

## **GOOD PRACTICES IN USING SECONDARY RAW MATERIALS AT THE LEVEL OF COMPANIES WITHIN THE FASHION AND TEXTILE INDUSTRY**

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**ABSTRACT:** *Responsible production and consumption requires firms, political decision-makers and consumers to adapt to durable practices. Adapting a circular economy helps us achieve this objective, but in industries like the textile and fashion ones, due to the impact their companies have on the environment, responsible management of waste and usage of secondary raw materials should be part of their business model. In this paper we have sought to highlight through a few examples of good practices the role and impact that one of the major players within this industry, namely the H&M Group, has, through initiatives and innovations, on the transition towards a circular business model.*

**KEY WORDS:** *fashion industry, textile industry, sustainability, responsible production and consumption, circular economy, secondary raw materials, business model.*

**JEL CLASSIFICATIONS:** *D22, L21, M14, O31.*

### **1. INTRODUCTION**

Today, terms such as durable development and sustainability have entered collective memory. In just a few decades the transition from concepts and theoretical models to their practical application in all areas (economic, social, environmental etc.) has occurred. More than that, the practical implementation of some measures towards not only reducing environmental degradation, but also towards regenerating its health, originating from the common obligation to guarantee the premises of sustainable development for future generations, has created new strategic orientations.

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These future strategic orientations seek to prevent the production of waste and efficiently manage it through a transition from the “take-make-consume-throw” model to the 4R approach (“reduce-reuse-recycle-redesign”).

Taking into account the global natural resource shortage, the main challenge for producers is achieving more, using secondary raw materials to a greater degree. This should lead to an increase in global environmental performance of products for the length of their lifecycle, stimulate demand for products and production technologies with better performance, and help consumers make rational decisions.

This is how a new concept has appeared, namely the circular economy, seen as a new model of sustainable production and consumption.

Currently, at EU level, a series of regulations, strategies, groups of measures and instruments which seek durable production and consumption have been adopted. These contribute to the prevention of waste creation and will permit a significant growth of its recycling rate, all of these leading to the attainment of the main desideratum of the circular economy.

## **2. SECONDARY RAW MATERIALS – REFERENCE AREA FOR THE CIRCULAR ECONOMY**

### **2.1. The circular economy**

The transition towards a circular economy, within its framework the value of products, materials and resources being maintained in the economy for as long as possible, and the production of waste being reduced to a minimum, has gathered considerable attention, being found in the agendas of public authorities, the business world, research institutes and non-governmental organisations. Recently, the concept of a circular economy has seen an exponential development through the active participation of all concerned factors.

In the vast specialty literature there are multitudinous definitions regarding the circular economy, concentrated around key concepts such as: durable development, the 4R framework (Reduce, Reuse, Recycle, Recover), systemic approach (micro, mezzo, macro) etc. (Târțiu, et al., 2019, p. 22).

Generally, however, by circular economy we understand an economic model based on sharing, reusing, repairing, refurbishing and recycling existing raw materials and end products.

At a European level, despite the fact that the European Commission adopted, in December 2015, an Action Plan for the Circular Economy to boost employment, innovation and investment and to develop a sustainable, low carbon, resource efficient and competitive economy, and presented a report on its implementation on March 4th 2018, it is surprising that the EU legislator has not established by that time a legal definition of “circular economy”. Mainly because the measures adopted by waste regulations at European level aim to facilitate the transition to a circular economy and guaranteeing the Union’s long-term competitiveness, as laid down in article 1 of the Directive (EU) 2018/851 (<https://www.lexology.com/library/detail.aspx?g=6aa8a7d7-abb1-4511-b1e1-c07f05c767be>).

With all that said, on the European Parliament's webpage ([www.europarl.europa.eu/portal/en](http://www.europarl.europa.eu/portal/en)), the circular economy is defined as "The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the life cycle of products is extended. In practice, it implies reducing waste to a minimum. When a product reaches the end of its life, its materials are kept within the economy wherever possible. These can be productively used again and again, thereby creating further value" (Figure 1).



Source: <https://www.europarl.europa.eu/news/en/headlines/economy/20151201STO05603/circular-economy-definition-importance-and-benefits>

**Figure 1. Circular economy**

Through the 11 March 2020 press release from Brussels, the European Commission announced that it has adopted a new Circular Economy Action Plan - one of the main building blocks of the European Green Deal, Europe's new agenda for sustainable growth. With measures along the entire life cycle of products, the new Action Plan aims to make the EU economy fit for a green future, strengthen its competitiveness while protecting the environment and give new rights to consumers. Building on the work done since 2015, the new Plan focuses on design and production for a circular economy, with the aim of ensuring that the resources used are kept in the EU economy for as long as possible. The plan and the initiatives therein will be developed with the close involvement of the business and stakeholder community.

The Circular Economy Action Plan put forward as part of the EU Industrial Strategy presents measures to:

- **Make sustainable products the norm in the EU.** The Commission will propose legislation on Sustainable Product Policy, to ensure that products placed on the EU market are designed to last longer, are easier to reuse, repair and recycle, and incorporate as much as possible recycled material instead of primary raw material. Single-use will be restricted, premature obsolescence tackled and the destruction of unsold durable goods banned.

- **Empower consumers.** Consumers will have access to reliable information on issues such as the reparability and durability of products to help them make environmentally sustainable choices. Consumers will benefit from a true ‘Right to Repair’.
- **Focus on the sectors that use the most resources and where the potential for circularity is high.** The Commission will launch concrete actions on:
  - **electronics and ICT** – a ‘Circular Electronics Initiative’ to have longer product lifetimes, and improve the collection and treatment of waste;
  - **batteries and vehicles** – new regulatory framework for batteries for enhancing the sustainability and boosting the circular potential of batteries;
  - **packaging** – new mandatory requirements on what is allowed on the EU market, including the reduction of (over)packaging;
  - **plastics** – new mandatory requirements for recycled content and special attention on microplastics as well as biobased and biodegradable plastics;
  - **textiles** – a new EU Strategy for Textiles to strengthen competitiveness and innovation in the sector and boost the EU market for textile reuse;
  - **construction and buildings** – a comprehensive Strategy for a Sustainably Built Environment promoting circularity principles for buildings;
  - **food** – new legislative initiative on reuse to substitute single-use packaging, tableware and cutlery with reusable products in food services.
- **Ensure less waste.** The focus will be on avoiding waste altogether and transforming it into high-quality secondary resources that benefit from a well-functioning market for secondary raw materials. The Commission will explore setting an EU-wide, harmonised model for the separate collection of waste and labelling. The Action Plan also puts forward a series of actions to minimise EU exports of waste and tackle illegal shipments ([https://ec.europa.eu/%20commission/presscorner/detail/en/ip\\_20\\_420](https://ec.europa.eu/%20commission/presscorner/detail/en/ip_20_420)).

Furthermore, on 16 January 2018, the European Commission published a press release on a monitoring framework for the circular economy. This framework is made up of ten indicators grouped into four aspects of the circular economy: (1) production and consumption, (2) waste management, (3) secondary raw materials, and (4) competitiveness and innovation. It is meant as a tool to follow key trends in the transition towards a circular economy, to assess whether measures in place have been effective, and to help identify best practices in Member States. The indicators will be updated by Eurostat, and are available on a dedicated website (<https://www.europarl.europa.eu/legislative-train/theme-new-boost-for-jobs-growth-and-investment/file-monitoring-framework-for-the-circular-economy>).

As can be observed, one of the reference areas for the transition to a circular economy is represented by secondary raw materials.

## 2.2. Secondary raw materials

Recycling is a prior condition for a circular economy – resources and materials can be recycled, given back to the economy and used again. What was once considered waste can become a precious resource. In order to capitalize on the potential of so-called secondary raw materials, we have to eliminate existing barriers to their commercialization, to improve waste management practices and guarantee high quality standards. Only then will the industrial sector be able to completely capitalize on secondary raw materials and contribute to assuring their safe provision.

In a circular economy, materials contained by products at the end of their lifecycles should be recovered through dismantling and recycling. Reintegrating these materials at the beginning of products' lifecycles reduces their impact on the environment and production costs. (<https://cdn.uc.assets.prezly.com/125a96dd-16e4-4943-9614-0e96a613b66d/-/inline/no/>).

So-called secondary raw materials (SRMs) are scraps from processing raw materials or materials derived from the recovery and recycling of waste. SRMs derived from the residues of production processes are, generally, recovered directly in the factories. Therefore, the cycle unfolds directly inside production spaces.

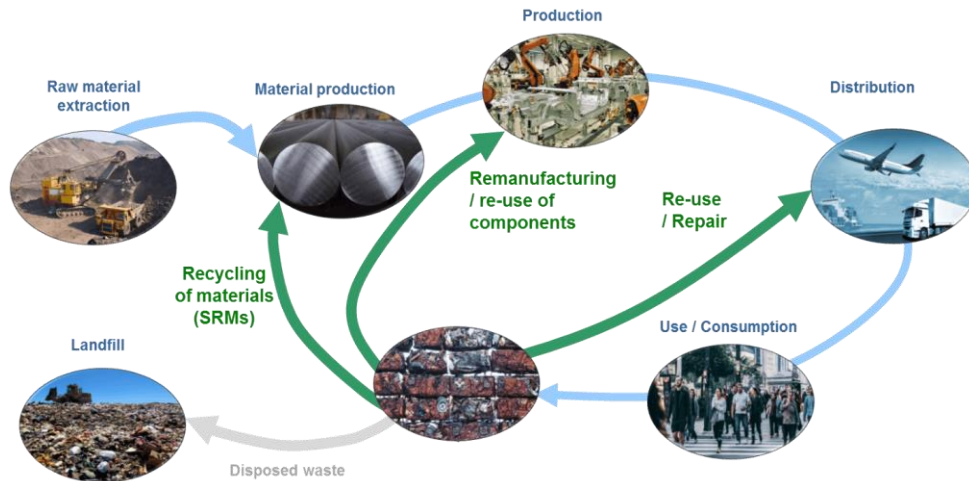
Another way to obtain these SRMs is the recovery and/or recycling of waste, a process which, therefore, takes place downstream from the products selling and consumption phases. Some materials have been recovered as secondary raw materials for a very long time (ferrous materials, for instance, which have always been recovered and resmelted), while for other materials the recovery as secondary raw materials is more recent; such is the case for glass, paper, and plastic materials whose separate collection permits the transformation of waste from problem to resource.

Once again, SRMs have no clear legal definition on the European Union Community level. Technically, SRMs can be identified as materials that can be recycled and then injected back into the economy as new raw materials. SRMs are typically obtained either from production waste or from End-of-Life (EoL) products, sent to recycling plants at the end of their lifespan. In the context of a circular economy, SRMs can be traded and shipped just like primary raw materials from traditional extractive resources, increasing the security of supply (CE, 2015).

The use of secondary raw materials presents a number of advantages, including increased security of supply, reduced material and energy use, reduced impact on the climate and the environment, and reduced manufacturing costs. However, the use of secondary raw materials faces a number of barriers, including the absence of EU-wide quality standards for certain materials (such as plastics), difficulties linked to the trading of secondary raw materials across the EU, and potential presence of chemicals of concern in recycled materials (<https://www.europarl.europa.eu/legislative-train/theme-new-boost-for-jobs-growth-and-investment/file-strategy-for-secondary-raw-materials>).

Preoccupation with SRMs has prompted the European Commission to identify a strategy to ensure sufficient access to raw materials based on three pillars, of which the third one is *improving resource efficiency and recycling*. This strategy was presented in 2008 in a press release called “The Raw Materials Initiative” (CEC,

2008). The importance of this strategy was re-enforced in the 2015 release “Closing the loop - An EU action plan for the Circular Economy”. The actions proposed in the Circular Economy Action Plan aim to support the circular economy in each step of the value chain – from production to consumption, repair and remanufacturing, waste management, and SRMs that are fed back into the economy, as can be observed in Figure 2 (<https://rmis.jrc.ec.europa.eu/?page=policies-and-definitions-2d5b5e>).



Source: <https://rmis.jrc.ec.europa.eu/?page=policies-and-definitions-2d5b5e>

**Figure 2. Closing the loop**

As has been previously shown, the European Commission monitors the progress registered by member states in their transition towards the circular economy through a set of indicators, available in the Eurostat database. In the case of SRMs a relevant indicator is “Circular material use rate”.

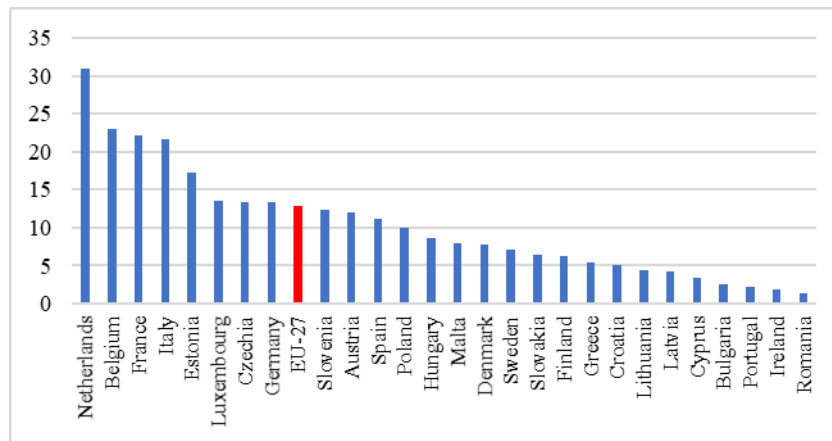
**Table 1. Circular material use rate in the EU in 2020**

Country	Indicator (%)	Country	Indicator (%)	Country	Indicator (%)
Belgium	23	France	22,2	Netherlands	30,9
Bulgaria	2,6	Croatia	5,1	Austria	12
Czechia	13,4	Italy	21,6	Poland	9,9
Denmark	7,7	Cyprus	3,4	Portugal	2,2
Germany	13,4	Latvia	4,2	Romania	1,3
Estonia	17,3	Lithuania	4,4	Slovenia	12,3
Ireland	1,8	Luxembourg	13,6	Slovakia	6,4
Greece	5,4	Hungary	8,7	Finland	6,2
Spain	11,2	Malta	7,9	Sweden	7,1
EU-27	12,8				

Source: [https://ec.europa.eu/eurostat/databrowser/view/CEI\\_SRM030/default/table?lang=en&category=cei.cei\\_srm](https://ec.europa.eu/eurostat/databrowser/view/CEI_SRM030/default/table?lang=en&category=cei.cei_srm)

The indicator, according to the Eurostat definition, measures the share of material recycled and fed back into the economy - thus saving the extraction of primary raw materials - in overall material use. The circular material use, also known as circularity rate, is defined as the ratio of the circular use of materials to overall material use. The most recent values of this indicator available on Eurostat are at the level of 2020 (Table 1.).

As can be observed, the EU average is 12.8%, a fairly low rate when taking into account that it is desired for the share of material recycled and fed back into the economy to be as high as possible. Compared with the average, the Netherlands have an almost three times larger rate, followed by three states close to it, between 21.6% in the case of Italy and 23% in the case of Belgium, as can be seen in Figure 3.



**Figure 3. Circular material use rate in the EU in 2020**

Unfortunately, 19 out of 27 member states register values below the European average. On the last three places are Portugal, Ireland and Romania. With a rate of only 1.3% Romania is at the bottom of the ranking, indicating the fact that it still has a long way to go in its transition towards a circular economy and in the use of SRMs.

### **3. THE NECESSITY OF ADOPTING THE CIRCULAR ECONOMY MODEL IN THE TEXTILE INDUSTRY**

The textile industry is one of the largest industries in the world. Its supply-chain includes agriculture, manufacturing, processing, fabric care, use, recycling and disposal. Nearly all countries are involved in the textile industry, though the actual involvement can vary from textile and product design and development of manufacturing technologies, to actual production and shipping to numerous locations. However, all countries face the growing problem of textile waste management directly linked to unsustainable textile production and use (HEJ Support).

In a press release from 2020 called “A new Circular Economy Action Plan For a cleaner and more competitive Europe” (CE, 2020), the European Commission

considers textiles to be the fourth highest-pressure category for the use of primary raw materials and water, after food, housing and transport. It is estimated that less than 1% of all textiles worldwide are recycled into new textiles.

In the light of the complexity of the textile value chain the Commission wants to propose a comprehensive EU Strategy for Textiles, based on input from industry and other stakeholders. This strategy will aim to strengthen industrial competitiveness and innovation in the sector, boost the EU market for sustainable and circular textiles, including the market for textile reuse, address fast fashion and drive new business models. This will be achieved, according to the Commission, by a comprehensive set of measures, including:

- applying the new sustainable product framework to textiles, including developing ecodesign measures to ensure that textile products are fit for circularity, ensuring the uptake of secondary raw materials, tackling the presence of hazardous chemicals, and empowering business and private consumers to choose sustainable textiles and have easy access to reuse and repair services;
- improving the business and regulatory environment for sustainable and circular textiles in the EU, in particular by providing incentives and support to product-as-service models, circular materials and production processes, and increasing transparency through international cooperation;
- providing guidance to achieve high levels of separate collection of textile waste, which Member States have to ensure by 2025;
- boosting the sorting, reuse and recycling of textiles, including through innovation, encouraging industrial applications and regulatory measures such as extended producer responsibility.

However, beyond the concern of public authorities there is a need, as is shown by the European Environment Agency in the document titled “Textiles in Europe's circular economy” (EEA, 2019), for the implication of private companies. In the document it is specified that recently, circular business models focusing on circular textile design, sharing, recycling and reuse of textiles have surfaced. Such business models cannot be upscaled in isolation - that is why a change in the whole system is necessary, supported by regulation and other policies.

Furthermore, education and behavioural changes are an important part of the shift towards circular textiles to bring about behavioural change across the entire system — from production and processing to transport, consumption and waste.

The EEA envisages the circular economy as one in which circularity is ensured in all phases of the lifecycle, including materials, eco-design, production and distribution, consumption and stock, and waste. The choice of materials and the design influence the environmental and climate impacts of textiles and the end-of-life options available in future. Circular business models need to be systematically scaled – and supported by policies - to enable sustainable sourcing of synthetic and natural fibres, including recycling and reuse of materials.

A strong focus on sustainability in design education curricula would be a powerful spur for a change in design culture. Extended producer responsibility is an



option already used in other sectors to make producers responsible for the materials used throughout their products' whole lifecycle.

In the use phase, business models should encourage collaborative consumption and longer use, e.g. by supporting leasing rather than buying, sharing platforms, take-back and resale, and second hand stores, and by revaluing repair and maintenance.

Education of consumers and the use of labelling play an important role in encouraging more sustainable textile use, such as reduced consumption, longer use and better maintenance.

In the collection, recycling and waste treatment stages, it is important that circular business models enable recycling and reuse. Investment is needed to ensure sufficient capacity. EU policies oblige Member States to:

- collect textiles separately by 2025;
- ensure that waste collected separately is not incinerated or landfilled.

Policies must also encourage setting up systems for repair and reuse of textiles to prevent waste in the first place. EU and national policymakers could consider future waste management targets, extended producer responsibility, and collection and take-back schemes.

## **4. THE BUSINESS MODEL OF THE H&M GROUP – EXEMPLE OF GOOD PRACTICES IN USING SRMs**

### **4.1. A short overview of the H&M Group**

From info available on the website ([www.hm.com](http://www.hm.com)), as well as in the Annual report for 2020 of the H&M Group, we have managed to create an overview of the beginnings of this company, and especially of the evolution of its operation up to the present.

In 1947 Erling Persson opened a ladieswear store called Hennes with the idea of making fashion available and affordable to all. The store in Västerås would soon be followed by more. Today, the Swedish H&M Group is a global design company with brands in 74 markets.

All 8 brands developed by the company over the years have their own unique identity, and they complement each other well. Together they offer a great variety of styles and trends within fashion and accessories, beauty and sportswear as well as interiors. While increasing the share of recycled or other more sustainably sourced materials the brands are also offering customers several services to make a sustainable lifestyle accessible to more people.

Furthermore, the brands are reaching customers around the world – through online, stores, digital marketplaces and external platforms. H&M Group expansion is taking place with a focus on omnichannel sales. Physical and digital channels are being increasingly integrated, and the store portfolio is being further optimised to ensure a relevant presence in each market and the best experience for H&M customers.

The H&M Group's vision for sustainability is to lead the change towards circular and climate positive fashion while being a fair and equal company. The sustainability strategy is produced jointly with external and internal experts. The

sustainability work spans the entire value chain, focusing both on groups' own operations and, together with other stakeholders, the industry in general

More than that, the H&M Group aims to be climate positive throughout its value chain by 2040. The main priorities for getting there are increased energy efficiency, renewable energy and carbon sinks that can absorb unavoidable greenhouse gas emissions. The ambition to become fully circular is fundamental to H&M Group's climate work (<https://hmgroupp.com/about-us/h-m-group-at-a-glance/>).

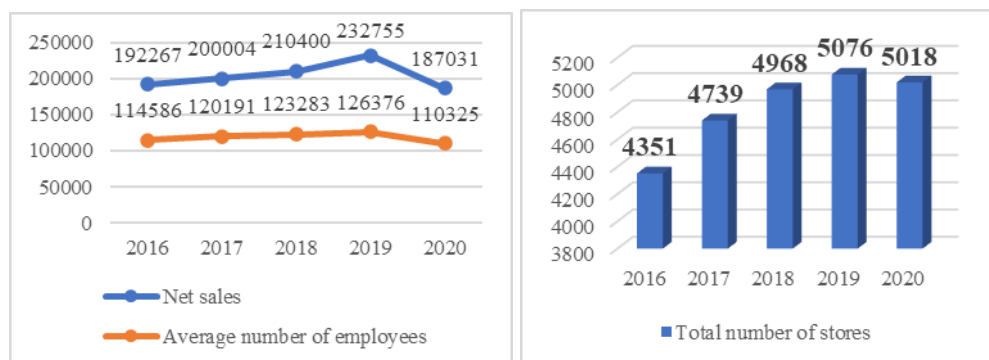
Companies within the fashion industry operate in an extremely competitive market at the national, regional and global levels. Consequently, companies find it challenging to differentiate and position themselves in consumers' minds. It is for this reason, that it is necessary for companies to constantly reinvent and adapt their products and business processes to gain an advantage over the competition. Today, innovation and the introduction and application of new ideas in companies' business is a strategic ability. This is the case for the H&M Group as well, which has, over the course of four consecutive years, in 2016-2019, registered a constant rise in the number of stores, average employee count and net sales, as can be observed from the data presented in Table 2 and Figure 4.

**Table 2. Key figures of H&M Group activity in 2016-2020**

Indicators \ Year	2016	2017	2018	2019	2020
Net sales, SEK m*	192,267	200,004	210,400	232,755	187,031
Operating profit, SEK m*	23,823	20,569	15,493	17,346	3,099
Profit after tax, SEK m*	18,636	16,184	12,652	13,443	1,243
Total number of stores	4,351	4,739	4,968	5,076	5,018
Average number of employees	114,586	120,191	123,283	126,376	110,325

\* SEK m - Swedish Krona in millions

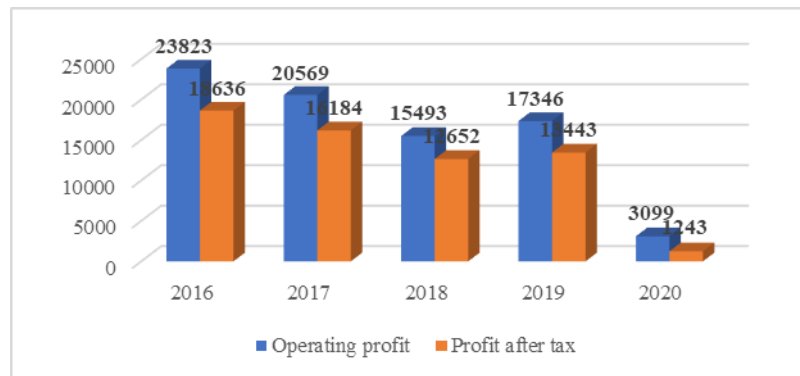
Source: *H&M Group, Annual report 2020, p. 18*



**Figure 4. Evolution of net sales, average number of employees and total number of stores of the H&M Group in 2016-2020**

All that said, regarding profitability indicators (Figure 5), 2018 has seen a drop due to, on one hand, problems faced by the entire fashion retail sector, and on the other

hand its own issues in connection with the implementation of logistic systems in some important markets, which led to higher costs. However, the company considers that although these costs had a negative impact on earnings and profit, they will result in a range of improvements for customers (H&M Group, Annual report 2018, p. 47). H&M has managed to put this moment behind, thus 2019 has brought growth over the preceding year for all key company figures, as can be seen in Figure 4 and Figure 5.



**Figure 5. Evolution of operating profit and profit after tax of the H&M Group in 2016-2020**

Unfortunately, the continuation of development in 2020 was significantly impacted by the severe negative effects of the Covid-19 pandemic. As a result of the H&M Group's transformation work and many years of investments focusing on digital, this contributed to the company being well equipped to handle the great challenges that the Covid-19 situation would bring. With the onset of the first wave of the pandemic stores were temporarily closed in many markets as a result of extraordinary social measures to reduce the spread of infection. (H&M Group, Annual report 2020, p. 36)

#### **4.2. Examples of good practices of the H&M Group regarding the transition to the circular model and the use of SRMs**

Through a declaration called "H&M Group position on waste as a resource and a secondary raw materials market for the textile and fashion industry", released in April 2021, the company made public its stance regarding the necessity of transitioning from the linear model to the circular one in the textile and fashion industry. More than that, the Group highlights the role the EU needs to have through its initiatives, strategies and regulations, so that a functioning secondary raw materials market for textiles can exist as soon as possible. The most relevant aspects of this declaration will now be presented.

The H&M Group is a firm believer of the EU Green Deal and the green recovery as the only responsible way out of the crisis. The H&M Group is committed to tackle climate change, resource depletion and biodiversity loss. The Group set the goal to become climate positive throughout the entire value chain by 2040 at the latest.

One of the levers to deliver on these targets is to become 100% circular in all business operations. By 2030, the company aims for 100% of its materials to be either recycled or sourced in a more sustainable way, including 30% recycled materials by 2025. In addition, they want to prioritise prolonging the life of garments by keeping pre-loved garments in use for as long as possible through investing in new circular business models.

The H&M Group believes that the transition from a linear to a circular model will require that all policies be reoriented towards prolonging product life and recirculation of resources in a safe and transparent manner. A circular and sustainable textile and fashion model must be based on two pillars:

1) Circular design requirements to make products more durable and recyclable according to product purpose, that design out waste and pollution, keep products and materials in use, and regenerate natural systems, and

2) A functioning secondary raw materials market ensuring post-consumer products' value is retained through prolonging product use and recycled back into new quality products at end of life.

The prolonging of product life and recirculation of materials is a key piece of the puzzle to limit the environmental impact of production as much as possible, as well as a valuable resource for new circular products. By circular products we mean products that are made to last, from safe, recycled and sustainably sourced inputs, that can be recirculated multiple times. The H&M Group has started this journey operating take back systems for garments and textiles since 2013. But to fully scale and realise the needed recirculation of products and materials, a functioning secondary raw materials market for textiles will be required. This can be done by:

- establishing EU-wide harmonised Extended Producer Responsibility (EPR) obligations to enable collection, sorting and recycling across the EU; including establishing common and effective EU definitions on specific circular terms, such as durability, reparability and recyclability.
- defining post-consumer textiles as resources and defining end-of-waste criteria for textiles in line with the EU waste hierarchy. This would enable collected textiles to be a resource and a valuable asset for the industry and the future circular economy.
- ensuring that the free movement of textile resources for sorting, preparation for reuse or recycling is simplified within the EU and globally in the revised Waste Shipment Regulation, but also guaranteeing sound environmental treatment in the receiving country.
- urgently building up the needed recycling capacities up to scale and standardise sorting, collection and recycling infrastructures and practices across the EU.

Furthermore, the group is of the opinion that there needs to be created effective markets for new business models that are based on extending the life of products (e.g. leasing and resale) and enabling recycled materials to become price competitive with virgin ones, e.g., through taxes or levies that incentivise the uptake of recycled materials. It is necessary to enable simple and efficient collection systems for consumers and to keep strengthening consumers' awareness on the importance of

extending the life of and taking care of products and delivering them for collection. The H&M Group is committed to playing a key role in these efforts.

The determination of the H&M Group to transform its business model into a circular one and to use secondary raw materials as basis for new clothing lines can be highlighted through a few examples of initiatives and innovations which can form the basis for the revolutionising of the whole textile and fashion industries (<https://hmgroup.com/sustainability/sustainability-reporting/#reuse-in-focus>). Thusly:

#### *Initiatives*

The biggest part of the fashion industry's environmental footprint comes in the production phase. So, when a garment is reused or resold, the lifespan of the product increases. Also, when substituting a purchase of a new product for a used one, valuable resources are saved and CO<sub>2</sub> emissions decrease. That is why the H&M strategy is to offer its clients the possibility to reduce their carbon footprint in convenient and attractive ways.

- One way to bring in new looks and styles without producing new products is through resale. The H&M Group is exploring a number of resale concepts for its brands, both online and in store. One exciting initiative is COS Resell, which was launched in the UK and Germany during the autumn of 2020. The platform allows customers in these markets to buy and sell pre-owned items online.

- Another initiative is a subscription rental programme for kids' clothing at ARKET, which was launched in January 2021. Existing initiatives within the group continue to thrive, such as Weekday's resell consignment programme in Sweden, Afound's second-hand and vintage online categories, as well as H&M's rental services for its Conscious Exclusive collection.

- Repairing damaged goods is another way to increase the use of products and prolong their lives. H&M's Take Care programme offers customers tips and hacks for making their clothes look great for many years to come.

#### *Innovations*

- In the future the goal is to manufacture all products in a circular way, for example by taking the fibres from recycled garments and turning them into a new fabric, or by using waste from production to make new materials. This kind of closed-loop system decreases the use of scarce natural resources. One example is the **Green machine**, a technology that can, for the first time ever, fully separate and recycle cotton and polyester blends at scale. In November 2020, Monki was first in the world to launch a collection using the Green Machine system.

- Another game changing recycling innovation launched in 2020 was the **Loop machine**, which transforms old garments into new ones – without the added environmental cost. The system recaptures valuable raw materials in recycled clothing and regenerates them back into fibres that are spun into new yarn and knitted into new clothes. The Loop machine is placed at H&M's flagship store in Stockholm.

## **5. CONCLUSIONS**

Today we live in a globalized world where production and consumption have long since outgrown national borders. It is for this reason that concern towards

protecting the environment and efficient waste management is not included solely in the agenda of governments, but implicates to the same degree consumers, producers, and regional and international organisations.

At the level of the European Union the new Circular Economy Action Plan is meant to make the EU economy fit for a green future. An important element within this plan is the use of secondary raw materials in the production process, especially in industries where the potential for circularity is high. This is the case for the textile and fashion industries as well, where measures contained in the EU Strategy for Textiles are meant to strengthen competitiveness and innovation in the sector and boost the EU market for textile reuse.

The H&M Group is, through its size and standing, one of the largest competitors on this market. The group's vision for its business model to lead the change towards circular and climate positive fashion. It is important to note that the company has gone from words to action through initiatives and innovations which represent examples to be followed for all concerned with the fashion industry, including consumers. More than that, the H&M Group, which operates in 74 markets, has identified various problems which it faces within its entire logistical system, and has made public its stance regarding the necessity for the existence of a secondary raw materials market for textiles within the European Union. The Group has also proposed a series of measures which must be included in European initiatives, strategies and regulations so that this market will be functional as soon as is possible.

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