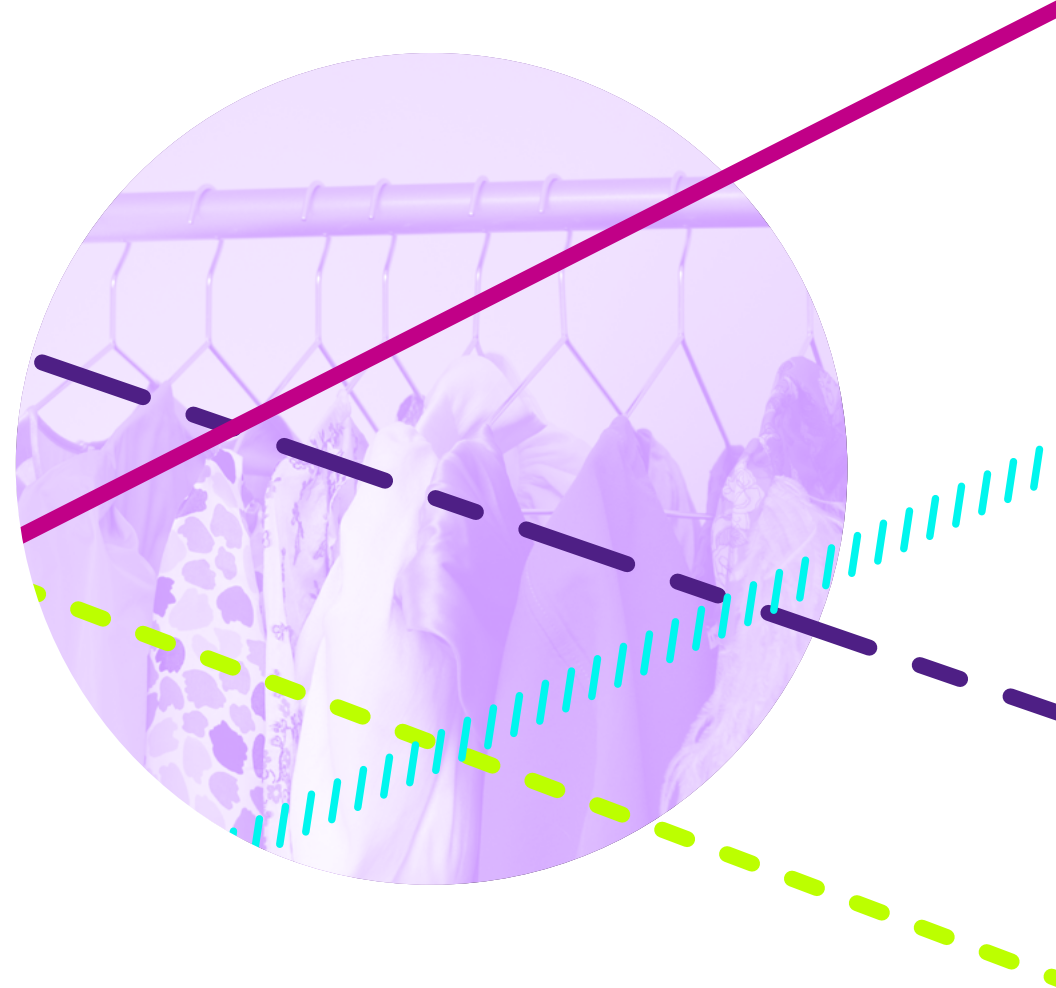


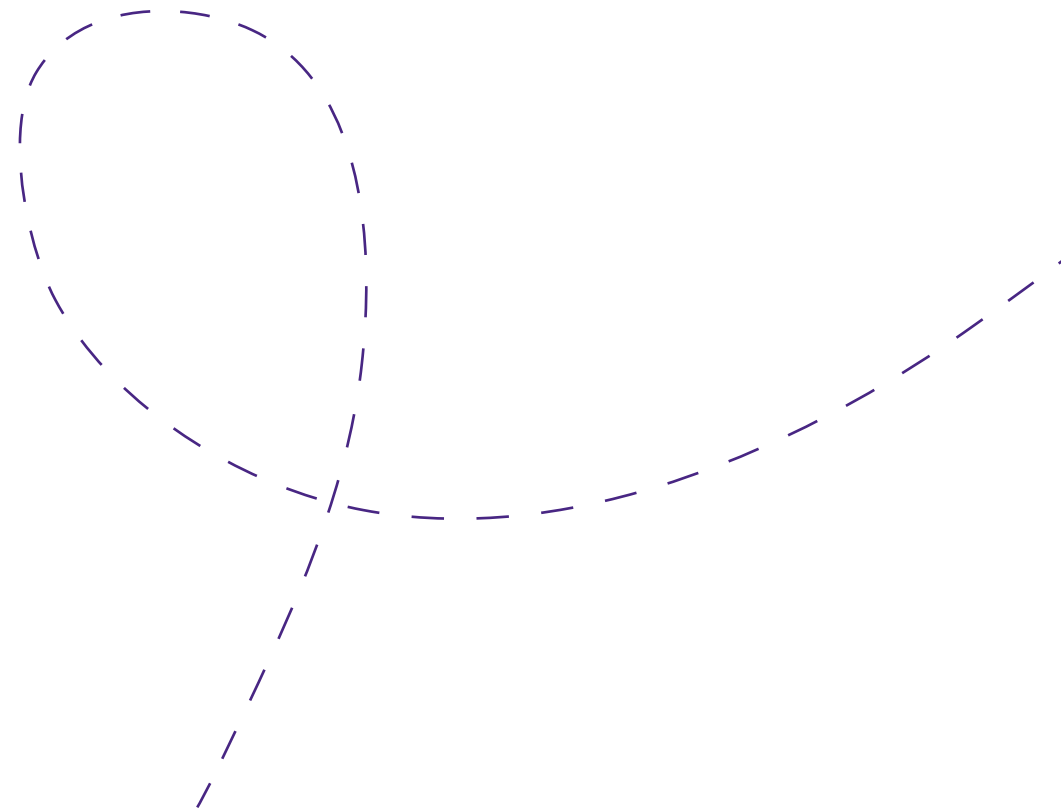
CIRCULAR BUSINESS MODELS

Redefining growth
for a thriving
fashion industry



This study was produced by the Ellen MacArthur Foundation with analytical support from The Boston Consulting Group. The other organisations that have contributed to this work are listed on page 57. The Ellen MacArthur Foundation is deeply grateful for the time and expertise that all these parties have dedicated to this project.

To quote this study, please use the following reference: Ellen MacArthur Foundation, *Circular business models: redefining growth for a thriving fashion industry* (2021).



About this study

Circular business models represent a significant opportunity for new and better growth in the fashion industry. This study examines how businesses can seize the full economic and environmental opportunity, and highlights those already taking steps to do so.

In 2017, the Ellen MacArthur Foundation launched the landmark report *A new textiles economy: redesigning fashion's future*. It identified the linear 'take-make-waste' model – with one rubbish truck load of textiles being landfilled or incinerated every second – as the root cause of many of the environmental challenges in the fashion industry. The report presented the circular economy as both a solution to these challenges and a significant economic opportunity.

The circular economy is a systems solution framework that tackles global challenges including climate change, biodiversity loss, waste, and pollution. It has three principles, all driven by design: eliminate waste and pollution, circulate products and materials, and regenerate nature. It is a bigger idea that goes beyond treating the symptoms of the current economy to tackle the root causes of global challenges, while providing opportunities for better growth that benefit businesses, people, and the environment.

Over the last three years, working collaboratively with more than one hundred organisations from across the fashion value chain, the Ellen MacArthur Foundation has set out a [vision for a circular economy for fashion](#) and established projects including [The Jeans Redesign](#) to work towards making it a reality. The circular economy is now firmly on the agenda for businesses, governments, academia, and wider society; it is being increasingly recognised as the way to ensure the fashion industry thrives in future.

This increased awareness and first steps towards a circular economy for fashion, while encouraging, are only the beginning. The linear operating model still dominates how fashion is designed, produced, and enjoyed. Material innovation and recycling are important elements of the solution, but they alone cannot create a thriving fashion industry. In a circular economy for fashion, clothes are used more, made to be made again, and made from safe and recycled or renewable inputs. To make this vision a reality, circular business models – one of the crucial elements of a circular economy for fashion – must become mainstream in the industry.

This study confirms the significant economic and environmental potential of circular business models. It provides an overview of the potential of models that have grown significantly (resale, rental, repair, and remaking) as well as, crucially, outlining the key actions that businesses, supported by policymakers, can take to capture their full potential. While this study does not address them directly, the social implications of a circular economy transition are vital to consider; academia and organisations, including BSR and Circular Apparel Innovation Factory (CAIF), have already begun to explore possible impacts.

This study was produced with analytical support from The Boston Consulting Group in 2020. Many others have contributed to this work and all contributing organisations are listed at the end of this document. The Ellen MacArthur Foundation is deeply grateful to all collaborators and contributors for the time and expertise they have dedicated to this project.

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Executive summary

Circular business models represent a significant opportunity for new and better growth in the fashion industry because they decouple revenue streams from production and resource use. Currently, booming models like rental and resale, while they hold great potential, do not always achieve this decoupling and the environmental benefits that come with it. For circular business models to reach their full potential, businesses, supported by policymakers, need to redesign performance indicators, products, and supply networks to fit them – and scale a wider range of these models.

Now is the time to explore a new way of doing business in fashion. In recent decades, the fashion industry has experienced ever growing levels of production, coupled with shrinking profit margins and increasing negative environmental impacts. Clothing production doubled between 2000 and 2015 while, during the same period, utilisationⁱ decreased by 36%.¹ This trend led to the global fashion industry producing around 2.1 billion tonnes of greenhouse gas (GHG) emissions in 2018 – 4% of the global total.² On top of this, due to ever lower prices and lost revenues – from overstock, stockouts, and returns – profit margins of the world’s leading apparel retailers decreased by an average of 40% from 2016 to 2019.³

This was exacerbated in 2020 by the impacts of the Covid-19 pandemic, which saw the industry suffer a 90% decline in profits.⁴

Circular business models represent a significant opportunity for new and better growth because they decouple revenues from production and resource use, maximising environmental benefits. As a key part of the transition to a circular economy, circular business models present an opportunity for the fashion industry to – by design – decouple its revenue streams from production, i.e. to make more revenue from fewer new products. This means less need for raw material production and therefore lower GHG emissions, pollution, and pressure on biodiversity.

Four business models (rental, resale, repair, and remaking), which all have the potential to decouple revenue streams from production and resource use, currently represent a USD 73 billion market. Since 2019, and despite the Covid-19 pandemic, sevenⁱⁱ rental and resale platforms have reached valuations above USD 1 billion. These business models are expected to continue growing as customers increasingly adopt new ways of accessing fashion, motivated by factors such as affordability, convenience, and environmental awareness.

Rental, resale, repair, and remaking have the potential to grow from 3.5% of the global fashion market today to 23% by 2030, representing a USD 700 billion opportunity with the potential to provide a third of the emission reductions necessary to put the fashion industry on a 1.5-degree pathway.ⁱⁱⁱ

This would amount to a reduction of around 340 million tonnes of CO₂ equivalent (CO₂e) annually by 2030, more than the annual GHG emissions of Thailand or France.⁵ As well as reducing GHG emissions, business models that increasingly decouple revenue generation from the use of virgin resources have also been shown to reduce pressure on biodiversity by cutting the amount of land needed for raw material production and the pollution associated with virgin fibre processing.⁶

Currently, booming sectors like rental and resale, while they have great potential, do not always realise the environmental benefits of decoupling revenue streams from production and resource use. There are a number of barriers to achieving this decoupling and successfully developing circular business models. One is performance indicators and associated customer incentives. A business measuring its success by sales volumes might incentivise product take-back for resale, remaking, or recycling by offering vouchers for new products which, while promoting circular business models, also grows the core linear business model.

ⁱ Utilisation is defined as the average number of times a garment is worn before it ceases to be used

ⁱⁱ Depop, Rent the Runway, The Real Real, Vinted, Poshmark, Vestiaire Collective, and thredUP

ⁱⁱⁱ To meet the 1.5-degree pathway set out by the Intergovernmental Panel on Climate Change (IPCC) and ratified by signatories to the 2015 Paris agreement, the fashion industry needs to reduce emissions by around 50% – or 1.1 billion tonnes – by 2030. Source: McKinsey & Company and Global Fashion Agenda, [Fashion on Climate](#) (2020). If rental, resale, repair, and remaking reach a 23% market share by 2030, in aggregate, this could lead to an overall CO₂e emission reduction for the fashion industry of up to 16%, providing up to a third of the abatement needed to be on a 1.5-degree pathway. See Appendix page 69

Another is product design. Offering clothes, via a rental model, that are not designed to withstand many wears and cleaning cycles will increase the chances of that model being economically and environmentally unviable. A third is supply chains. These are currently optimised for predictable, one-way production and distribution, but circular business models require effective local and global supply networks that facilitate services such as cleaning, repair, and remaking.

The social impacts of a transition to circular business models – and the resulting shift to a more distributed global and local supply network in the fashion industry – is not quantified in this study. However, it is vital that businesses consider these social impacts and do their utmost to ensure they are positive for people in the fashion industry and the societies in which it operates. Making positive social outcomes a priority now, while a circular economy for fashion is emerging, could help address concerns in the industry about insufficient job security and quality, which can lead to increases in poverty, inequality, and exclusion in communities of affected workers.⁷

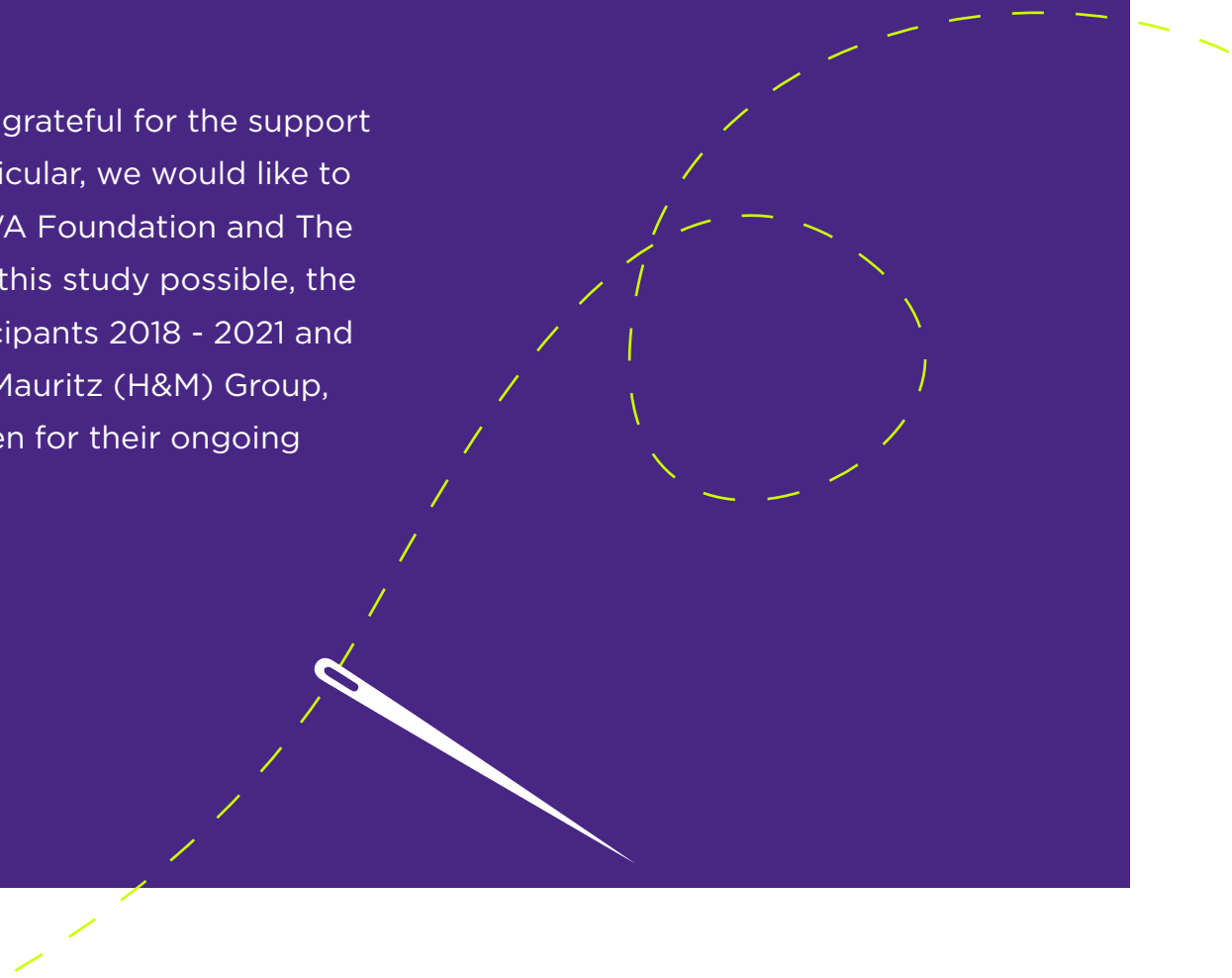
To maximise the positive outcomes of circular business models, businesses, supported by policymakers, can take four key actions:

- **Rethink performance indicators, customer incentives, and customer experiences:** Shifting to a business model based on increasing the use of products, rather than producing and selling more products, requires the business to rethink how it measures success, and to encourage its customers to opt for its circular offering through carefully designed incentives and enhanced customer experiences.
- **Design products that can be used more and for longer:** To maximise the economic and environmental potential of circular business models, products need to be designed and made to be physically durable, emotionally durable, and able to be remade and recycled at the end of their use.
- **Co-create supply networks able to circulate products locally as well as globally:** To successfully keep products in circulation, fashion supply chains, currently designed for a predictable one-way flow of products, need to be transformed into supply networks capable of circulating products locally and globally, through collaboration and the use of digital technologies.
- **Scale a wider range of circular business models:** Scaling a variety of circular business models that generate revenue without producing new products can increase the overall economic and environmental opportunity in the long term.

This is an ambitious agenda that offers businesses and policymakers the opportunity to ensure the fashion industry shifts towards a better growth model.

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About the Ellen MacArthur Foundation

The Ellen MacArthur Foundation is an international charity that develops and promotes the circular economy in order to tackle some of the biggest challenges of our time, such as climate change, biodiversity loss, waste, and pollution. We work with our network of private and public sector decision-makers, as well as academia, to build capacity, explore collaborative opportunities, and design and develop circular economy initiatives and solutions. Increasingly based on renewable energy, a circular economy is driven by design to eliminate waste, circulate products and materials, and regenerate nature, to create resilience and prosperity for business, the environment, and society.

ABOUT THE FOUNDATION'S FASHION INITIATIVE

The Fashion Initiative was launched by the Ellen MacArthur Foundation as 'Make Fashion Circular' at the Copenhagen Fashion Summit 2017, and brings together leaders from across the fashion industry to work with cities, philanthropists, NGOs, and innovators. Fashion companies that are in the Foundation's Network include: Strategic Partner – H&M Group, Partners – Inditex, Lacoste, Primark, PVH Corp., Ralph Lauren and Zalando, and [members](#). The Foundation's Fashion Initiative is leading international efforts to stop waste and pollution by creating a circular economy for the industry, where products are used more, are made to be made again and are made from safe, recycled or renewable inputs.

Further information: www.ellenmacarthurfoundation.org | @circulareconomy



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Endnotes

- 1 Ellen MacArthur Foundation, [A new textiles economy: redesigning fashion's future](#) (2017)
- 2 McKinsey & Company and Global Fashion Agenda, [Fashion on climate](#) (2020)
- 3 Morgan Stanley, [Peak of apparel consumption](#) (2019)
- 4 Fashion United, [McKinsey and BoF find 90 percent profit decline for the fashion industry](#) (2020)
- 5 Our World in Data, [Total GHG emissions including LUCF tonnes CO₂e](#) (2020)
- 6 Ellen MacArthur Foundation, [The nature imperative: how the circular economy tackles biodiversity loss](#) (2021)
- 7 BSR, [Taking a people-centered approach to a circular fashion economy](#) (2020)