

What can we learn from the bankruptcy of Renewcell?

Some limitations of business-case-based circular transition.

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Recently, circular start-ups have received increased attention in the circular economy literature. Considered an important complement to the transition of incumbent organizations to circularity, circular new ventures are considered frontrunners of circular disruption (Henry & Kirchherr, 2020). They are a breeding ground for bottom-up CE innovation (Henry et al., 2024) and circular business models (Kanda et al., 2024). There is hope that they will be able to induce an institutional normative and cognitive-cultural shift towards a circular economy (Närvänen, Mattila, & Mesiranta, 2021). Correspondingly, the economic press loves success stories about small circular start-ups that develop unique circular solutions or linear giants that dare to add a circular product to their line of linear products.

Renewcell was, for a long time, one of these circular success stories. Backed by prominent investors, among which was the global fast fashion company H&M, Renewcell was a high-profile effort to put fashion on a circular track at scale. “We make fashion circular” Renewcell proudly claimed. To the satisfaction of local politicians and workers, they set up a large production unit in a decommissioned pulp and paper factory in Northern Sweden to recycle textile waste, such as worn-out jeans and production scraps, into Circulose®, a pristine fibre that, instead of being made of cotton, oil, or wood, originated in textile waste.

TIME Magazine listed Circulose as one of the 100 Best Inventions in 2020. Renewcell was featured among the World’s Most Innovative Companies in 2021, as a World-Changing Idea in 2023, and was awarded the Nordic Council Environment Prize for clothes recycling as late as November 2023.

Sales did not take off, though. After reaching 300 SEK in early 2021, the stock fell under 100 SEK in mid-2022 and plunged to less than 10 SEK in the autumn of 2023. Quarterly Report Q3 2023 still claimed that “There is no doubt the world is transitioning towards green circular product flows and Renewcell is uniquely positioned to contribute to this transition”. But unable to secure sufficient long-term funds to continue operations, the company filed for bankruptcy on February 27, 2024¹.

Was Renewcell too early and too fast? Was it a business model flaw to sell to agents in Southeast Asia and thereby lack control of the end part of the value chain? Should not large-scale production of recycled fibres operate where textiles are produced, that is, in Southeast Asia instead of Northern Europe? Should H&M have shown more (moral) commitment and bought enough Circulose to keep the company afloat? Is Renewcell’s bankruptcy the consequence of the unwillingness of the fashion industry to think differently and renew itself? These questions are indicative of the financial, knowledge and technology, supply chain, market, and institutional challenges of developing a viable circular business model (Kanda et al., 2024).

The demise of Renewcell points to the crucial issue that, if conceived as a business-led societal change, circular transition ultimately depends on the basic premise of business management: the

¹ Disclosure / Conflict of interest: On that day, Hervé owned 1019 Renewcell shares that he bought for around 8000 € a year and a half ago.

ability of circular businesses to secure financing, develop reliable production processes, gain sufficient market share, and generate more income than they cost. Trivialities? Not when the financing of circular ventures holds back (Dewick et al., 2020), circular production faces technical and social challenges (Grafström & Aasma, 2021; Rask, 2022), the willingness of customers to pay for circularity remains low (Hobson, 2020), and circular ventures must bear costs that linear ventures structurally externalize (Hobson, 2021).

How realistic is it to assume that it will be possible to develop profitable ventures for every necessary step of circular transition? Linear solutions hold the economy in a stronghold thanks to massive competitive advantages of scale, pace, costs, and attractiveness (Stowell and Corvellec, 2023). And there are known technical, cultural, and institutional barriers to circular business models (Hina et al., 2022; Werning & Spinler, 2020). Therefore, there are good reasons to doubt the capacity of circular ventures to replace linear ones to scale shortly, if ever.

The profit motive is a proven source of innovation and change. However, the Renewcell case demonstrates that companies will only drive a circular transition if they can make a profit from it. Similarly, circular ecosystems will only develop if *all* actors manage to find a business case for circularity. And this puts serious limits on circular transition.

Some forty years of neoliberal doxa have hammered the idea that markets have an inherent superiority as a form of resource allocation. But the history of social change has much to do with idea-driven and public initiatives, from the abolition of the slave trade to the creation of national health, unemployment, and pension insurance.

Circularity is already broader than the business case for circularity. For instance, municipalities are implementing long-term circularity plans to manage natural flows such as water, nutrients, and biomass, as well as man-made flows such as construction materials, buildings, and consumer goods. Similarly, the circular economy has attracted a wide range of initiatives based on voluntary work, from collective composting to, that set care for life and material at the core of circularity.

Renewcell's bankruptcy is a reminder that the rationale of corporate profit cannot drive circular transition alone. Corporations can contribute to circular transition; but not everything that matters for circular transition can generate a profit and thus be amenable to corporate interests. The centrality that is given to corporate initiatives, rationales, and interests in circular policies and research puts effective restrictions on circular transition as it predicates social change on something as unrevolutionary as corporate profit. What is at stake here is the participation of civil society and the general public in the societal change that is the transition to a circular society. In a democracy, people are more than consumers in markets. The business case for sustainability is not enough to ensure the democratic legitimacy of the circular economy.

Epilogue: A few days after letting Renewcell file for bankruptcy, H&M launched Syre, a new impact textile company that it backed up by an offtake supply agreement worth USD 600 million over 7 years. Syre is "to decarbonize and dewaste the textile industry through textile-to-textile recycling at hyperscale, starting with polyester". The CEO explains:

"Syre marks the start of the great textile shift. We envision a world where every textile fiber sees a new day. By implementing true textile-to-textile recycling at hyperscale, we want to drive the transition from a linear to a circular value chain by putting textile waste to use, over and over again" (Press release, Stockholm – March 6, 2024).

The promise sounds familiar. As a textbook sequence of Schumpeterian creative destruction, a new company arises when the former has fallen. Pink economic pages, trade (e)magazines, and LinkedIn enthusiasts celebrate Syre and uncritically dispatch the CEO's message of faith in a circular future for fashion.

With circularity at only 7.2% (Circle Economy Foundation 2024), the circular economy discourse needs fresh success stories to feed hope. However, with Renewcell in mind, we know that the future of circular success stories is conditioned on good and rapid enough positive figures at the bottom line.

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