

Circular Economy and Human Rights: Ethical Considerations



Peter G. Kirchsclaeger

Abstract: Circular Economy embraces opportunities and risks from an ethical perspective informed by human rights. From an ethical standpoint, the aim is to enjoy the human rights-upsides and avoid the human rights-downsides. At the same time, a conceptual compatibility characterizes the relationship between human rights and circular economy. Based on these considerations, circular economy and human rights are discussed as a tandem for a sustainable and flourishing future of humanity and the planet.

Keywords: Circular Economy, Human Rights, Ethics, Principle of Vulnerability, Intergenerational Justice

Kreislaufwirtschaft und Menschenrechte – Ethische Überlegungen

Zusammenfassung: Die Kreislaufwirtschaft berücksichtigt Chancen und Risiken aus einer ethischen Perspektive, die sich an den Menschenrechten orientiert. Aus ethischer Sicht besteht das Ziel darin, die Vorteile der Menschenrechte zu nutzen und die Nachteile zu vermeiden. Gleichzeitig zeichnet sich die Beziehung zwischen Menschenrechten und Kreislaufwirtschaft durch eine konzeptionelle Kompatibilität aus. Auf der Grundlage dieser Überlegungen werden Kreislaufwirtschaft und Menschenrechte als Tandem für eine nachhaltige und blühende Zukunft der Menschheit und des Planeten diskutiert.

Stichwörter: Kreislaufwirtschaft, Menschenrechte, Ethik, Prinzip der Verletzlichkeit, Generationengerechtigkeit

1. Human Rights Opportunities and Risks of Circular Economy

The United Nations Development Programme (UNDP) defines “Circular Economy” in the following way:

Our current economic system can be considered a ‘linear economy,’ built on a model of extracting raw materials from nature, turning them into products, and then discarding them as waste. Currently, only 7.2 percent of used materials are cycled back into our economies after use. This has a significant burden on the environment and contributes to the climate, biodiversity, and pollution crises. Circular economy, on the other hand, aims to minimize waste and promote a sustainable use of natural resources, through smarter product design, longer use, recycling and more, as well as regenerate nature. Besides helping tackle the problem of pollution, circular economy can play a critical role in solving other complex challenges such as climate change and biodiversity loss. (United Nations Development Programme UNDP, 2023)

Circular Economy is all about this change from organizing economic value-creation without “happy end”, namely resulting in waste, to an economic circle of production, reuse, recycling, and regeneration (Stockholm Environment Institute, 2019; Abbate et al., 2023a) contributing to a sustainable future (Gil-Pérez & Vilches, 2023).¹

Human rights protect elements of human existence that are necessary for the physical survival of humans (e.g., food through the human right to food) and for a life as a human – with human dignity – (e.g., education through the human right to education) (Kirchschlaeger, 2013).

If one looks at circular economy from the perspective of an ethics of human rights, circular economy, by contributing to a sustainable future, enables the sustainable fulfillment of human needs and rights (The Clube of Rome & Systemic, 2020; UN Environment Programme, 2024). At the same time, circular economy overcomes some of the human rights issues the linear economy encompasses by recognizing and addressing “environmental degradation and climate change as interconnected human rights crises” (UN News, 2021). Stealing for example the basis for a human existence by ruining the environment, by destroying the climate, or by polluting the water or air, linear economy possesses a negative human rights record which can be left behind by circular economy. Protecting the environment, the climate, and clean water and air means at the same time to respect, to protect, and to realize human dignity and the human right to life as well as the right to a clean, healthy, and sustainable environment.

This positive impact by circular economy is necessarily needed from an ethics of human rights-standpoint because the risks of inaction, particularly regarding the “Global South,” encompass violations of human rights. The severe consequences of inaction – such as extreme weather events – are unfortunately already evident.

At the same time, it could be possible that circular economy achieves these ethically positive ends by violating human rights at the same time.

Human rights risks and impacts are present in the transition to renewable energy from the mining of the critical minerals needed for the transition, to the manufacturing of solar panels and the deployment of solar and wind projects [...] Because regenerative agriculture may result in smaller crop yields than conventional agriculture, farmers may resort to child and forced labor as they seek to increase crop yields and profits. Hazardous working conditions due to longer working hours and less industrialized processes may also result from shifts away from conventional farming. Loss of livelihood for smallholder farmers who may be left behind in favor of large commercial farms with higher crop yields is also a potential adverse impact. Because of the continued use of pesticides, the risks to health and to the right to a clean, healthy and sustainable environment typically associated with large agribusiness will persist even in this new context. Regenerative agriculture activities have also been linked to threats against environmental human rights defenders. There is a risk of forced and child labor in the scaling up of the circular economy, as more waste workers are needed to process recycled goods. There is also a risk of adverse impacts on workers' health from hazardous working conditions in recycling centres.[...] Closing loops to scale up the circular economy may also cause workers to lose their livelihoods as supply chains are shifted or reduced. (Areias, 2024, p. 336)

1 Of course, these are selected examples – driven by the R-strategies – rather than a comprehensive list.

The implementation and practice of circular economy could result in such ethically negative realities.

Nature-based solutions can lead to violations of customary land and carbon rights of local peoples, including Indigenous Peoples and traditional communities. Violence by security forces, sexual harassment and gender-based violence at project sites [...] and threats to environmental human rights defenders are additional risks associated with nature-based solutions. (Areias, 2024, pp. 336–337)

For example, renewable energies require raw materials, rising concerns about the impact of its extraction for people (Vasil, 2020; Kuegerl & Tost, 2022; Zanoletti et al., 2024).

Moreover, in the textile and fashion industry – known for their substantial contributions to environmental pollution and climate destruction and, correspondingly, for their significant change-potential towards a circular economy – (Abbate et al., 2023b)

there are initiatives that employ regenerative agriculture to produce organic cotton and other natural fibers, using natural colorings and dye, thus ensuring higher quality and safer garments for the health of consumers and the environment. By producing higher quality garments, clothing can also last longer, be repaired, thrifted, and recycled. (United Nations Development Programme UNDP, 2023)

Theoretically, this could also be done by economically exploiting humans with excessive working hours per day or by paying them too low wages.

Finally, the social value of agri-food industrial parks serving circular economy can be discussed (Atanasovska et al., 2022). While changing value-creation in a sustainable way (including contributing to the respect, protection, implementation, and realization of human rights), circular economy itself needs to respect, protect, implement, and realize human rights of all humans. “The circular economy will not be socially just by default.” (Lembacher et al., 2022, p. 13). From an ethical perspective, in order to master its own social challenges (Mies & Gold, 2021; Seigné-Itoiz et al., 2021; Upadhyay et al., 2021; Musariri & Moyer, 2022; Suarez-Visbal et al., 2022; Millward-Hopkins, 2024; Mulvaney, 2024; Sareen & Martin, 2024), circular economy needs to accept the guidance by human rights as ethical points of reference. At this point, the concept of “Just Transition” provides ethical guidance embracing the economic opportunities as well as the social aspects of such a transformation. “A Just Transition means greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind.” (Chrysler et.al., 2024)

2. Compatibility of Human Rights and Circular Economy

Both, circular economy – because it serves the ethically necessary protection of the environment and the climate (Kirchschlaeger, 2012, 2023) –, and human rights – e.g., based on the principle of vulnerability (Kirchschlaeger, 2013, 2016) –, can be justified ethically. Therefore, there is a responsibility to realize circular economy as well as human rights. At the same time, both are conceptually compatible with each other. Whilst circular economy encompasses sustainability (Sehnem et al., 2019) and protects the environment, the climate, and clean water and air, it joins forces with human dignity and the human right to life as well as with the human right to a clean, healthy, and sustainable environment. The other way around, linear economy applied in, e.g., “plastics production, use, and disposal

pose significant threats to human rights.” (Center for International Environmental Law CIEL, 2023, p. 11) Therefore, human rights (Orellana, 2021) like the right to information should inform the understanding of circular economy from an ethical perspective (CIEL, 2023):

People everywhere must be fully and actively informed about plastics’ risks, hazards, and harms [...] This should include, among other things, freely and easily available information on air and water emissions from plastics production; labeling disclosures for plastic products and packaging; and transparency regarding the impacts of local plastic burning, thermal processing, or disposal (CIEL, 2023, p. 11).

Furthermore, the right to full and meaningful participation needs to be integrated in the concept of circular economy as well:

A fully informed public should be actively involved in key decisions at every stage of the circular economy for plastics. This includes: the amount and purpose of plastics resin production; construction of waste management facilities of any kind; and the inclusion of additives in recycled plastics that might be toxic to workers, local communities, or consumers. In particular, Indigenous Peoples have the right to free, prior, and informed consent, as they shall be protected from, among other scenarios, the storage or disposal of hazardous material on their lands (CIEL, 2023, p. 11).

Beyond that, access to accountability and remedy should also be part of a circular economy:

The plastics industry and recyclers should be accountable for the harms wrought by their products and processes along their life cycles.[...] People have a right to remedy for any harm caused, and this remedy should include a global mechanism for liability and compensation [...] Circularity for any material or resource must be deeply rooted in protection and respect for the lives and livelihoods of all people across the global supply chain and use system. Policy approaches for a circular economy that fail to include principles grounded in justice to prevent future harm will fall short of addressing the crisis. (CIEL, 2023, p. 11)

This means concretely that circular economy cannot avoid the “monument of human rights” (Joas, 2012, p. 280). In an economic value creation – also in the case of circular economy – and its impact on the environment and the climate, human rights are at stake (Rocasolano & Berlanga, 2022). “The implementation of circularity for all materials in the economy[...] must ensure that human rights are upheld for all people, with specific care for those made most vulnerable to harm.” (CIEL, 2023, p. 1) This requires though specific and focused efforts to achieve the respect, protection, implementation, and realization of human rights while advancing circular economy.

Conducting human rights due diligence on nature-based solutions can be challenging as there can be a ‘green haze’ surrounding these projects due to their positive impacts on the environment. This can lead to a reluctance from stakeholders within companies to engage on the human rights issues associated with these projects, particularly when activities to achieve the company’s net zero strategy have been prioritized. Often these projects are managed by third-party suppliers, and, in the case of carbon offsets, they are purchased from suppliers who may be one or two tiers removed from the projects

themselves, adding complexity to human rights due diligence. Such projects may also represent a completely new business activity for companies. Understanding biodiversity-related human rights impacts can be highly complex and context specific. The multiple actors often involved in nature-based solutions, the lack of experience of some companies in these activities and the complex interconnection between biodiversity and human rights can all create additional challenges in identifying and addressing the adverse human rights impacts associated with nature-based solutions. (Areias, 2024, p. 337)

3. Circular Economy and Human Rights – The Way Forward Creating a Future of Humanity and the Planet?

If one goes beyond the present and thinks about the future, “intergenerational justice” builds an adequate principle to balance needs and interests not only of the present humans but also of past and future generations in a fair way.

A society is intergenerationally just when each generation does its fair share to enable members of succeeding generations, both inside and outside its borders, to satisfy their needs, to avoid serious harm and to have the opportunity to enjoy things of value. (Thompson, 2010, p. 6)

The concept of “intergenerational justice” does not address the satisfaction of every need of all humans which already results of the aspired balance between past, present, and future generations. “Intergenerational justice” is obviously not about excessive needs and luxury goods but protecting a minimal standard based on human rights for enabling survival and living with human dignity for every human living now and in the future (Kirchschlaeger, 2013). So, the combination of intergenerational justice with human rights creates a first part of a tandem for the future of humanity and the planet. The second part can be circular economy because it represents a concept of economy fostering the protection of the environment and the climate. The tandem of circular economy and human rights can only depart into the future if circular economy includes ethics of human rights. “Building the human rights lens early in the planning or development of climate action activities can help companies break down siloes and act more quickly to identify and address human rights risks.” (Areias, 2024, p. 338) Concretely, this could mean

to include partnerships or other collaborations with Indigenous Peoples and traditional communities due to their unique knowledge and roles as stewards or custodians of land. Such collaborations may, for example, cover the management of forests for nature-based solutions or the rehabilitation of soil in regenerative agriculture. These collaborations themselves must be based on respect for human rights, including land rights and cultural traditions. (Areias, 2024, p. 338)

Beyond that,

engaging with suppliers to support the transformations necessary for climate mitigation can also help to identify and mitigate adverse human rights impacts. Reskilling and retraining the workforce may also be necessary.[...]In implementing nature-based solutions, companies may need to engage with partners carrying out these projects,

to ensure they are able to respect human rights throughout project implementation. (Areias, 2024, p. 338)

As a tandem, circular economy and human rights could be transformative for the world (Vallaey, 2020). As a tandem, circular economy and human rights would ensure that the environment, the climate, as well as all humans enjoy circular economy as ethically positive change. As a tandem, circular economy and human rights could lead humanity, the environment, and the climate in a flourishing sustainable future.

References

- Abbate, S., Centobelli, P., & Cerchione, R. (2023a). From Fast to Slow: An Exploratory Analysis of Circular Business Models in the Italian Apparel Industry. *International Journal of Production Economics*, 260, 108824. <https://doi.org/10.1016/j.ijpe.2023.108824>
- Abbate, S., Centobelli, P., Cerchione, R., Nadeem, S. P., & Riccio, E. (2023b). Sustainability trends and gaps in the textile, apparel and fashion industries. *Environment, Development and Sustainability*, 26(2), 2837–2864. <https://doi.org/10.1007/s10668-022-02887-2>
- Areias, S. A. (2024). Striving for a Rapid Transition: How Companies are Approaching Integrating Respect for Human Rights in Their Climate Action. *Business and Human Rights Journal*, 9(2), 334–340. <https://doi.org/10.1017/bhj.2024.17>
- Atanasovska, I., Choudhary, S., Koh, L., Ketikidis, P. H., & Solomon, A. (2022). Research gaps and future directions on social value stemming from circular economy practices in agri-food industrial parks: Insights from a systematic literature review. *Journal of Cleaner Production*, 354, 131753. <https://doi.org/10.1016/j.jclepro.2022.131753>
- Center for International Environmental Law CIEL. (2023, March 1). Beyond Recycling: Reckoning with Plastics in a Circular Economy. Center for International Environmental Law. Retrieved February 1, 2025, from <https://www.ciel.org/reports/circular-economy-analysis/>
- Chrysler, J., Jaeger, C., & Phan, T. (2024). *Towards a Sustainable Future: Recommendations for a just transition in waste management and circular economy in the ASEAN region* (Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Ed.). <https://www.giz.de/en/downloads/giz2024-en-just-transition-report.pdf>
- Gil-Pérez, D., & Vilches, A. (2023). Cómo avanzar en la necesaria Transición a la Sostenibilidad. *Ciência & Educação (Bauru)*, 29. <https://doi.org/10.1590/1516-731320230027>
- Joas, H. (2012). *Die Sakralität der Person: Eine neue Genealogie der Menschenrechte* (3rd ed.). Suhrkamp.
- Kirchschlaeger, P. G. (2012). Evolution of the International Environment Law and Position of Child from a Philosophical Perspective. In K. Boesch (Ed.), *Changement Climatique: Impacts sur les enfants et leurs droits* (pp. 73–87). Institut international des Droits de l'Enfant.
- Kirchschlaeger, P. G. (2013). *Wie können Menschenrechte begründet werden? Ein für religiöse und säkulare Menschenrechtskonzeptionen anschlussfähiger Ansatz*. Religionsrecht im Dialog: Vol. 15. LIT.
- Kirchschlaeger, P. G. (2016). How can we justify human rights? *International Journal of Human Rights and Constitutional Studies*, 4(4), 313–329. <https://doi.org/10.1504/IJHRCS.2016.10001930>
- Kirchschlaeger, P. G. (2023). Klimagerechtigkeit und Menschenrechte. In M. Wasmaier-Sailer & M. Durst (Eds.), *Theologische Berichte: Vol. 42. Schöpfung und Ökologie* (pp. 175–202). Herder.

- Kuegerl, M.-T., & Tost, M. (2022). Verantwortungsvolle Beschaffung im Bereich der erneuerbaren Energien – Realität oder noch ein weiter Weg? *BHM Berg- Und Hüttenmännische Monatshefte*, 167(4), 140–145. <https://doi.org/10.1007/s00501-022-01209-3>
- Lembacher, Y., Marsden, J., & Schwerdtner, A. -S. V. (2022, June 2). *Thinking beyond borders to achieve social justice in a global circular economy – Insights – Circle Economy*. Retrieved February 1, 2025, from <https://www.circle-economy.com/resources/thinking-beyond-borders-to-achieve-social-justice-in-a-global-circular-economy>
- 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>
- Millward-Hopkins, J. (2024). The Social Implications of Circular Clothing Economies in the Global North. *Sustainability*, 16(16), 7094. <https://doi.org/10.3390/su16167094>
- Mulvaney, D. (2024). Governing solar supply chains for socio-ecological justice. In S. Sareen & A. Martin (Eds.), *Geographies of Solar Energy Transitions: Conflicts, controversies and cognate aspects* (pp. 125–136). UCL Press.
- Musariri, L., & Moyer, E. (2022). Hunting Treasure, Gathering Trash: Politics and Precarity in the Plastic Recycling Industry. *Etnofoor*, 34(2), 49–66.
- Orellana, M. (2021). *The stages of the plastics cycle and their impacts on human rights*. (United Nations, Ed.; A/76/207). Retrieved February 1, 2025, from <https://undocs.org/A/76/207>
- Rocasolano, M. M., & Berlanga, M. D. C. (2022). Piedras Angulares del derecho ambiental, el ecocidio y el derecho fundamental al medio ambiente para el desarrollo de la persona. *Revista Opinión Jurídica (Fortaleza)*, 20(35), 83–109. <https://doi.org/10.12662/2447-6641oj.v20i35.p83-109.2022>
- Sareen, S., & Martin, A. (Eds.). (2024). *Geographies of Solar Energy Transitions: Conflicts, controversies and cognate aspects*. UCL Press.
- Sehnm, S., Pandolfi, A., & Gomes, C. (2019). Is sustainability a driver of the circular economy? *Social Responsibility Journal*, 16(3), 329–347. <https://doi.org/10.1108/SRJ-06-2018-0146>
- Seigné-Itoiz, E., Mwabonje, O., Panoutsou, C., & Woods, J. (2021). Life cycle assessment (LCA): Informing the development of a sustainable circular bioeconomy? *Philosophical Transactions. Series A, Mathematical, Physical, and Engineering Sciences*, 379(2206), 20200352. <https://doi.org/10.1098/rsta.2020.0352>
- Stockholm Environment Institute. (2019, November 15). Transformational change through a circular economy. In *JSTOR*. Retrieved February 1, 2025, from <https://www.jstor.org/stable/resrep22978>
- Suarez-Visbal, L. J., Carreón, J. R., Corona, B., & Worrel, E. (2022). The Social Impacts of Circular Strategies in the Apparel Value Chain; a Comparative Study Between Three Countries. *Circular Economy and Sustainability*, 3(2), 757–790. <https://doi.org/10.1007/s43615-022-00203-8>
- The Clube of Rome & Systemic. (2020). *A System Change Compass: Implementing the European Green Deal in a time of recovery*. Retrieved February 1, 2025, from <https://www.clubofrome.org/publication/a-system-change-compass-implementing-the-european-green-deal-in-a-time-of-recovery/>
- Thompson, J. (2010). What is Intergenerational Justice? *Future Justice*, 5–20, 6.
- UN Environment Programme (Ed.). (2024). *Global Resources Outlook: Bend the trend Pathways to a liveable planet as resource use spike*. International Resource Panel. Retrieved February 1, 2025, from <https://resourcepanel.org/reports/global-resources-outlook-2024>

- UN News. (2021, October 8). *Access to a healthy environment, declared a human right by UN Rights Council*. UN News. Global Perspective Human Stories. Retrieved February 1, 2025, from <https://news.un.org/en/story/2021/10/1102582>
- United Nations Development Programme UNDP. (2023, April 24). *What is circular economy and why does it matter?* UNDP Climate Promise. Retrieved February 1, 2025, from <https://climatepromise.undp.org/news-and-stories/what-is-circular-economy-and-how-it-helps-fight-climate-change>
- Upadhyay, A., Mukhuty, S., Kumar, V., & Kazancoglu, Y. (2021). Blockchain technology and the circular economy: Implications for sustainability and social responsibility. *Journal of Cleaner Production*, 293, 126130. <https://doi.org/10.1016/j.jclepro.2021.126130>
- Vallaey, F. (2020). ¿Por qué la Responsabilidad Social Empresarial no es todavía transformadora? Una aclaración filosófica. *Andamios, Revista De Investigación Social*, 17(42), 309–333. <https://doi.org/10.29092/uacm.v17i42.745>
- Vasil, A. (2020) How to clean up Ev's dirty Battery Problem. *Corporate Knights*, 19(1), 26–31.
- Zanoletti, A., Bresolin, B. M., & Bontempi, E. (2024). Building a Circular Economy for Lithium: Addressing Global Challenges. *Global Challenges*, 8(12), 2400250. <https://doi.org/10.1002/gch2.202400250>

Peter G. Kirchschlaeger, Prof. Dr. is Ethics-Professor and Director of the Institute for Social Ethics ISE at University of Lucerne, Research Fellow at the University of the Free State, Bloemfontein (South Africa), Visiting Professor at the Chair of Neuronal Learning and Intelligent Systems at ETH Zurich and at the ETH AI Center as well as Visiting Fellow at the University of Tuebingen (Germany). Previously, he was a Visiting Fellow at Yale University (USA).

Address: University of Lucerne, Institute of Social Ethics ISE, Frohburgstrasse 3, Postfach, 6002 Luzern, Phone: +41 41 229 52 61, E-Mail: peter.kirchschlaeger@unilu.ch