significant economic value. This condition encourages the need for an adequate mechanism in terms of regulations, business agreements, management, waste collection, and markets that can help circular economy processes run. Do not let this potential even be missed because of the inability of management to respond to changing times and trends that are increasingly advanced at this time. In addition, based on table 3, what needs to be considered is the amount of imports which is far greater than the amount of plastic waste exports. One of the things that encourages the industrial sector to import large quantities of plastic waste is because domestic waste has not been properly segregated, making it difficult for the industrial sector to process this waste. As a result, the industry chose to import waste from various countries to become raw material for industrial processing in Indonesia.

2. Improving Sustainable Product Design:

Governments and industry can work together to promote more sustainable product designs, with a focus on using raw materials that are more environmentally friendly, easily recyclable and have a longer shelf life. This could include developing sustainable design standards, providing tax incentives or financial support to companies adopting sustainable designs, as well as educating consumers about the importance of choosing environmentally friendly products (Ellen Macarthur Foundation, 2020).

This can be done by referring to table 2, where it is known that there are various types of waste. If this waste is managed properly, it has the potential to become a basic material in making product designs, and of course all of this cannot be separated from the waste manager or waste bank, but rather the culture in the community towards the surrounding waste. In addition, if we use data from table 4, it is known that there are many initiators in implementing circular economy. This implementation needs to be an example to other parties so that the implementation of the circular economy can be more widely spread so as to reduce environmental impacts while increasing the amount of labor absorption.

3. Infrastructure Development and Innovation in the Recycling Industry:

Governments can encourage the development of modern and efficient recycling infrastructure, including waste processing facilities and recycling centres. In addition, support and incentives can be provided to industry players in adopting innovative technologies to increase the efficiency of recycling processes, such as waste segregation, energy recovery, and the use of green technologies (Forum, 2021).

4. Encouraging Partnerships and Collaboration:

Collaboration between the government, the private sector and civil society is very important in encouraging the implementation of a circular economy in Indonesia. This is illustrated in table 4. Each sector can perform its role well, such as the government can facilitate partnerships and cooperation between various stakeholders, including industry, research institutions, financial institutions, and civil society to accelerate the adoption of circular practices and expand impact (UNIDO, 2018).

5. Resource Efficiency:

The circular economy focuses on the efficient use of resources, by reducing the use of natural resources and maximizing the value of existing resources. By adopting recycling, recovery, and reuse practices, a circular economy can reduce the need for new raw materials, reduce pressure on limited natural resources, and optimize the use of existing resources. This is in line with the SDG 8 target which emphasizes sustainable economic growth and efficient use of resources (European Commission, 2020).

6. Innovation and Entrepreneurship:

The circular economy encourages innovation and entrepreneurship in the development of sustainable solutions. By adopting a circular-based approach, businesses can create products that last longer, are easier to recycle, and focus on a more efficient use of resources. This not only creates new jobs in the innovation and

entrepreneurship sector, but also promotes the development of sustainable solutions that contribute to inclusive economic growth.(Rizos et al., 2015)

4. CONCLUSION

Based on the above description, it can be concluded that the implementation of the circular economy in achieving Sustainable Development Goal (SDG) Number 8 offers a sustainable approach to economic growth, with a focus on resource efficiency, waste reduction, and sustainable consumption. Through practices such as recyclable product design, the use of renewable energy, the adoption of recycled materials, and effective waste management, the circular economy can contribute to global goals for sustainable economic growth. The implementation of the circular economy can create new opportunities for job creation, particularly in sectors such as recycling, recovery, and green technology innovation. In the context of SDG Number 8, the circular economy can help achieve goals such as sustainable economic growth, decent work, financial access, protection of labor rights, reduction of child labor, and the eradication of forced labor. The implication that is expected is to expand the application of the circular economy to many sectors, both from the government, private, non-governmental organizations and to the public directly. Economic independence will be achieved if jobs can be opened as widely as possible, and besides that, the concept of circular economy will provide a balance for the improvement of nature that has been damaged by waste that could not be managed properly before.

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