



# A precious transition

Demanding more transparency and responsibility  
in the watch and jewellery sector

Environmental rating and industry report 2018

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## Foreword



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Sustainability is no longer a niche topic - on the contrary. As one of the megatrends of our time, it is increasingly finding its way into businesses, and studies show that the majority of CEOs place a high importance on sustainable development. They are convinced that it will have a growing impact on their business model and they recognise the necessity of integrating sustainability into their companies. However, despite these increasing commitments to sustainable business practices, the initiatives are not yet sufficiently effective to address current and future sustainability challenges. One of the main reasons is the lack of effectiveness in corporate commitment and thus the missing holistic integration. Too often, sustainability is only seen as an add-on topic or communication initiative. The absence of impact is the logical consequence.

In its role as one of Switzerland's flagship industries, the position of the Swiss watch and jewellery sector is one of great responsibility, which provides those within the sector the opportunity to consciously generate a positive impact on society, nature and the economy – something that is essential if broader development objectives (i.e. the UN Sustainable Development Goals) are to be achieved. The watch and jewellery sector has made a significant contribution to social prosperity and economic growth in Switzerland and is an important representative of the country's culture and history; with its pioneering spirit, precision and long-lasting tradition. Thus, taking the importance of the industry and its responsibility into account, dealing with the topic of sustainability should change fundamentally. Not only in favour of ecologically and socially responsible development, but also out of strategic considerations for the companies themselves. In other words, effective sustainability is equivalent to "future security", an aspect that every CEO should be seriously interested in.

Climate change, for instance, affects every company that causes high CO<sub>2</sub> emissions along its value chain. If the objectives of the Paris Agreement (2015) are to be reached, regulations to curb current CO<sub>2</sub> levels must be defined in accordance with the targets set. In the wake of such possible future governmental requirements, the consequences for companies can include major financial and competitive risks, as currently exemplified by the diesel scandal in the automotive industry. Early consideration of the internalisation of caused externalities is therefore not only a contribution to positive ecological development but can also be of great strategic relevance for each company. Sustainability risks and opportunities are further influenced by changing social expectations and technological developments. Digitisation, for instance, enables the development of new approaches to transform sustainability challenges into business opportunities. At the same time, it increases the risk of detecting unsustainable practices through increased transparency, which in turn negatively impacts society's growing demand for more sustainability.

To ensure a sustainable development, the key lies in the strategic integration of sustainability. Companies should focus on using their core competencies to develop effective solutions for key economic, environmental and social challenges within the framework of their core business. By focusing on "material" topics, sustainability becomes a key element of the business model and thus of profit making, which leads to the required holistic integration of sustainability. The right combination of core competencies and sustainability challenges has a positive impact on business success in terms of increasing sales, reducing costs or enhancing reputation.

I hope that CEOs will recognize the opportunity for their companies and set out on the path to holistically effective sustainability. Strategies, methods and expertise for this path are available and must be used. Space for innovation always exists when there is opportunity to proactively move forward, and the development of a business is generally much more difficult by retrospectively adapting to market changes. The Swiss watch and jewellery industry has proven its innovative and forward-looking approach multiple times in its history and the time is now, to actively deal with sustainability and its role in securing the sector's future.

## Executive Summary

The watch and jewellery industry offers the highest aspirations regarding craftsmanship and tradition. However, the sector also generates ecological and social impacts and does not meet good environmental standards. Switzerland plays a more important role than many might think. The country hosts world-renowned luxury watch and jewellery companies and is the global leader in the gold refining market. Around half of the largest luxury watch brands are Swiss and between 60% and 70% of the globally mined gold physically travels through Switzerland to be refined (~2,400t in 2017<sup>1</sup>).

Due to these aspects and the important role the industry plays, WWF Switzerland asks **how the watch and jewellery brands will present solutions to align luxury goods with a contribution to the well-being of society and the environment.**

This report and industry rating aims to improve the sustainability performance of Swiss watch and jewellery brands by focusing on their global value chain, particularly on the sourcing of critical raw materials such as gold. It will show how more ambitious companies are improving the current state and perception of the sector, how others still lag behind what is considered a sustainable and responsible business and what is generally needed to reduce the sector's impact on the environment.

## Taking responsibility for ecological and social impacts

The ecological and social impact of the watch and jeweller industry is bigger than might be apparent at first glance, mainly through its sourcing of raw materials. The demand for vast amounts of precious raw materials and the **lack of transparency** among most companies is of great concern. The sourcing of raw materials, such as gold, is accountable for **large environmental footprints, including the pollution of air and water, soil degradation, landmass movements and deforestation. Enormous inputs of toxic substances and land transformation** are responsible for the fragmentation and destruction of ecosystems and have immense negative effects on fresh water, forests and wildlife.

Increasing transparency and more ambitious sustainability approaches need to be higher on the priority list of companies in the watch and jewellery sector. The industry uses over 50% of annual gold production (>2'000t), for instance, and in most cases the companies are not able to demonstrate where their raw materials comes from and that they were not responsible for dramatic environmental degradation and human rights violations.



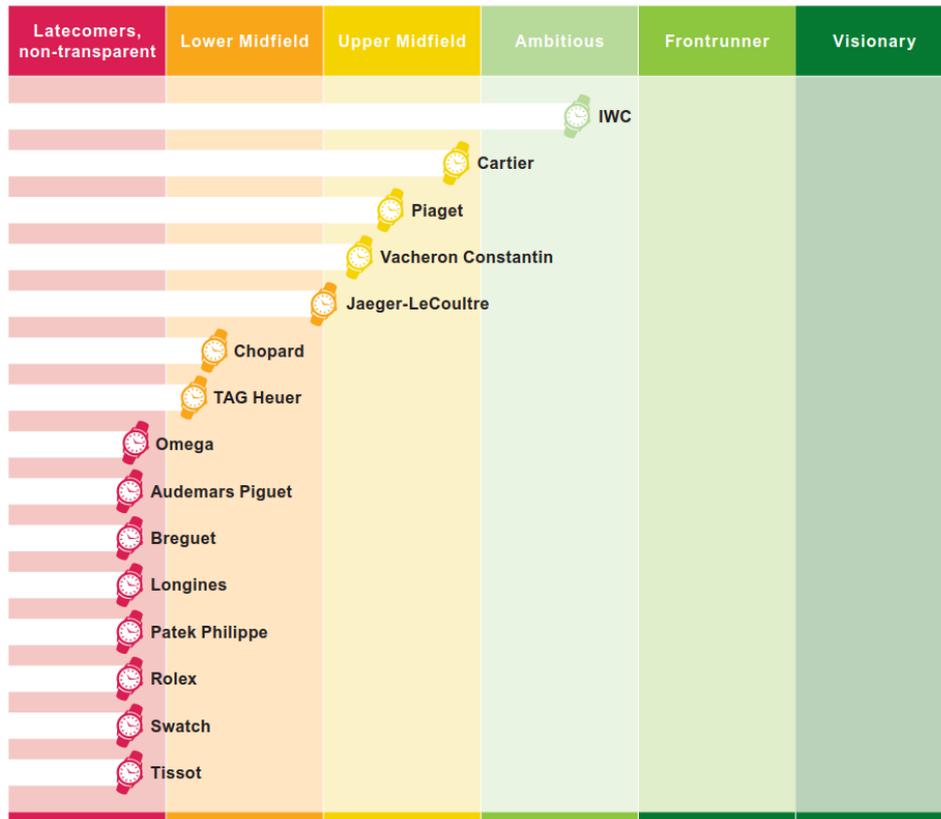


Figure 1: Results of environmental rating

### Environmental Rating of the 15 biggest Swiss watch companies

Together with the sustainability consulting agency BHP - Brugger and Partner, WWF Switzerland has analysed the environmental stewardship of the 15 biggest watch companies<sup>2</sup> based in Switzerland. The rating questionnaire reflects a comprehensive set of sustainability issues, such as sustainability strategy and targets, due diligence, sustainable supply chain management, greenhouse gas emissions and stakeholder engagement. The rating focuses on environmental topics only, since this is WWF's area of expertise.

Among the 15 assessed companies, six took the opportunity to comment on and complement WWF's pre-assessment while the remaining nine companies did not complement the initial rating and therefore needed to be evaluated based only on publicly available data. The results show that none of the surveyed companies was ranked as a frontrunner, illustrating the rather low level of ambition in the sector overall. Among the evaluated companies, the brands from the Richemont Group (Cartier, IWC, Jaeger-LeCoultre, Piaget and Vacheron Constantin) are the only ones that managed to achieve a better score ("Upper Midfield" or above). Most brands were ranked either in the "Lower Midfield" or as "Latecomers / Non-transparent" since almost no information could be found on how they consider relevant social and environmental issues and challenges in their business practices. The more detailed results illustrate that most of the companies have not taken any appropriate steps to

address and counter climate change. There are significant gaps regarding the sourcing and use of sustainable raw materials, the setting of forward-thinking strategies and targets, and the provision of more transparency in this highly secretive industry. The results also show that few companies recognise their responsibility and that action and more transparency towards sounder environmental management are needed. Moreover, the overall findings are highly worrying, and prove that it is time for change. WWF therefore calls upon companies to make improvements in the following material areas: (1) devising strategies to operate within the planet's ecological boundaries; (2) exercising due diligence in sourcing; (3) managing supply chains responsibly and sustainably; (4) providing transparency and communication; (5) exercising joint environmental management within the industry; and (6) encouraging stakeholder engagement.

### Changing towards sustainable practices

Numerous current developments underpin the need for action in the sector, and upcoming political requirements and mandatory obligations (e.g. the Responsible Business Referendum) might soon bring the watch and jewellery brands into the spotlight of media, governments and consumers regarding their environmental and social impact along the supply chain. At this point, improving efficiencies will neither be enough to operate within planetary boundaries nor to achieve the Sustainable Development Goals by 2030<sup>3</sup>.

This report shows examples of how some actors in the industry are driving more sustainable processes, setting new directions in transparency and addressing social responsibility in the watch and jewellery sector. Seeking and promoting ambitious, sustainable solutions to transform this secretive and tradition-conscious industry are essential. A few determined brands and start-ups have set out to rethink current norms and practices and are striving to do business within our planet's ecological boundaries. These first-movers hold the potential for pulling the industry away from its harmful, opaque standards and are leading the way towards more sustainable watch and jewellery making. This report further draws attention to sustainable sourcing, transparent reporting and environmental target setting, as well as to innovative business models, products and processes.

### Gold as an illustration of the industry's sustainability issues

Gold represents the focus of this report when it comes to the issues in sourcing raw materials. However, it must be stressed that **gold will simply serve as an illustration of the lack of transparency, the ecological issues along the value chain and the general sustainability challenges the watch and jewellery industry is facing**. Neither does gold sourcing affect all companies nor is it considered the only environmental challenge. The use of leather, gemstones, plastic and many other metals and materials often poses similar threats to the environment, but a more detailed analysis of all relevant raw materials would have gone well beyond the scope of this report and gold represents a great and highly relevant example for the Swiss market.

### The power of consumers

The report has also gathered suggestions on how consumers can contribute to reducing the industry's environmental impact. How each person can have a positive impact is listed below:

- **Ask for recycled and always recycle:** Metals and many other materials are a reusable resource. By recycling and buying recycled metals, for example, we avoid the need for mining and therefore the use of additional natural resources.
- **Ask for certifications and transparency:** Whether the materials are recycled or newly extracted, we should always ask about their origin and sustainability certification.
- **Reuse and repair:** Whenever possible, we should maintain, repair and reuse products. When certain goods are no longer needed or wanted, we might be able to redesign, reuse, or return the raw materials for recycling.
- **Consume sufficiently:** Before each purchase, we as consumers should consider whether we really need this product. We should also apply a more conscious, considered shopping routine with a stronger focus on high quality and durability.

This report – together with follow-up reports for the tracking of progress – should be regarded as an encouraging and constructive contribution to the sector's transformation towards more transparency and responsibility. WWF plans to repeat this rating in two to three years to track the industry's progress.





## Introduction - Increasing responsi- bility in the watch and jewellery sector

## A risky black-box

Brands in the watch and jewellery sector offer luxury, individuality and status symbols. They sell the highest aspirations regarding craftsmanship and tradition. The sector has been growing steadily in recent years and generates annual revenues of more than US\$ 300 billion<sup>4</sup> worldwide. Switzerland is an important global player in the sector, as it hosts around half of the largest luxury watch companies. It is also the global leader in gold refining: around two-thirds of globally mined gold physically travels through Switzerland for this purpose.

Every year, the watch and jewellery sector uses more than 50% of global gold demand (>2,000 tonnes)<sup>5</sup> and 67% of the newly mined rough diamonds produced globally (90 million carats)<sup>6</sup>.

The sourcing of these precious raw materials is accountable for large environmental footprints, including **air and water pollution, soil degradation, landmass movements and deforestation**. Enormous **chemical inputs** and **land transformation** are responsible for the **fragmentation and destruction of ecosystems** and have **vast negative effects on fresh water, forests and wildlife**. These footprints of the operations are often neglected when buying jewellery or a timepiece.

Like most industries, the watch and jewellery sector will face big challenges due to climate change, the increasing scarcity of resources and a rapidly growing world population. To overcome these challenges, new forward-thinking strategies must play a central role in the transformation of the watch and jewellery sector. WWF asks **how the watch and jewellery brands will present solutions to align luxury goods with a contribution to the well-being of society and the environment**.

## Risk of entanglement, non-compliance and need for due diligence

The results of the rating show that **most of the analysed brands are unable to demonstrate where their raw materials come from**, or that they are unwilling to communicate on the matter. Not being able to trace raw materials further back than to a tier 1 supplier, or not being able to demonstrate that the brand's gold providers are not involved in cutting down forests, polluting rivers or destroying wildlife, entails huge business risks and runs counter to the OECD's recommendations on exercising due diligence and on identifying, preventing, mitigating and accounting for adverse impacts in companies' operations, supply chains and other business relationships<sup>7</sup>.

It is beyond dispute that purely compliance-driven and risk-minimising approaches alone are no longer sufficient to meet the expectations of various stakeholder groups like the public, consumers, investors, employees, etc. with respect to environmentally responsible business practices. If a company only acts once its own products or business practices are being criticised or directly affected, it can no longer create trust. **Today, companies are expected to take a pro-active approach to combatting environmental risks through science-based strategies and relevant sector-specific reduction and development targets**.

## A call for transparency and responsibility

Advancing in transparency and traceability as well as taking responsibility for preventing negative impacts of a business are key factors in improving a company's performance in the sector. Yet they pose big challenges as they require physically tracking raw materials throughout the supply chain and collecting information on where, how and under what conditions the raw material in question is sourced. Brands have it in their hands to actively get involved and influence how large the negative environmental and social impacts in their supply chain will be. **If a company does not know where its raw materials are coming from, it might be (unintentionally) supporting tropical deforestation, violent conflicts, illegal trade, child labour, immense health hazards and numerous other adverse effects.** Consequently, companies in the watch and jewellery sector face huge challenges regarding due diligence and Swiss watch brands have environmental, social and human rights risks that they need to address and manage.

## Vision: Stop the degradation of the planet's natural environment and build a future in which people live in harmony with nature

WWF seeks to commit stakeholders from the watch and jewellery industry (e.g. manufacturers, retailers, consumers, refiners and the government) to finding innovative solutions to protect the environment, in particular forests, fresh water and wildlife that are currently threatened in several points of the sector's supply chain. Together, we will transform international markets by producing goods and services sustainably and we will encourage others to be sustainable consumers.

There is a long way to go to make this vision come true, but WWF believes it to be possible if the industry and related stakeholders take bold, ambitious steps towards transformation.

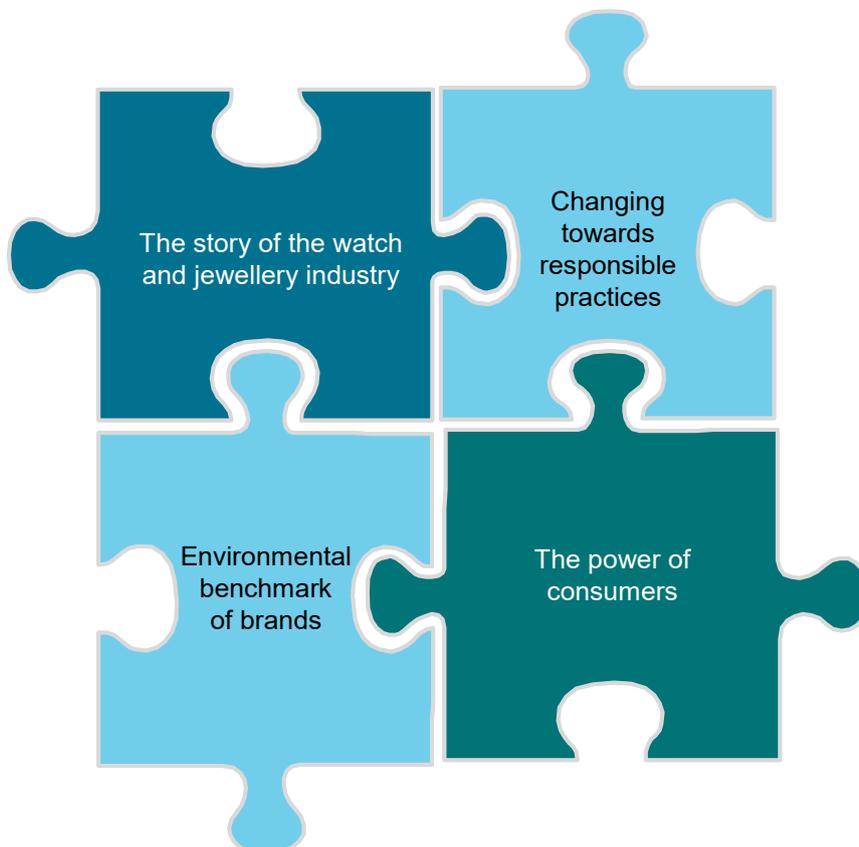


## We call on Swiss companies to act responsibly as role models

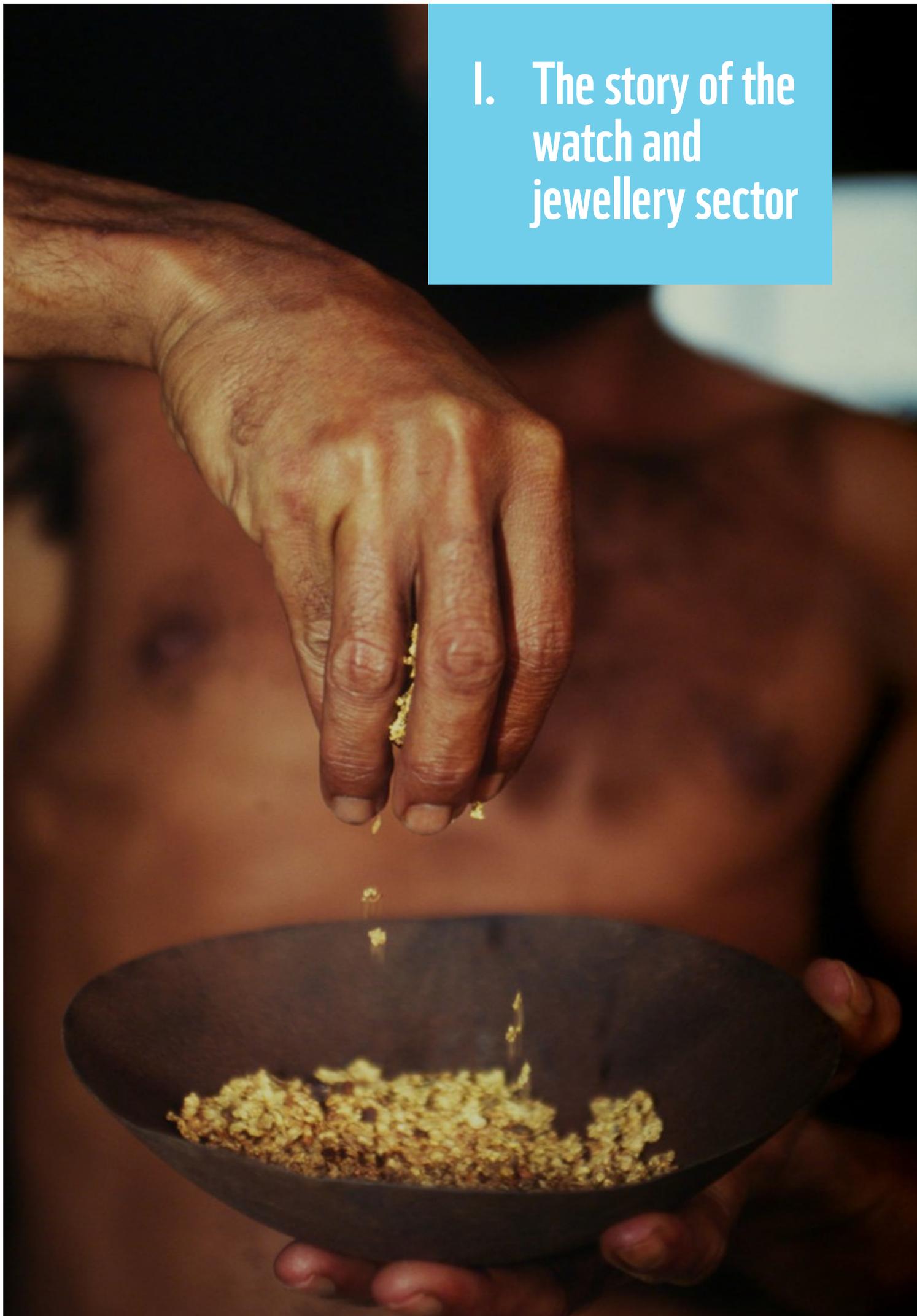
This report and industry rating aims to improve the sustainability performance of Swiss watch and jewellery brands by focusing on their sustainability strategies and supply chain management, particularly for the sourcing of critical raw materials, such as gold. Hence, the content is primarily directed towards watch and jewellery companies but, since consumers have obvious market power through their purchasing decisions, WWF has also included recommendations for consumers to have a positive impact on the sector's sustainability performance.

The structure of the report is as follows: The first chapter provides an overall picture of the watch and jewellery industry and the role that Switzerland plays. It explores the sector's value chain and key raw materials and illustrates the sector's main environmental impacts, with a special focus on gold extraction. The next chapter describes the results of the environmental performance benchmark of the 15 biggest Swiss watch brands. The third chapter explores how the sector can drive sustainable practices and what companies must do to work towards positive change. Finally, the last chapter offers recommendations for more sustainable consumer behaviour.

The focus in the report is on environmental issues. Social aspects and labour rights are not analysed in much detail. While WWF acknowledges the importance of social matters and the devastating and unacceptable conditions endured by many workers, especially in the mining industry, our expertise lies in improving the sector's environmental footprint. Organisations like Human Rights Watch, Society for Threatened People and Public Eye are dedicated to improving working conditions and supporting workers' empowerment. WWF strongly endorses their efforts.



# I. The story of the watch and jewellery sector



## Made in Switzerland dominates the luxury watch industry

Switzerland is famous for its long-standing tradition and expertise in watchmaking. Since the 18<sup>th</sup> century it has been a major producer and exporter of some of the most sophisticated watches in the world. While this report addresses brands and issues in the watch and jewellery sector generally, **the focus in this chapter is on the example of the Swiss watch industry**. There are three reasons for this. First, the largest luxury watch companies in the world are Swiss and watchmaking is one of Switzerland's flagship industries. Secondly, the business and the sustainability challenges are very similar for watches and jewellery. Finally, many companies that produce and sell watches also make jewellery and vice versa.

Of the 20 largest companies globally active in the watch sector, around half are headquartered in Switzerland and 17 have production centres there (see Figure 2)<sup>8</sup>. The market is mainly dominated by three companies – Swatch Group, Richemont Group and Rolex – all three of which have their head office in Switzerland.<sup>9</sup> Together they account for around 50% of the global watch market (base on turnover).<sup>10</sup> Watchmaking is Switzerland's second-largest manufacturing industry and the third-largest export sector behind pharmaceuticals-chemicals and mechanical engineering. Even though the watchmakers' golden age came before the 1970s, in 2015 the sector still employed around 60,000 people in 500 companies in Switzerland and contributed around 1.5% of Swiss GDP.<sup>11</sup> On a revenue basis, Switzerland is the largest exporter of watches in the world, with international sales of watches and components totalling some CHF 20 billion.<sup>12</sup>

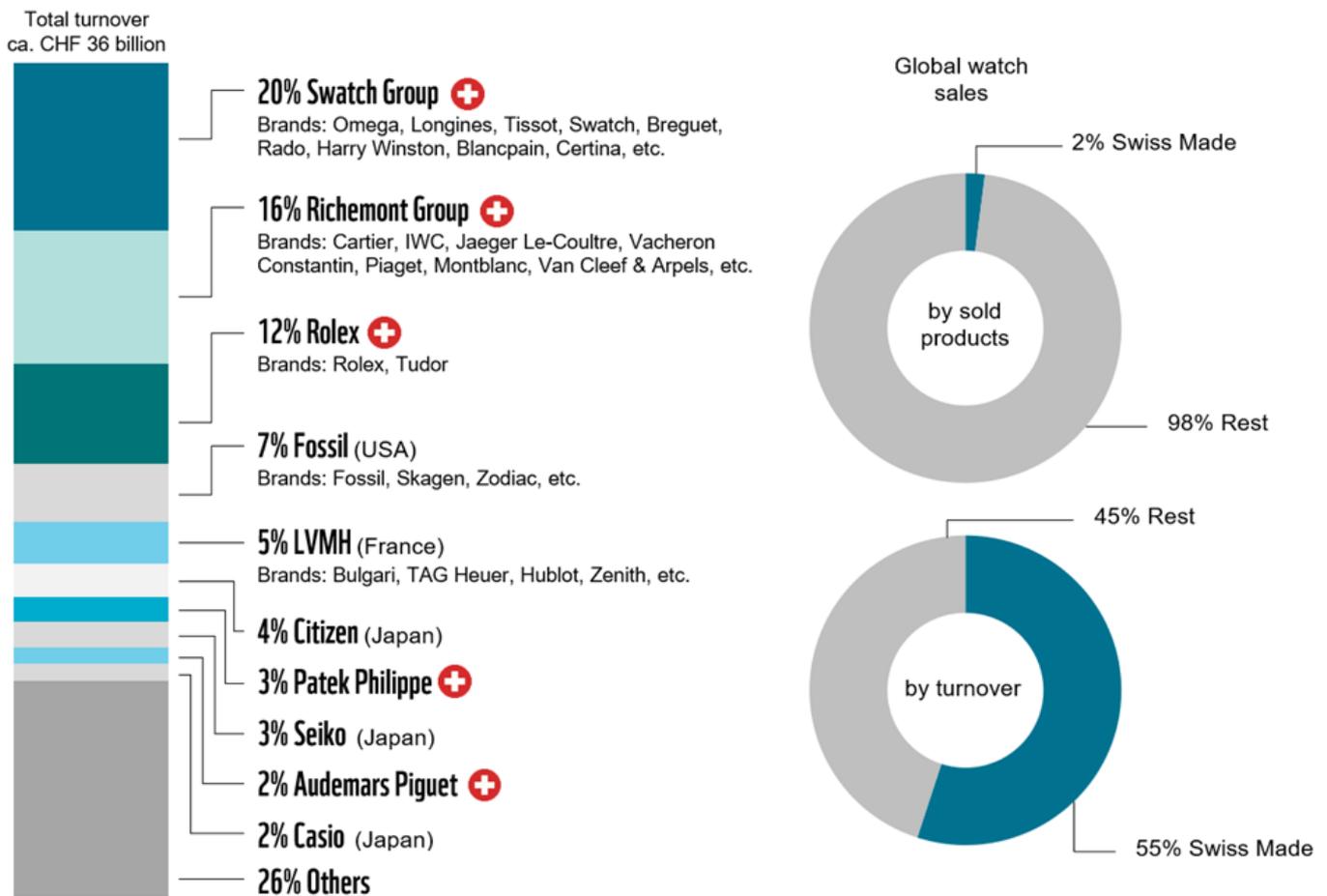


Figure 2: The 10 biggest global watchmakers

For most luxury watch companies, 'Swiss Made' is a mandatory quality label because part of their reputation is built on the fact that their components are assembled in a traditional Swiss workshop (see Appendix for additional information). However, the supply chain of a brand that produces and sells watches holds out various challenges that can easily damage a brand's reputation – for instance, if consumers connect a watch brand to child labour, the destruction of large areas of rainforest or other negative impacts.

## The supply chain of watches: a long and complex black box

Behind the polished face of a luxury watch, a potentially immense ecological footprint is hidden. Yet, **the long and complex supply chain of watch-making is often a black box, severely lacking transparency and comprehension of the origin of the raw materials and the processes and people involved.** This chapter dives into the supply chain of a typical watch brand and describes the most important stages of production, including the accompanying environmental impacts. While the extraction phase usually has the strongest social and environmental effects, the impacts vary greatly, depending on the materials and processes used, the location of operations and how well the processes are managed.

### Brand

The brand is generally the company that designs a watch. It also usually organises and possibly controls the supply chain (at least up to the manufacturing stage). Finally, it is generally responsible for marketing, distributing and ensuring the product's promised quality.<sup>13</sup>

Since typical watch brands use various critical raw materials (e.g. gold, titanium, silver, steel, ceramic, tungsten carbide, leather, etc.), they have complex supply chains with multi-faceted impacts. Figure 3 provides an illustration of a watch and its most important materials, underlining the complexity of their supply chain.

### Watch manufacturing and inputs production

The manufacturing of watches either takes place in the premises of the brand itself or is outsourced to contractors. In Switzerland, watch producers are mainly based in the cantons of Neuchâtel, Bern, Geneva, Solothurn, Jura, Vaud and Ticino. There the numerous parts of watches are assembled, i.e. the cases, dials, movement, straps, glass, etc. The various input parts are usually produced in other factories, quite often abroad.

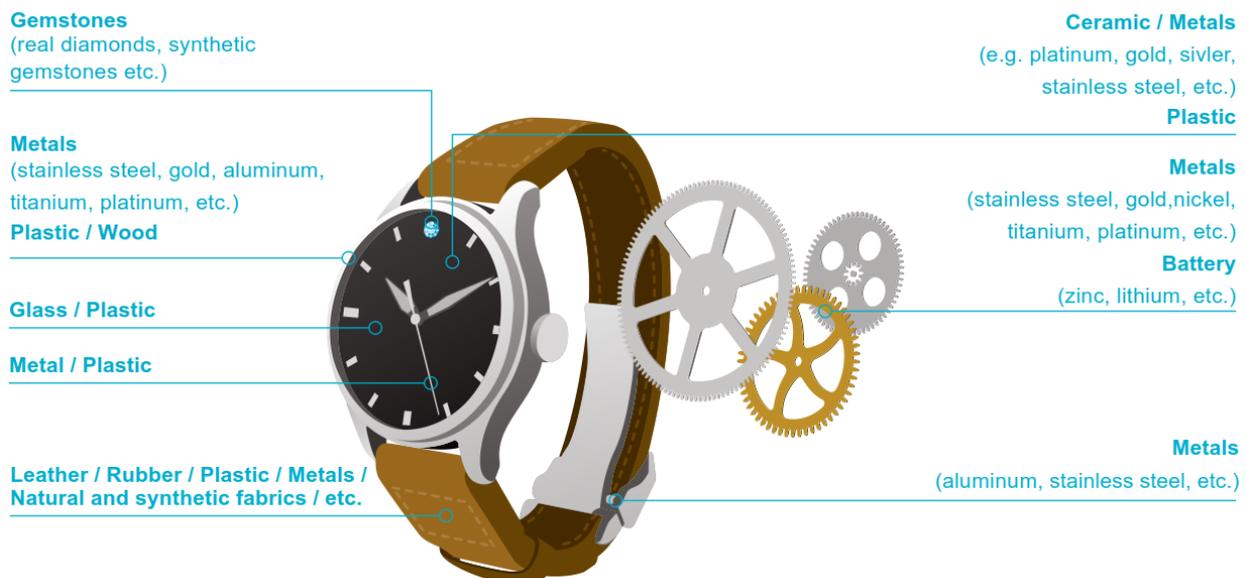


Figure 3: Exemplary illustration of most relevant raw materials in a watch

## Raw materials: extraction and refining

## The gold supply chain as an exemplary illustration of the industry's environmental issues

These manufacturers have their own raw material sourcing practices, which makes it even more difficult for a brand to trace a material's origin. Many brands in the sector therefore do not know where their intermediate manufacturer is sourcing the input parts.

The extraction and production phase of raw materials usually has numerous environmental and social impacts. **From mining the required metals to tanning the leather or producing the plastics, the raw materials used in watches can seldom be considered sustainable and pose numerous environmental challenges.** Since discussing the issues related to all these raw materials would certainly go well beyond the scope of this report, the impacts are elaborated by using the supply chain of gold as an illustration.

There are several important reasons why this report focuses on gold: Firstly, **mining and beneficiation of gold has huge negative environmental effects** because immense amounts of earth need to be moved for tiny volumes of gold. Secondly, over **half of global gold demand is used for jewellery and watches** and most Swiss brands in the sector use gold in their products. Thirdly, the most important gold refineries are situated in Switzerland (i.e. **Switzerland represents one of the most important gold hubs in the world**). Lastly, the mining and beneficiation of other metals has very similar ecological and social impacts, and within the scope of this report it would not be feasible to include all relevant metals and materials.

Gold is a precious metal with many characteristics: it is easily malleable, corrosion-resistant and has a high emotional value in addition to its material price. Annual gold demand is approximately 4,400 tonnes, including around 2,500 to 3,000 tonnes of newly mined gold from over 100 different countries around the world<sup>14</sup>. Between 25 and 30% of the annual gold supply is covered by recycled material.<sup>15</sup>

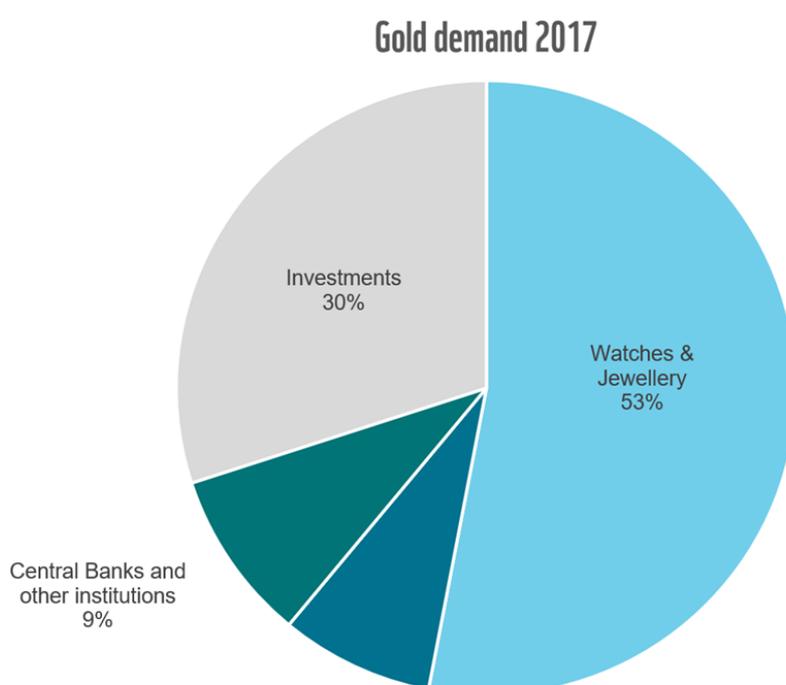


Figure 4: Global gold demand 2017 by industry

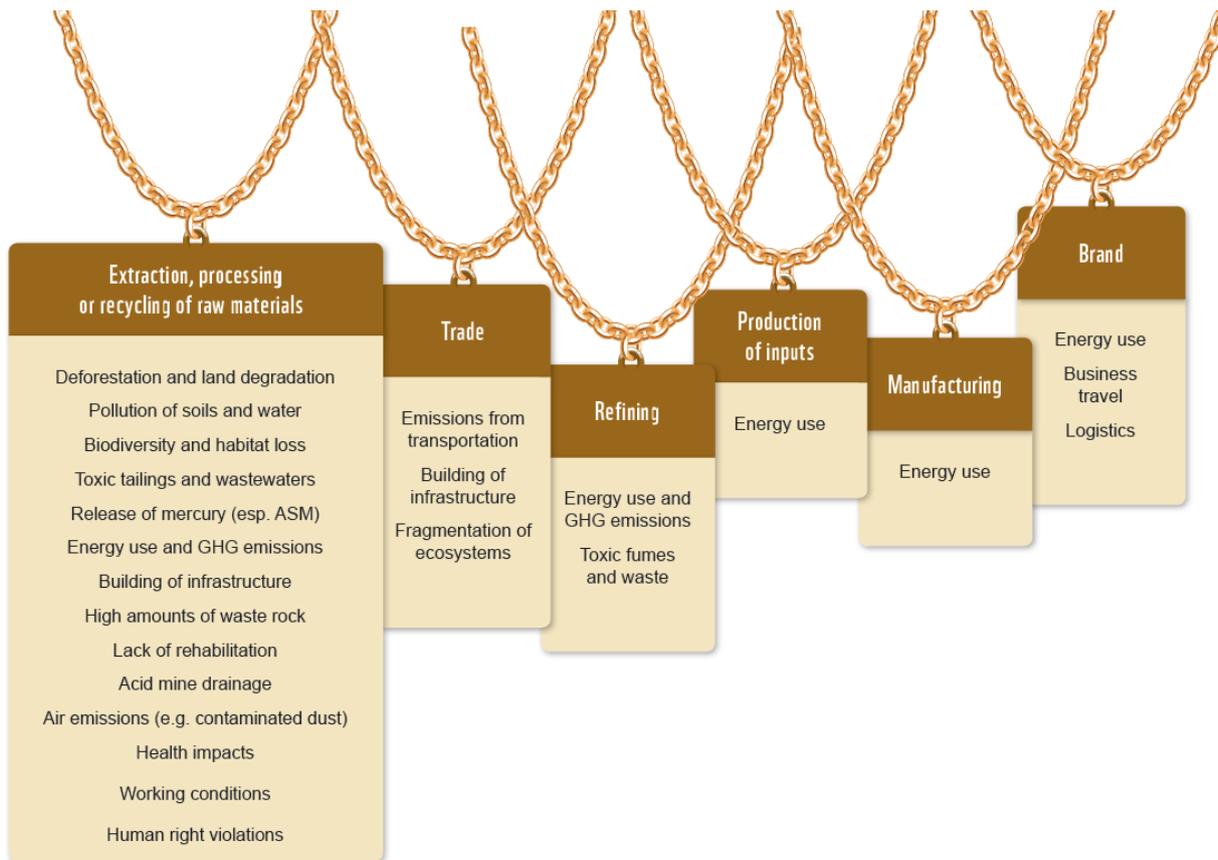


Figure 5: Impact hotspots along the gold supply chain (WWF compilation)

The watch and jewellery sector uses the lion's share of gold (53%), followed by financial industry investments (30%), central bank purchases and the technology sector (see Figure 4).<sup>16</sup> Gold is the largest metal market by dollar value and generated \$170 billion in 2015, more than all other metals including iron, aluminium and copper. Gold is also the most precious metal in the world<sup>17</sup>, even though the gold price has rollercoasted in the past 20 years. For example, in 2000 an ounce (31.10 grams) of gold sold at \$300; the price shot up to \$1,900 in 2011 and has dropped to between \$1,200 and \$1,300 in 2018.<sup>18</sup>

The next sections follow the different processes from mining to refining gold and explain the main impacts. The focal environmental and social impacts of a watch and jewellery brand's supply chain are upstream in the sourcing, processing and production of raw materials (compare Figure 5). Downstream (production of inputs, design and manufacturing, brand administration), energy use, business travel and logistics are the most relevant impacts.

As WWF is an environmental NGO, this report focusses on the ecological issues involved. The social and human rights issues related to gold mining have recently been analysed thoroughly by NGOs like Human Rights Watch, Public Eye and the Society for Threatened Peoples<sup>19</sup>. WWF strongly supports their efforts and it is important not to neglect the often negative social and human rights impacts of mining (compare Box 1).

### Box 1: Human rights challenges of mining

The International Labour Organisation (ILO) sums up the human rights challenges of mining as follows: “Mineworkers face a constantly changing combination of workplace circumstances. Some work in an atmosphere without natural light or ventilation, creating voids in the earth by removing material and trying to ensure that there will be no immediate reaction from the surrounding strata. Despite the efforts in many countries, the toll of death, injury and disease among the world’s mineworkers means that, **in most countries, mining remains the most hazardous occupation when the number of people exposed to risk is taken into account. Although only accounting for one percent of the global workforce, it is responsible for about eight percent of fatal accidents at work.** No reliable data exist on injuries, but they are significant, as is the number of workers affected by disabling occupational diseases such as pneumoconiosis, hearing loss and the effects of vibration.”<sup>20</sup>



Top left to bottom right:  
Large-scale mine, small-scale mine in rainforest, clear-cut and destroyed forest, ASM miners

### Mining, milling, concentrating and smelting

The first process of mining is extracting ore from hard rock. Ore is basically rock that contains particles of metal (in this case gold). To extract ore from the ground, mining usually involves heavy drilling and blasting. Additionally, it uses numerous other mechanical and/or chemical processes to separate gold and bedrock from the ore. Gold is extremely rare: **one tonne of rock usually only holds between 1 and 6 grams of gold**<sup>21</sup>. This results in enormous amounts of earth being moved, holes being dug, and huge areas of land and forest being destroyed.

The process of purifying ore, called **beneficiation**, results in so-called doré bars, a semi-pure alloy of gold and silver, usually created at the mine site. These steps involve various mechanical and chemical processes (e.g. crushing, grinding, screening, milling, flotation, cyanidation, amalgamation and smelting). The chemical treatment usually consists of cyanidation or amalgamation. Cyanidation uses cyanide and carbon for leaching. In the amalgamation process, mercury is used to dissolve gold and silver in the rock. Finally, gold-rich sludge is recovered, melted and poured into doré bars, which contain between 60% and 90% gold and silver. These bars are then transported to a refinery.

### Main environmental impacts

**Mining of mineral resources is intrinsically unsustainable because the reserves are non-renewable and finite**<sup>22</sup>. It further results in various environmental impacts, which vary largely depending on the processes used, the machinery, the location of the mines, etc. The following list of negative environmental effects is not exhaustive but provides a better understanding of the issues and challenges at stake:

**Land use change:** Probably the largest and most evident environmental impact of the mining sector is the use and transformation of land including deforestation with impacts on soils, biodiversity and wildlife.<sup>23</sup> These impacts depend very much on the kind of mining and the location of operations. A large-scale mine (LSM) in the desert in Australia transforms a different kind of land and has different impacts than a large-scale mine in the Amazon rainforest. Surface artisanal and small-scale mining (ASM) in a tropical rainforest will have other impacts on deforestation than an underground LSM in the same area. In addition, mining has indirect land use impacts stemming from the need to build infrastructure (e.g. roads, houses, etc.) for logistics and transportation. New settlers and miners pose an additional threat by interfering with and hunting wildlife, cutting trees for building materials and fuel and triggering erosion by clearing hillsides and detonating explosives.

**Use and pollution of water:** Mining is among the top users of water as it requires enormous amounts of water to separate the metal from the ore<sup>24</sup>. The waste water is often mixed with minerals (e.g. sulphidic minerals or uranium), which negatively influence the soil or aquatic systems. In water-scarce regions, mining additionally increases water stress. Since many mines are located in regions where water is already a very scarce resource (e.g. in Africa, Asia and parts of Latin America), the intensive use of water and water pollution create significant problems for the local environment, ecosystems, wildlife and people<sup>25</sup>.

## Box 2: Large- and Small-Scale Mining

There are important differences between Large-Scale Mining (LSM) and Artisanal and Small-Scale Mining (ASM).<sup>26</sup> Usually, LSM is performed by large companies with heavy equipment, while ASM is done by smaller groups with often very simple equipment. While LSM is responsible for 80-90% of annually mined gold, ASM only accounts for 10-20% (IGF estimates that 330 tons of gold are extracted by ASM<sup>27</sup>). In contrast, the latter is less capital intensive but involves a multiple of LSM's workforce. In 2017 around 40 million operators existed worldwide in all ASM mines, among which roughly 15 million<sup>28</sup> workers were mining gold.<sup>29</sup> An estimated 75 million people are additionally dependent on this industry, due to their businesses or family members being involved in ASM. Especially in very remote areas, ASM can contribute to a large share of income for the local population, regardless of potentially poor working conditions. ASM can be further subdivided into 'formal' and 'informal' mining operations – of which the latter often operate illegally and without modern equipment. Informal mining is often connected to greater negative environmental and social impacts.

**Greenhouse gas emissions:** Due to energy-intensive activities from mining to beneficiation, the industry contributes substantially to the emission of greenhouse gases. Life-cycle studies estimate that the GHG emission intensity of one tonne of gold is between 11,500 and 55,000 tonnes of CO<sub>2</sub>-equivalents<sup>30</sup>. Putting this figure into perspective, **the CO<sub>2</sub>-equivalents for producing 1 kg of gold correspond to between 8 and 46 flights from Zurich to New York.**

### Box 3: Mercury endangering Amazon's wildlife

The **freshwater dolphin**, also called pink river dolphin, is a very distinctive denizen of the Amazon rainforest and is currently among the most endangered mammals. The Amazon and Orinoco river basins in South America are the habitat of three known species of freshwater dolphins that are now severely threatened by mercury released to the environment by artisanal gold mining. These dolphins mainly eat catfish, a bottom feeder that can contain a poisoning amount of mercury and which is renowned for making the longest freshwater fish migration in the world, travelling more than 11,600 km and therefore contributing to the spread of mercury across the entirety of the Amazon region. Mercury in the Amazon also highly affects humans: A study in Madre de Dios revealed that mercury levels in nine out of the fifteen most consumed fish species for sale in local markets exceed the safe limit set by the United States' Environmental Protection Agency (EPA).

Mercury emissions into the environment are irreversible and difficult to contain and artisanal and small-scale gold mining is the leading source of mercury pollution in the Amazon. To learn more about the mercury crisis in the Amazon, consult the "**Healthy Rivers, Healthy People**" report by WWF.



Southern Amazon conservation corridor



Amazon River Dolphin

## Trade

Trade connects the mines with the refineries and is similar for all mining activities: high grade gold ore and/or gold doré is transported by ship, truck, train, plane or helicopter – often via bigger trading hubs – to the intermediaries and finally the refineries. While the gold won in LSM is often sold directly by the mining company or through traders, ASM usually involves many more stakeholders. Regarding sustainability risks, **the difficulty in this part of the supply chain lies in maintaining traceability, especially if transparency is unwanted due to illicit business or human rights violations.** Since gold itself does not reveal its origin, an adequate system for ensuring transparency is required. Besides these aspects, the main environmental impact posed by trade is greenhouse gas emissions due to transport.

#### Box 4: The problem of mercury, chemical pollution and deforestation

The Amazonian rainforest exemplifies critical environmental damage due to increasing mining activities. From 2005 to 2015, mining and related activities were responsible for causing 11,670 km<sup>2</sup> of rainforest to disappear, accounting for nearly 10% of the entire Amazon region of Brazil<sup>31</sup>. In Madre de Dios, an Amazonian region of Peru, artisanal and small-scale gold mining has profoundly degraded the ecosystems due to deforestation and the movement and deposition of large amounts of waste rock, promoting soil erosion and landslides<sup>32</sup>. According to a new analysis by scientists at Wake Forest University's Center for Amazonian Scientific Innovation (CINCIA), small-scale gold mining has destroyed more than 170,000 acres (~ 890km<sup>2</sup> or roughly 125,000 football fields) of primary rainforest in the Peruvian Amazon from 2013 to 2018<sup>33</sup>. Moreover, the discharge of oil, lubricants and turbid materials in rivers has highly contaminated the rainforest's waterways.

A critical threat to wildlife and fresh water in the Amazon is the application of **cyanide** and **mercury**. The latter especially is a highly toxic substance that is used extensively in artisanal and small-scale gold mining<sup>34</sup>. The intended or accidental release of mercury into the environment contaminates land, rivers, animals, plants and soils. Large parts of the mercury used in mining bond with the gold but a considerable portion remains as liquid metal, which is often disposed of into soils, sediments, rivers and lakes. In aquatic systems, inorganic mercury is converted into more toxic methylmercury, which accumulates in fish and other animals. **ASM is responsible for most water and air mercury pollution worldwide<sup>35</sup> and releases 1,400 tonnes of mercury to the environment each year<sup>36</sup>**. In the Madre de Dios area of Peru, it is estimated that between 30 and 40 tons of atmospheric mercury is released into the environment annually<sup>37</sup>. To put this into perspective, over time just one gram of mercury per year can contaminate a lake with a surface area of 80,000m<sup>2</sup>.<sup>38</sup>

Uncertainty surrounds the future of ecosystems in the Amazon Basin. Mercury releases from gold mining have put many living organisms such as the freshwater dolphin at risk (see Box 3), and the magnitude of the negative impacts mercury has on wildlife and fresh water are still unknown. The **Minamata Convention on Mercury**<sup>39</sup> was developed to stop the use of mercury but, until it is fully implemented, mercury will continue being responsible for contaminating immense areas of precious ecosystems.

Other materials used in mining that have drastic environmental impacts are cadmium, lead, zinc, copper, arsenic and selenium.<sup>40</sup> In addition, whether intentionally or accidentally, many mining sites dump toxic production waste directly into natural bodies of water. Earthworks and Mining Watch Canada estimate that about 180 million tonnes of toxic waste are being dumped annually into bodies of water by mining operations<sup>41</sup>.

Even when large-scale mines construct dams to avoid direct contamination through waste materials, toxic leftovers and particles can still get into the environment. It is estimated that among the roughly 3,500 tailing dams built globally to hold mine waste, one or two spills occur each year with devastating consequences for the environment. An infamous example was the cyanide spill in Romania in 2000, described as the worst river pollution Europe has ever witnessed. It has taken 10-20 years for most river life to make a comeback.<sup>42</sup>



*Gold dealers packing highly poisonous mercury into bags for sale to gold miners*

## Switzerland is the global leader in refining

Before the gold can be used in watches or jewellery, it needs to be refined and purified. Refineries transform doré gold (with 60-90% gold content) into pure gold (99.5% or 99.99% = 24 karat). In ASM, gold is sometimes already refined at the mining site by burning amalgam-containing mercury in the open air.

Refiners link gold buyers and miners. Thus, they are important players when it comes to ensuring gold's traceability. Switzerland plays the central role in the process of gold refining, since around **60-70% of global gold production is refined in Switzerland** by four of the world's largest gold refiners: Valcambi, PAMP, Argor-Heraeus and Metalor.

### Environmental impacts

The main environmental impact of refining is due to energy use and mainly depends on the refining methods, the quality of the gold and the energy source. When gold is refined on ASM sites by burning mercury, this creates strong health risks to the workers and contaminates the air.

## Recycling gold: an environmentally friendlier alternative

When a watch or piece of jewellery containing gold reaches the end of its life, the gold is usually reused. Around 25-30% of the yellow metal consumed each year comes from recycled sources.<sup>43</sup> Jewellery, gold bars and coins account for the bulk of recycling (approximately 90% of post-consumer recycled gold), while much less comes from industrial recycled materials or household electronics.<sup>44</sup> Some brands in the analysed sector allegedly rely on recycled content, yet they do not communicate this. A possible reason for not doing so could be fear of reputational risks due to the negative connotation that recycled content is of lower quality. In the case of gold, as well as many other materials, these concerns are unfounded since recycling has no effect on quality.

### Environmental impacts

Recycled gold from old jewellery or watches, fillings and electronic scrap is a very valuable alternative to newly mined gold, and its use has absolutely no effect on quality. It produces fewer environmental impacts over its life-cycle, since the environmental footprint from the initial mining operations is distributed across all its users. Basically, the more often gold is recycled the lighter the footprint of each use becomes. In addition, recycled gold can help avoid the human rights risks and social issues associated with newly-mined gold.

Nevertheless, the environmental impacts from collecting, sorting and particularly refining old gold still persist. Since refining is an energy-intensive process, the environmental impacts of recycled gold mainly depend on the primary energy source. Moreover, recycled gold is not necessarily risk-free since it can be used for money laundering or to hide its unfavourable origin.

Hence, **recycled gold can only present a valuable alternative when the origin can be proved and the material is transparently certified.**

## II. Environmental benchmark of brands



## Benchmark of 15 brands

In order to pinpoint and highlight the most pressing sustainability issues and incentivise the sector towards a stronger sustainability performance, WWF Switzerland has assessed and compared the environmental stewardship of 15 major watch and jewellery brands. The questionnaire developed together with BHP - Bruggler and Partner, reflects a comprehensive set of sustainability topics such as sustainability strategy and targets, due diligence, reporting and monitoring, sustainable supply chain management, greenhouse gas (GHG) emissions and stakeholder engagement.

As the results below show quite clearly, the Richemont Group brands (Cartier, IWC, Jaeger-LeCoultre, Piaget and Vacheron Constantin) are the only ones among the surveyed companies that managed a score in the “Upper Midfield” or above. Moreover, together with TAG Heuer, it was the only one that actively took part in the evaluation process by complementing and commenting on the WWF rating questionnaire. The remaining companies (Audemars Piguet, Breguet, Chopard, Longines, Omega, Patek Philippe, Rolex, Swatch and Tissot) chose not to complement the pre-assessment. Since **most of these companies do not publish any detailed information about their sustainability efforts**, a substantial part had to be classified as non-transparent. There is simply no publicly available data about the evaluated topics and criteria to be found for most of the companies, which is why an evaluation of actual sustainability performance is rather difficult. Nevertheless, the first and most important issue for the watch and jewellery industry is therefore the **apparent lack of transparency and communication regarding material environmental concerns**.

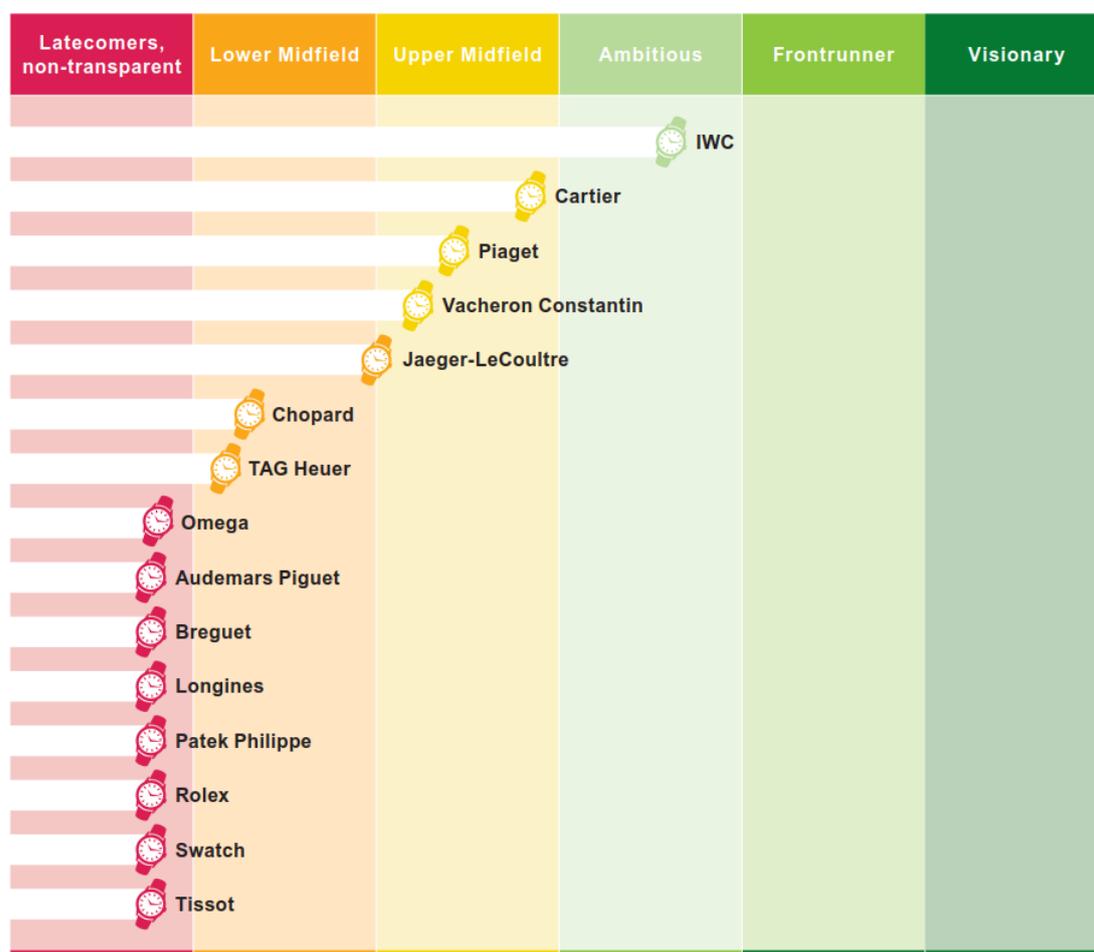


Figure 6: Results of environmental rating

Because so far the sector has not been called upon by its stakeholders to communicate about its business practices, having the brands of only one group in the upper part of the rating scale does not come as a complete surprise due to the secrecy of the entire industry. Only IWC was able to show more serious commitment towards a sustainable transformation, but with substantial potential for improvement. Most brands were ranked either in the midfield or as non-transparent (when no relevant data was found, and the companies did not answer the questionnaire). These findings are mostly in line with other studies, illustrating that the sector is just beyond the starting point in terms of its sustainability performance. A recent study by Human Rights Watch<sup>45</sup>, for example, indicates that **the majority of companies in the watch and jewellery industry do not yet take responsibility for their actions and have shown little effort so far to be more transparent.**

Figure 7 shows the 15 selected companies and an overview of the 18 rating criteria that seek to get a comprehensive picture of the companies' environmental management.

Company	Active Participation in Rating Process	Overall score environmental rating	Rating Criteria															
			Governance structure & policies	Due Diligence	Materiality analysis & target setting	Monitoring & reporting	GHG emissions (inventories, reduction targets, etc.)	Waste management and product packaging	Sustainable procurement	Traceability & emissions of transportation	Environmental impact of products	Transparency and certification of raw materials	Environmental certification and % coverage of certified raw materials	Sourcing & environmental projects for raw materials	Capacity building of suppliers	Engagement with employees	Customer awareness on sustainability impacts	Membership in business initiatives for sustainability
Audemars Piguet		non-transparent																
Breguet		non-transparent																
Cartier	X	upper midfield																
Chopard		lower midfield																
IWC	X	ambitious																
Jaeger-LeCoultre	X	upper midfield																
Longines		non-transparent																
Omega		non-transparent																
Patek Philippe		non-transparent																
Piaget	X	upper midfield																
Rolex		non-transparent																
Swatch		non-transparent																
TAG Heuer	X	lower midfield																
Tissot		non-transparent																
Vacheron Constantin	X	upper midfield																

Figure 7: Results for 18 rating criteria

To sum up the rating, this section contains the key observations that can be drawn from the detailed analysis by BHP and WWF on the surveyed brands. The detailed criteria and rating results can be found in the appendix, together with a more elaborate explanation of the rating approach. For the detailed analysis per category in figure 7, no distinction was made between Lower and Upper Midfield, which is why no orange colour is shown for the ratings in the individual questions. Also, a company was rated “non-transparent” only when no relevant data could be found, and the companies did not actively participate. Hence, these companies disclosed no relevant information and chose not to complement the questionnaire. Others which might also have published only limited information were able to improve their score by providing additional relevant information to the analysts.

As the figure shows hardly any green in the rated categories, the following general conclusion can be drawn: except for a few first movers, **most companies in the watch and jewellery sector are either non-transparent or show no serious ambitions to become more sustainable.**

## Results of the environmental rating

6 companies actively filled in the questionnaire, showing first important steps towards more transparency



**Overall environmental management.** In general, the watch and jewellery industry has a long way to go regarding its environmental management performance. The rating shows rather substantial gaps between the brands in terms of their approach to environmental sustainability, the way they communicate and the way they set sustainability targets. Only one of the surveyed leading brands (IWC) has taken noticeable first steps by becoming more active and implementing certain sustainability measures. In general, some of the assessed brands are taking first actions (mainly Cartier, IWC, Jaeger-LeCoultre, Piaget and Vacheron Constantin), whereas most others are showing no or very little effort towards serious environmental management and related communication.

**Sourcing of raw materials.** When sourcing raw materials such as gold, the most important sustainability issues are deforestation, soil degradation, water contamination, the use of hazardous substances and social injustices. This is the reason why the supply chain was given a greater weighting in the overall rating. In general, the performance of the assessed companies in this section is rather weak and **transparency must be drastically improved to advance towards more sustainable sourcing practices.** IWC is the only company that publishes the amounts of their main raw materials (steel, gold, diamonds, etc.), while all other brands are still very secretive regarding their use of raw materials.

Many of the evaluated brands rely on the Responsible Jewellery Council when it comes to promoting raw materials such as gold. However, this certification does not allow a third party to assess whether a company is sourcing responsibly, and more proactive, transparent communication should therefore be implemented. Cartier, IWC, Chopard and Piaget have more ambitious approaches to certification, including more specific information on what materials certain certificates apply to. Chopard, for example, is committed to using only gold from ASM mines that participate in the Swiss Better Gold Association (SBGA), Fairmined and Fairtrade schemes or from Responsible Jewellery Council (RJC) Chain of Custody certified entities<sup>46</sup>.

To conclude, **most companies still conceal where they are sourcing their gold, leather, gemstones and other critical raw materials and in what conditions these resources are extracted or produced.**



None of the companies managed a final classification as a "frontrunner" or "visionary"



**Climate change.** Most of the surveyed companies have taken no or very limited steps to actively counter climate change. **The problem of climate change itself and the global challenges associated with it have not been appropriately addressed, no ambitious targets have been set and no notable measures have been taken by the industry.** Most measures which have been applied in the sector concern efficiency (e.g. more energy-efficient production facilities, reduced packaging, etc.) or philanthropic social and environmental projects, which often have no clear relation to the sector's real impact. While such projects and advancements are praiseworthy, they are not tackling the core environmental issues facing the sector and thus do not have a sufficiently relevant impact. In view of the industry's effect on climate change, especially through its raw materials, WWF considers this finding very worrisome.

**Scientific tools and eco-efficiency measurement.** The uptake of scientific tools and eco-efficiency data collection in the industry is slow. While some companies are making efforts in this regard, most do not seem to be applying environmental assessment tools of any type (e.g. in product design). Some first-moving companies monitor and manage the eco-efficiency of their own operations (mainly manufacturing sites or retail stores) as well as parts of the downstream supply chain. **None of the companies implement measures in their extended supply chain or collect relevant eco-data from suppliers, especially beyond tier 1.**

**Transparency and reporting.** **There is a lack of even non-existence of reporting and transparency among the evaluated brands, and an apparent absence of commitment to determined action,** particularly with the companies in the bottom of the rating sample (the 'non-transparent/late-comers' category). This is highly undesirable for the environment, but also for consumers, investors, communities, political bodies and other stakeholders. Furthermore, it is a major economic and reputational risk for the industry itself.

**Dialogue and collaboration with stakeholders.** Some traction is evident in the sector when it comes to participation in national and international business initiatives. Cartier, Chopard, IWC and Vacheron Constantin all report on their participation in several industry initiatives aimed at sustainable development. Most other brands either do not participate actively in such initiatives or do not communicate publicly about it. **There is substantial room for improvement for most assessed companies regarding their commitment with employees, the capacity building of suppliers and, especially, efforts to raise customer awareness of environmental issues within the industry.**

## Call to action

In summary, the rating revealed that among the assessed companies, only a few are taking first steps towards reducing the industry's environmental footprint. None of the companies assessed in this rating was classified as a 'frontrunner' or a 'visionary'. From the perspective of WWF this is simply not good enough. **WWF calls upon companies in the watch and jewellery industry to take more determined action towards better environmental management, increase transparency and align their business models with the ecological boundaries of our planet.**

### III. Changing towards forward-thinking practices



## The need for transparency and responsibility

The industry is far behind other sectors regarding its supply chain and sustainability management, which is why WWF has gathered recommendations on the most important steps towards more responsible watch and jewellery making and is calling for action.

Numerous current developments underline the need for action in the sector, and new political requirements and mandatory obligations may soon bring the watch and jewellery brands into the spotlight of media, governments and consumers regarding their environmental and social impact along the supply chain. Political moves such as The Responsible Business Referendum (“Konzernverantwortungsinitiative”) in Switzerland, for instance, may soon require Swiss-based companies to take responsibility for their impacts along the value chain. Also, consumers are increasingly addressing sustainability topics and becoming progressively aware of the issues, demanding transparency and responsibility from the companies.

Each company can contribute significantly to making the industry more sustainable, be it on a national or global level, on a highly specific issue or in the general discussion, as well as alone or in conjunction with its customers, suppliers and competitors. Based on the results of this rating, WWF Switzerland makes general relevant recommendations to the Swiss watch and jewellery industry regarding six issues.

### 1. Increase value chain transparency

Transparency poses a challenge in the highly fragmented supply chain, but it is a necessity if the sector wants to improve in supply chain management and environmental performance. **WWF recommends increasing transparency regarding raw materials and upstream manufacturing and taking broad responsibility for all tiers of the supply chain within each company.** Consumers and investors are becoming increasingly aware of products, production facilities, raw materials and the associated environmental and social risks. Intergovernmental organisations<sup>47</sup> (e.g. the OECD and the UN) have increasingly stressed the importance of due diligence in the relationship between business, the environment and human rights (see *Appendix for additional information*). Only by increasing transparency, and by addressing and better understanding its own issues and processes, will the industry be able to substantially improve.

### 2. Use responsible materials

The production of raw materials for watches and jewellery always has an impact on the environment, whether the materials are newly extracted, produced or recycled. However, **companies should better understand their supply chain and adopt measures to reduce risks**, which can differ substantially depending on the nature of the raw materials, the location of production and the manufacturing processes involved. Careful choice, design, as well as ambitious sustainability standards and certificates, can reduce the environmental impacts of raw materials (see *Appendix for selection of certifications*).

**WWF advises companies to switch to 100 per cent responsible materials with the lowest possible ecological footprint and to apply eco-design measures to all products, including the possibility for full reusability and recyclability.** Equally important is the absolute reduction of newly sourced raw materials, for example, through repairing and recycling processes, improved product durability and longevity and reduced consumption.

### 3. Integrate sustainability into business practices

Following the footsteps of other industries, companies in the watch and jewellery sector are slowly adopting more integrated sustainability strategies but are still only in the early stages of this process. As a consequence, business initiatives such as science-based target setting<sup>48</sup> are becoming more and more important and scientifically based business objectives for sustainability need to be adopted. Besides the absolute necessity to change from current mere efficiency targets to science-based target setting, there are also numerous, more general business benefits of setting science-based targets.<sup>49</sup> **Sustainability needs to be a fundamental part of business practices and be embraced and embedded in a company's culture and strategy to achieve considerable transformational change.**

### 4. Report publicly on relevant sustainability topics

Even though public reporting on environmental topics is not yet mandatory for many players in the sector, **companies should implement regular (at least bi-annual) systematic internal quantitative monitoring and reporting on environmental issues, challenges, targets and achievements.** Also, a systematic public sustainability report (e.g. according to GRI Standards<sup>50</sup>) and quantitative reporting on all targets should be standard procedure. Relevant publicly reported information needs to be further assured by a third party to increase credibility. Due to the sector's relevance and impact, companies should apply such a course of action regardless of any legal requirements.

### 5. Collaborate with peers in the industry

Sustainability in the supply chain could be easier to implement and transparency could be provided more credibly if companies collaborated. **WWF highly recommends that companies seek collaboration (pre-competitive as well as up- and downstream the**

**value chain) to tackle transparency and responsibility challenges in the industry.** A true multi-stakeholder approach offers the most effective platform for creating and sustaining a responsible and inclusive sector.

### 6. Innovate for circularity

Basing decision-making on insights of life-cycle analysis and constantly aiming for product longevity and circularity is an important step towards the Circular Economy. Thus, **besides business model innovation for sustainability, which goes far beyond reducing negative impacts in operations and supply chains, WWF advises companies to become part of the Circular Economy.**

WWF sees the Circular Economy as a regenerative system built on the continued use of high-quality materials, which respects planetary boundaries and minimises resource input and waste by slowing and closing material and energy loops. A circular economy creates positive environmental and societal benefits, supported by an alternative growth and consumption narrative, while waste and negative impacts are designed out of the system.

Business model innovation can go from rethinking a business case to challenging the entire system (market) in which the business operates. The objective of business model innovation from a sustainability perspective is to drastically reduce resources and material input and bring a sector's environmental impacts into line with planetary boundaries and the SDGs.

*For more information on business model innovation, we recommend the **White Paper by WWF and Impact Hub on Business Model Innovation for Sustainability.***

## Box 5: Summary of recommendations for transitioning towards a more sustainable watch and jewellery sector

### Increase transparency across the value chain

- Identify brand's own supply chain and develop traceability measures
- Require suppliers (incl. gold refiners, diamond suppliers, etc.) to ensure traceability and to provide detailed information on the whole supply chain
- Demand segregated processing of raw materials (e.g. gold) to ensure traceability in the supply chain
- Assess all environmental and human rights risks throughout the supply chain, including evidence of due diligence by upstream suppliers
- Implement follow-up procedures and remediation of all critical issues identified

### Use responsible materials

- Implement a chain of custody over precious metals and stones (e.g. gold, diamonds etc.), including efforts to trace these minerals to their origin
- Preferably rely on certified and traceable recycled raw materials instead of newly mined resources
- Support organisations and initiatives that work to improve environmental and social conditions in artisanal and small-scale mines

### Integrate sustainability into business practices

- Integrate sustainability into the core business
- Identify own major environmental and social challenges/impacts and formulate ambitious objectives and measures for coping with them
- Adopt and implement a robust, detailed sourcing policy with suppliers to provide detailed evidence of chain of custody and due diligence undertaken throughout the supply chain
- Build a sustainability governance structure within the company (incl. top management responsibility)
- Set science-based environmental targets

### Report publicly on relevant sustainability topics

- Report publicly (preferably annually) on environmental management and due diligence, including steps to manage and mitigate risks
- Communicate on total amounts of annually purchased critical raw materials (e.g. precious metals, leather, gemstones, etc.), including information about main suppliers
- Follow international reporting standards
- Implement third-party verification for relevant sustainability information (incl. responsible sourcing)

### Collaborate with peers in the industry

- Support and actively participate in business initiatives for sustainability and responsible business practices
- Foster the development of true multi-stakeholder initiatives to assure the inclusion of non-industry partners - in particular civil society organizations - at all levels of the governance structure

### Innovate for circularity

- Base decision-making on insights of life-cycle analysis and constantly aim for the products' longevity and circularity
- Make eco-design a substantial part of product design and close material and energy loops to work towards a circular approach and respect planetary boundaries
- Reconsider the current business model, if necessary, to drastically reduce resources, material input and waste production

## Good practice stories within the sector

The good practice examples listed below were selected based on their level of ambition in terms of reach, relevance, feasibility and scalability. Due to the variety and diversity of existing approaches, it is important to note that this is not to be regarded as a conclusive list but rather a glimpse of possible pathways that companies are taking to improve their sustainability performance.

We describe concepts that are relevant for the sector's environmental impacts, that have been tested and already exist, and that could be brought to scale in the near future. Also, the following sections include recommended ways forward by WWF that might not be seen yet in the market or brought to scale but could hold the potential for transformational change.

Drawing a clear line when categorising these examples is often quite difficult, which is why the following section is divided into four main categories: **responsible raw materials, reducing & repairing, more transparent reporting, sharing & second hand.**

### Responsible raw materials

There are several good examples for using more sustainable, responsible raw materials but we would like to highlight some exemplary cases. First of all, smaller jewellers are increasingly offering the possibility to only incorporate certified raw materials in their collections, whether they are newly mined (e.g. Fairtrade, Fairmined etc.) or recycled, but the availability of such certified materials is still limited and the adaptation in the market therefore slow. Secondly, some global watch and jewellery brands are increasingly trying to make their sourcing more transparent by only buying and offering certified raw materials. Below are two examples of global companies that are taking first steps towards more responsible and transparent sourcing as well as another case of more responsible raw material sourcing, representing various kinds of alternative raw materials.

**Chopard:** The company committed in spring 2018 to only use 100% "Ethical Gold" in its jewellery and watch creations. Chopard defines "Ethical Gold" as gold acquired from responsible sources, verified as having met international best-practice environmental and social standards. The gold comes only from two different sources: artisanal newly mined gold from small-scale mines participating in the Swiss Better Gold Association (SBGA), Fairmined and Fairtrade schemes as well as RJC Chain of Custody gold (through Chopard's partnership with RJC-certified refineries). Even though it is difficult to learn about the gold's actual origin, especially the RJC certified gold, this is an important step for the industry.<sup>51</sup>

**Tiffany & Co.:** The firm sources the majority of its rough diamonds and precious metals directly from mines, taking responsibility for the supply chain, as well as from recycled sources. For instance, Tiffany established its own chain-of-custody controls for diamonds (in addition to Kimberley Process compliance) and if non-recycled gold is used, it comes from one specific mine, which is disclosed in the company's sustainability report. The latter is also an aspect where Tiffany & Co. sets a good example, since its sustainability reporting is well ahead within the sector in terms of its scope and level of transparency.<sup>52</sup>

**Alternative raw materials:** There are several types of watches and jewellery made of alternative, eco-friendly materials (e.g. recycled, renewable, reused, etc.) in the market. One specific example, which will be representative for these kinds of materials is wooden watches. Yet, when deciding to buy a wooden watch it is highly recommended to have a closer look at the origin of the wood: for example, reclaimed, recycled and certified woods (e.g. FSC). As with all such products it is important to focus on high quality and durability since an eco-friendly main raw material has few environmental advantages when the product has a short lifetime.

## Reducing and repairing

From an environmental perspective, *reducing the production of new raw materials* (e.g. newly extracted metals, newly produced plastics, etc.) is to be favoured. It is important to mention at this point that **jewellers have always recycled a substantial part of their material such as precious metals and numerous jewellers offer remodelling, upcycling and recycling of old jewellery**. Recycling and repurposing valuable raw materials is therefore no new phenomenon in the industry and often has simple economic reasons behind it. Nevertheless, reusing resources is very important and the following companies present some of many good examples for reducing, recycling and upcycling in the market:

**Bayou with Love:** Bayou with Love has created the “Circular Collection” and the “One Earth Collection” using only recycled gold from used technology. The company collaborated with Dell, the tech solutions provider, to use gold that had been recovered by Dell’s US recycling programmes.<sup>53</sup>

**Triwa:** The brand manufactures its watches in small batches and puts great emphasis on quality. One of its latest lines of watches is made out of recycled destructed illegal firearms. This product was made in collaboration with IM Swedish Development Partner and was created to transform guns into something useful. The watch sales generate financial resources to rebuild conflict-torn societies and support victims of armed violence.<sup>54</sup>

**Baume:** the company was launched in 2018 by offering fully customisable watches. Baume developed a business model that exploits recycled materials, avoids precious metals and applies a *made-to-order* approach. The brand has committed to not use animal-based or precious materials in its products and, by making customised products, it is hoping that customers will keep and use the products longer. It offers recycled and re-used components and the watchstraps are made from cotton, cork, linen and recycled PET.<sup>55</sup>

Generally speaking, the *reparability and reusability* of a watch or piece of jewellery, like its longevity, are very important aspects when it comes to reducing the consumption of newly manufactured products. Thus, quality plays a very critical role and many companies in the sector are already putting considerable emphasis on this aspect. In particular, the companies in our rating mostly manufacture products that are made to last for decades and are designed to be repaired or reused. This is a praiseworthy characteristic of the watch and jewellery sector (mainly in the luxury segment – see Box 6), where it is generally ahead of many other industries.

### Box 6: Fast-fashion jewellery / watches and smart watches: a currently unsustainable business model

Fast fashion is establishing itself in the jewellery and watch market and smart watches are becoming more and more popular, overtaking many traditional watch-makers in volumes and sales.<sup>56</sup> Jewellery and watches have traditionally been a durable, long-lasting purchase, but technological changes and fashions are changing this paradigm, making jewellery and watches less durable, short-lived and therefore an additional contribution to overconsumption and waste production. From an environmental perspective, WWF is critical of the fast-fashion jewellery and watches movement as well as the rise of smart-watches, if low life-expectancies of products should become common practice.

**Fast-fashion jewellery and watches:** Fine jewellery and high-end watches have so far mostly been unaffected by fast fashion, but this cannot be said of the fashion-jewellery market. More and more players are entering the fray, coming for example from the apparel or other fast-paced industries. These providers are adding hundreds of new items and constantly changing their assortment — an unheard-of pace in an industry where the standard is two collections a year<sup>56</sup>. Without sensible sustainable business models, eco-design considerations and responsible raw materials, the fast-fashion trend can therefore worsen the industry’s environmental impact many times over.

**Smart watches:** Even though smart watches tend to be way more expensive than regular fashion watches, they often have similarly low life expectancies due to rapid technological advances that make hardware and software obsolete after a few years. Since most smart watches rely on precious metals for their electronics, they often have comparable impacts as general high-end watches but with obvious shorter lifespans.

## More transparent reporting

A major issue where the jewellery and watch industry has immense room for improvement, is regarding non-financial reporting and the transparency of its business practices. While regular and extensive sustainability reporting has been established in most larger industries, promising examples among watch and jewellery makers are still quite rare. Since listing all brands with various types of approaches towards non-financial reporting would be very difficult and could hardly be exhaustive, we make a rather general observation about good-practice examples. If companies report according to internationally recognised reporting standards (e.g. GRI Standards, EU's Non-Financial Reporting Directive etc.) at the brand level (i.e. Maison), this can be viewed as current best practice in the sector. Companies that are trying to be ahead of the game in this regard are IWC, Swarovski, Tiffany & Co and a number of others.

## Renting and second-hand

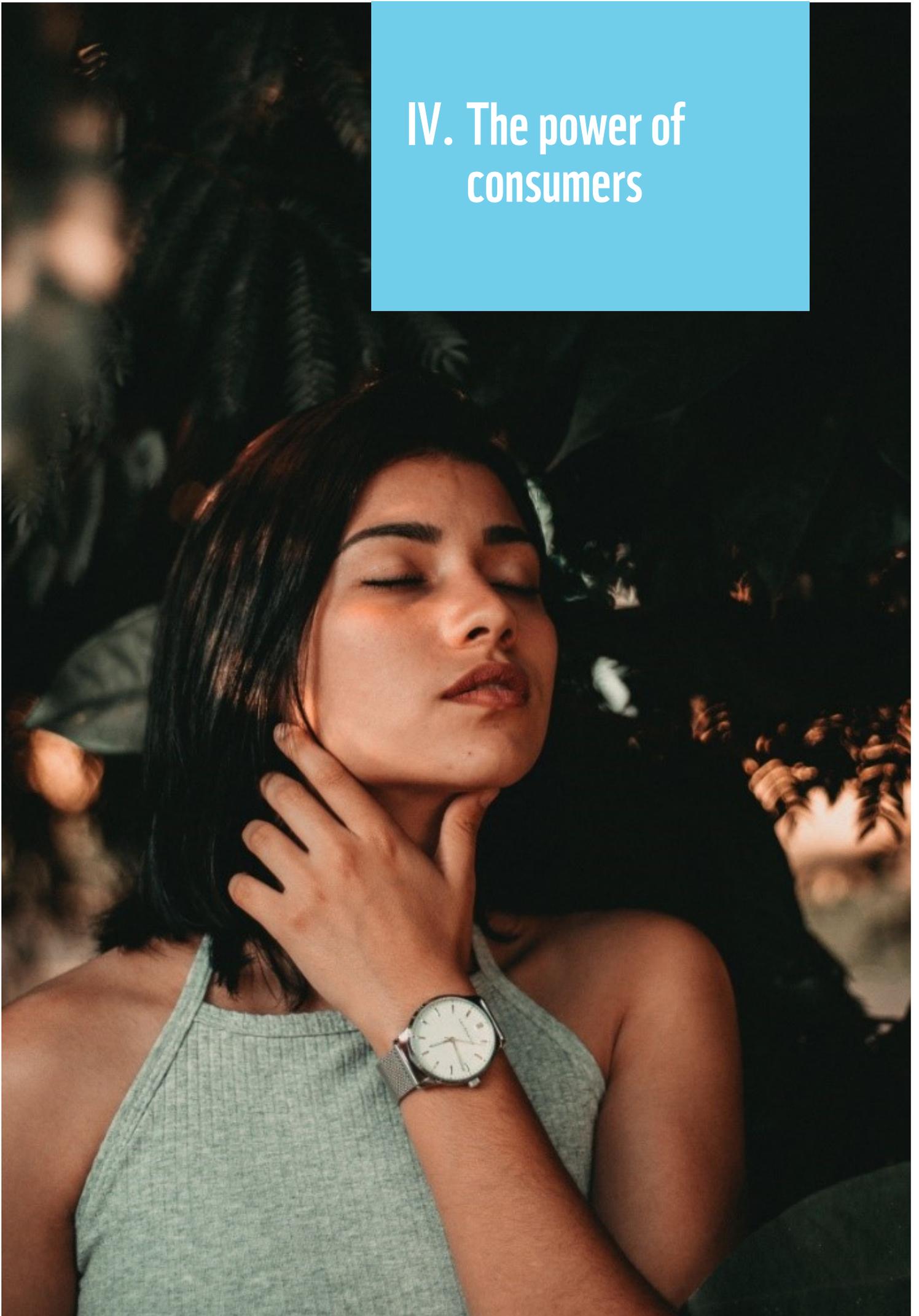
**Renting, co-owning and sharing** watches and jewellery instead of owning them is another phenomenon which seems to be gaining traction in the market. While this might not be the most feasible option when it comes to a watch for everyday wear, it can have apparent sustainability advantages for specific items used on rare occasions.

**Haute Vault, Clerkenwell and Axess Chronos:** These three brands will stand for an illustrative selection of many such providers. They offer wide ranges of watches for rent, allowing the customer to wear a watch for a specified period of time at a fraction of the total cost. Axess Chronos offers watch renting for days, weeks or months and provides advice on selecting the perfect watch for each type of occasion (e.g. weddings, black-tie events, job interviews, business presentations.)<sup>57</sup>. Clerkenwell allows customers to rent an item for a month or long-term<sup>58</sup>. Haute Vault offers both watches and fashion jewellery for rent from a week to a month. This company has acquired an exclusive collection of watch and jewellery that can be rented through any of their memberships for different lifestyles.<sup>59</sup>

Even though such services might not be based on a sustainable rationale, by indirectly reducing the need to buy several new items and promoting a sharing economy, they hold the potential to positively impact the sector's ecological footprint.

The **second-hand** market for watch and jewellery is a booming billion-dollar segment and is mostly dominated by independent third-party vendors without the active involvement of the brands themselves.<sup>60</sup> Unlike car manufacturers, which maintain networks of certified pre-owned dealers, watch-makers have long neglected the second-hand market, often fearing both its strategic and logistical challenges.<sup>61</sup> WWF is in favour of selling and buying second-hand, mainly since it avoids producing new items and therefore does not have an additional negative environmental impact. There are several watch-makers, also among the featured brands in the rating, that have allegedly announced the introduction or consideration of certified pre-owned watches. So far, we have not been able to find these offerings on their websites, but we would strongly support such endeavours.

## IV. The power of consumers



## How consumers can drive sustainability

Sustainability has become a key factor for consumers. There is an evident trend for a transition towards more sustainable patterns of production and consumption. According to several studies, customers generally believe that consumption is a means to shift the direction of the world, enhance livelihoods and community well-being<sup>62</sup>. In fact, 81% of global consumers expect more from their expenditure than the sole acquisition of goods, according to a consumer study by Accenture<sup>63</sup>. Customers are now demanding leadership from brands to succeed in dealing with planetary challenges: they expect more responsible stewardship of natural resources and the environment and more transparency. Despite these expectations, 72% of consumers believe that business is failing to take care of our planet and society<sup>64</sup>.

Global consultancy firms and market research organisations agree on the fact that the current economy is largely influenced by the millennial generation, the cohort born between the early 1980s and the early 1990s<sup>65</sup>. Millennials expect to have a meaningful relationship with brands<sup>66</sup> and 84% of them believe that it is their generation's responsibility to change the world through their actions<sup>67</sup>. A Forbes publication shows that one of the key purchasing patterns of millennials is to do business with brands engaged in sustainable manufacturing, ethical business standards and pro-social messages<sup>68</sup>. All these aspects are reason enough to stress the importance and the power of consumer behaviour, which is why the following section lists possibilities for consumers to improve and influence sustainability regarding watches and jewellery.

**Consume sufficiently.** First and foremost, we as consumers should try to reduce the consumption of resource-intensive products and services according to the sufficiency strategy. Sufficiency is a sustainability strategy which acts as a complementary component to efficiency and consistency, it aims for an absolute reduction of resource consumption and covers reductionist strategies such as consuming less and slowing down. Thus, before each purchase, we should consider whether we really need this product and apply a more conscious, considered shopping routine. With regard to watches and jewellery, this should feature a stronger focus on high quality and longevity.

**Ask for recycled materials and always recycle.** Remember that precious metals are a (often infinitely) reusable resource: they can be recycled numerous times without losing their original quality. By recycling and buying recycled metals you avoid the need for mining and therefore the use of additional natural resources. Among others, sources of recycled metals range from existing jewellery, metals that had an industrial use, metals from electronic devices or product manufacturing, to metals from in-house recycling, investment gold, etc.

**Ask for certifications and examine the certifications carefully.** Whether it is diamonds sourced under the Kimberley Process or precious metals coming from an RJC-certified entity, Fairmined or Fairtrade, you should always ask about the origin of the raw material. If it is not possible to prove where a raw material has come from (e.g. mine of origin) and what players were involved (e.g. mining company, mining communities), or if a certified segregation is not guaranteed, there is no assurance its sourcing was not responsible for ecosystem destruction, forced and child labour involvement, dangerous working conditions or corruption.

**Reuse and repurpose.** Whenever possible, we should maintain, repair and reuse products. When certain products are no longer needed or wanted, we might be able to redesign, reuse, or return the raw materials for recycling. The principle includes reselling, reusing or further using items that are no longer required, providing a longer life for precious raw materials such as gold or diamonds.

Moreover, a lot of jewellery and watches are often passed down in the family as heirlooms. Since designs and taste change over time, many such heirlooms end up forgotten or unnoticed in family safes

and boxes. Redesigning and modernising such pieces is a conscious decision for eco-friendly jewellery that can simultaneously help revive memories and personal connections to the dearly departed.

**Use instead of own.** Our jewellery can be shared, exchanged or borrowed for a special occasion instead of being bought new each time. As described in the previous chapter, in addition to sharing among family and friends, there are numerous service providers available that offer the possibility of renting jewellery and watches.

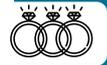
### Box 7: Summary of what consumers can do



Think twice about whether you really need new jewellery or a new watch



Always try to repair defective items to extend their lifetime or have old jewellery reworked or recycled by local jewellers or your preferred brand



Avoid purchasing industrially manufactured mass-produced watches or jewellery whose raw materials come from uncertain sources, and focus on high quality



For products with precious metals or gemstones, choose certified recycled and re-refined metals and recycled or synthetic gemstones



With newly mined materials, prefer certified eco-friendly conflict-free and fair-trade products and always ask about the origin and story of the raw materials



Recycle old and unused jewellery, watches and electronic devices (e.g. mobile phones)



Choose jewellers and watch-makers that comply with international environmental and social standards and can prove the origin of their critical raw materials



Prefer watch and jewellery companies that apply a holistic sustainability approach and communicate on their practices and efforts (e.g. in sustainability reports)



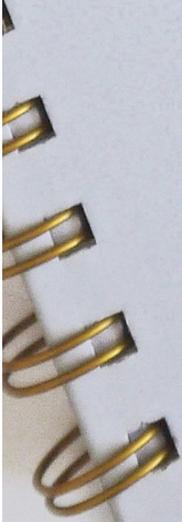
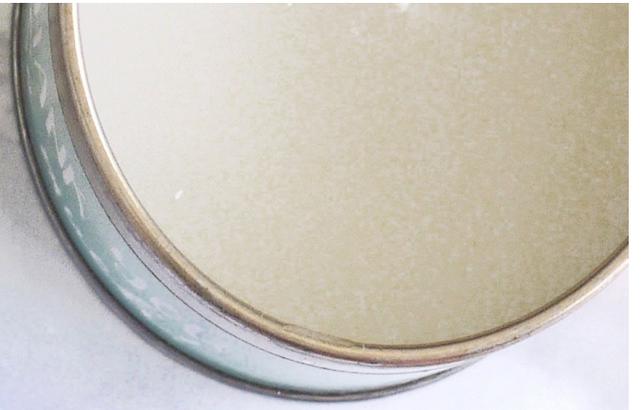
If you need jewellery for special occasions, you can rent or borrow it instead of buying new



Ask the brands how they tackle the environmental issues of their sector, and discuss this with colleagues, friends and family

# Appendix

NOTEWORTHY



## Swiss Made

Swiss-made watches have a high reputation as Swiss brands sell rather expensive, high-quality and prestigious watches and invest a lot into supporting and framing this image. Amongst the larger Swiss brands, Patek Philippe sells the most expensive watches, retailing at CHF 45,000 on average, while the regular Swiss-branded watch retails at around CHF 800.<sup>69</sup>

### What does 'Swiss Made' mean?<sup>70</sup>

Since 2017, a watch can only get the label "Swiss Made" or "Swiss" if at least 60 per cent of manufacturing costs for the finished watch were generated in Switzerland. Additionally, the technical development of a "Swiss Made" watch or movement must also take place in Switzerland itself. This also includes smart watches. Various studies have shown that consumers pay up to 20 per cent more for a Swiss watch and up to 50 per cent more for special mechanical timepieces.

## Selection of certifications and guidelines

The following section about certifications and standards, applicable for the watch and jewellery industry, does not raise any claim to completeness but is rather intended to give an illustrative overview of some of the currently most relevant standards. WWF does not provide direct recommendations regarding current certifications and labels, yet the following aspects need to be considered when relying on industry standards: Using only certified raw materials is an important step towards more responsible and sustainable sourcing, but the certification scheme should be transparent enough to disclose who was involved, where the material has come from and what criteria were applied in the certification assessment.

Given the topic at hand, we decided to focus on the following 6 initiatives for a more detailed analysis: Responsible Jewellery Council, Fairmined, Fairtrade Gold, IRMA, the Kimberley Process and the OECD Guidance on Due Diligence. As previously mentioned in the report, the main focus was placed on critical raw materials such as gold, which is why this section mainly covers gold certifications as well.

### Responsible Jewellery Council (RJC)

The Responsible Jewellery Council<sup>71</sup> (RJC) was set up in 2005 by companies and trade associations from the gold and diamond industry with the aim of promoting an ethical, socially and environmentally compatible and human rights-compliant corporate policy along the entire supply chain. To this end, two standards were created: the Code of Practices (CoP), which must be implemented by all members of the RJC; and the Chain of Custody (CoC) standard, which can be implemented voluntarily. By ensuring that many companies in the gold, diamond and platinum industries comply with the standards, it also aims to improve the reputation of the sector as a whole and consumer confidence in its products.

Membership of the initiative has grown rapidly in recent years and, with it, the number of companies implementing the initiative's Code of Practices (CoP). The RJC is an ISEAL<sup>72</sup> member (global association for sustainability standards), which provides insights into the state of implementation of the standard through monitoring and evaluation reports.

In the Declaration of Commitment for Entrepreneurial Practice, the Code of Practice (RJC CoP), the members commit themselves to a number of standard principles in four fields:

Business ethics: prohibition of corruption, smuggling, blackmail, fraud and bribery, money laundering and terrorist financing on the basis of existing UN and OECD conventions, certification according to the criteria of the Kimberley Process Certification Scheme to ban conflict and war diamonds, product safety and product integrity

Respect for human rights and social responsibility

Environmental responsibility: environmental protection, the handling of hazardous substances, waste and emissions and the use of energy and natural resources

Management systems: Binding to existing legal bases, company policy and business relations

Companies must have their business practices certified in accordance with RJC two years after becoming a member, otherwise sanctions or exclusion are imposed. Moreover, external audits are carried out.

### Critical reflection

A particular advantage of the CoP is its wide distribution and high dynamic within the selected industrial sectors. Since 2005, the Council's membership has grown from 14 to more than 1,100 organisations committed to advancing responsible jewellery practices. Many relevant international standards, such as EITI73 and the International Cyanide Management Code, are integrated into and harmonised with CoP and CoC. The standards comply with the requirements of the ISEAL Alliance and are regularly reviewed and revised accordingly. The standards thus remain adaptable to new challenges (cf. the current review of the RJC COP standard). Implementation, monitoring and evaluation reports present and address both successes and existing challenges.

The RJC is an industrial initiative. As of now, the decision-making bodies of the RJC do not include consumer groups, representatives of mining or locally affected communities, trade unions, miners' associations or a broader spectrum of NGOs. Chain of Custody is not compulsory for sourced materials (e.g. gold). The RJC does not make its audits public and external stakeholders only receive very basic data about member entities. There is no information about the findings and corrective actions of the audits, making it simply impossible to assess a company as an external stakeholder. This lack of transparency undermines confidence in the certification system and makes it difficult for any party to credibly evaluate a company's performance.

Thus, membership of the RJC does not automatically guarantee responsible sourcing by a company and RJC's governance, standards and audit system are not transparent enough to give such a recommendation. WWF currently considers the RJC as an industry body that provides civil society and other stakeholders (e.g. NGOs) only with an advisory role and no direct influence on the decision-making process of the initiative. While the handling of implementation challenges can be assessed positively, the auditing and assessment process is seen as less transparent and comprehensible.

### Fairmined

The Fairmined Initiative<sup>74</sup> was created in 2004 by the Alliance for Responsible Mining (ARM)<sup>75</sup>, a global non-profit organisation for responsible artisanal and small-scale mining. The goal of the initiative is to enhance equity and well-being in artisanal and small-scale mining communities through improved social, environmental and labour practices, good governance and the implementation of ecosystem restoration practices.

ARM wants to set standards for responsible ASM, support producers and enable them to deliver "Fairmined" certified metals and minerals to the markets through economically fair supply chains. The aim is, to contribute towards the transformation of ASM into a socially and environmentally responsible activity, and to the improvement of the quality of life of marginalised artisanal miners, their families and communities. In this way, ASM will become a formalised, organised and profitable activity that uses efficient technologies, and is socially and environmentally responsible.

There are two different certifications that can be obtained: Fairmined Gold and Fairmined Eco Gold. The latter includes stricter and more extensive ecological criteria (see below).

Fairmined Gold	Fairmined Eco Gold
Environmentally friendly	Ecological
Responsible use of toxic substances	No use of toxic substances
Gradual reduction in the use of toxic substances	Rehabilitation of native ecosystems (e.g. restoration of forests in highly biodiverse areas)
Premium: 4000 USD per kg	Additional requirements for minimization of ecological disruption
	Ecological Premium: 4000 USD (regular premium) + 2000 USD per kg

### Critical reflection

Depending on the customer's licence with Fairmined, the gold may be fully traceable to the mine of origin or mixed with other gold. Certified Fairmined gold is still only available in very limited amounts with approximately 500 kilograms of gold output per year<sup>76</sup>. This quantity represents a marginal fraction of the gold bought and used each year by the assessed companies in this report. At the time of writing this report, eight mines in four countries (Bolivia,

Colombia, Mongolia, and Peru) were certified, with an additional 20 mining organisations working towards certification. Although the standard might not have a reach similar to that of the RJC, for example, it does show a best-practice example of how to cover a very broad spectrum of issues and goes well beyond the narrow focus of conflict-financing prevention. In the environmental field, for example, it additionally includes requirements on water consumption and renaturation in its Fairmined Eco standard. The initiative also aims to reduce and eliminate the use of toxic substances (e.g. mercury) in small-scale mining and to improve the handling of chemicals in general.

## Fairtrade

Fairtrade and Fairmined dual certification for gold was launched in 2011, a joint scheme between The Fairtrade Foundation and The Association for Responsible Mining, with a separation of the two in 2013. Since then, Fairtrade Gold<sup>77</sup> has been solely administered under the umbrella of Fairtrade International. This is a standard-setting and global consumer certification system that works with small producers in developing countries with the goal to improve livelihoods and create sustainable development opportunities through trade. The Fairtrade Gold and Precious Metals programme extends these goals to the artisanal and small-scale mining sector. The institution works directly with artisanal and small-scale mining organisations to achieve compliance with its standard, independent third-party verification, chain of custody audits, minimum price guarantees, Fairtrade premium payments and the marketing of certified products in international Fairtrade markets.

### Critical reflection

The Fairtrade Foundation is working closely with NGOs on a programme to train and support artisanal and small-scale gold miners. As with the Fairmined standard, the certified quantity represents a marginal fraction of globally mined gold, but it is an important first step and a signal to the industry. Miners can earn an additional ecological premium when they recover gold without the use of mercury or cyanide.<sup>78</sup> In addition, they must ensure minimum ecological disruption and forest restoration from the outset of new operations. Generally speaking, the reach of this standard might not be similar to the other examined examples, but it shows a well-established case of how to cover a very broad spectrum of issues that goes well beyond the narrow focus of conflict-financing prevention.

## Initiative for Responsible Mining Assurance (IRMA)

The Initiative for Responsible Mining Assurance<sup>79</sup> (IRMA) is a certification scheme that offers watch and jewellery companies another source of responsibly-sourced precious minerals and gemstones. IRMA was launched in 2006 to develop an independent standard for responsible mining, offering certification to individual mine sites rather than mining companies. The focus of IRMA is on industrial, rather than small-scale or artisanal, mining.

According to the responsible mining website, the IRMA Standard is designed to support the achievement of four overarching principles: business integrity, social responsibility, environmental responsibility, and planning and managing for positive legacies. It was developed by a broad stakeholder group that includes mining companies, jewellers and other “downstream users,” non-governmental organisations, affected communities and labour unions. IRMA will be testing the metrics and global applicability of this standard in 2018 and 2019. During its launch phase, IRMA will be seeking input to improve the standard to assure its relevance across geographic regions, mining methods, types of mined materials, social and political environments, diverse landscapes and mining company sizes. A revision of the IRMA Standard is planned for 2019 based on learning from the launch phase. According to current information, an official certification of mines will not be available before late 2019.

### Critical reflection

The Standard for Responsible Mining is the result of more than ten years of collaboration between groups from the mining industry, organised labour, non-governmental organisations, impacted communities, and businesses. This multi-stakeholder approach, offering shared value for mining industry participants, while addressing purchaser demand for greater options in sourcing responsibly mined materials and civil society's desire for transparency and independent verification, is considered a definite step forward.

Standard for Responsible Mining's best practice requirements for mining go far beyond current industrial norms and include aspects such as health and safety for workers, human rights, community engagement, pollution control, mining in conflict-affected areas, rights of indigenous peoples, transparency in revenue payments from companies to governments and land reclamation. The standard focuses on transparency, where different levels of performance are recognised, and continuous improvement is encouraged but where certification is still available for those industrial-scale mine sites that meet all major best-practice requirements.

IRMA has a somewhat negative connotation due to its long development and implementation phase and there is increasing concern that the initiative will lose relevance the longer this certification is postponed.

### Kimberley Process

The Kimberley Process is an international certification that was established by the United Nations in 2003 to safeguard the legitimate diamond trade by preventing rough diamonds from entering the mainstream market<sup>80</sup>. It has been acknowledged that the process contributes to international security, development and human rights. Before the Kimberley process, watch and jewellery customers had little information on where the diamonds that they were buying came from. Even in the early 21<sup>st</sup> century, diamonds were still mined in armed-conflict zones and financed insurgencies and rebel groups in several countries<sup>81</sup>.

The Kimberley Process relies on the contributions of its participants - governments and regional organisations (e.g. the European Community) – to remove conflict diamonds from the global supply chain<sup>82</sup>. To become a participant, parties must meet the minimum requirements of the Kimberley Process Certification Scheme (KPCS), which entitles them to trade in rough diamonds with one another. The KPCS aims to safeguard the shipment of rough diamonds and certifies them as conflict-free<sup>83</sup>. The requirements are:

1. Satisfy 'minimum requirements' and establish national legislation, institutions and import/export controls
2. Commit to transparent practices and to the exchange of critical statistical data
3. Trade only with fellow members that also satisfy the fundamentals of the agreement
4. Certify shipments as conflict-free and provide the supporting certification<sup>84</sup>

Implementation of the KPCS is monitored through annual reports, review visits, regular exchanges of data and statistical analysis.<sup>85</sup> In addition, participants, observers and representatives from the industry meet twice every year and conduct monthly teleconferences<sup>86</sup>.

On 7 March 2018, the General Assembly of the United Nations adopted a consensus resolution to intensify the Kimberley Process Certification Scheme (KPCS), to continue breaking links between illicit rough diamonds trade and armed conflict, and to align the KPCS with the 2030 Agenda for Sustainable Development<sup>87</sup>.

### Critical reflection

The Kimberley Process Certification Scheme (KPCS) is the most prominent international standard with regard to diamonds. Despite being the most internationally applied standard, it has not escaped criticism and two main flaws have been condemned: narrowness and traceability. Firstly, critiques aim at the fact that the certification by the Kimberley Process is too narrow, leaving aside serious issues such as more specific human rights abuse issues or environmental impact. Diamonds certified by the Kimberley Process can still carry tragic histories, including land degradation, destruction of ecosystems, populations evicted from their ancestral lands, forced labour, abuses and corruption. Secondly, the Kimberley Process certificate does not apply to individual stones, but to batches of rough diamonds that are cut and distributed around the world with no comprehensive tracking system. This means that in most cases consumers of watches and jewellery will not know in which mine or even which country the diamonds they are buying were sourced, even if they are certified by the KP<sup>88</sup>.

### OECD guidance on due diligence

The OECD has defined due diligence as an ongoing process “through which enterprises can identify, prevent, mitigate and account for how they address their actual and potential adverse impacts as an integral part of business decision-making and risk management systems”<sup>89</sup>. Due diligence goes beyond identifying and managing risks to a company itself, also addressing the impacts and risks caused to other parties.

The OECD proposes a five-step framework to operationalise due diligence:

- Step 1:** Establish strong company management systems
- Step 2:** Identify and assess risk in the supply chain
- Step 3:** Design and implement a strategy to respond to identified risks
- Step 4:** Carry out independent third-party audit of due diligence at identified points in the supply chain
- Step 5:** Report on supply chain due diligence

Due diligence goes beyond identifying and managing material risks to the enterprise itself; it considers addressing potential impacts through prevention or mitigation and actual impacts through remediation<sup>90</sup>. The OECD Guidelines focus on adverse impacts that are “either caused or contributed to by the enterprise, or are directly linked to their operations, products or services by a business relationship”<sup>91</sup>.

Concerning the need to protect the environment and to advance in sustainable development, the OECD Guidelines suggest that enterprises should<sup>92</sup>:

- Establish a system of environmental management
- Assess and address possible environmental impacts involved in the processes, goods and services of the enterprise to avoid them or mitigate them if unavoidable
- If the proposed activities might have significant environmental impacts, elaborate an environmental impact assessment
- If there are threats of serious damage to the environment, do not postpone measures to prevent or minimize the damage
- Keep contingency plans to prevent, mitigate and control serious environmental damage from operations
- Establish mechanisms for immediate reporting of serious environmental damage
- Constantly improve corporate environmental performance, at the enterprise and supply chain level
- Provide training to workers in environmental health and safety issues, such as handling hazardous materials, preventing environmental accidents, or learning about environmental impact assessment procedures and environmental technologies
- Contribute to environmentally meaningful and economically efficient public policy (e.g. establishing partnerships to promote environmental awareness and protection).

### Critical reflection

The OECD Due Diligence Guidance elaborates a detailed mineral supply chain due diligence framework for companies operating in or sourcing from conflict-affected or high-risk areas. The Guidance offers a broad definition of “high-risk areas” that focuses largely on the prevalence of serious human rights abuses or violations of international law. Under this framework, where companies cannot trace their material all the way back to the mine, they should require upstream suppliers such as gold refiners to provide them with detailed evidence that they have conducted due diligence in their supply chain. Even though, the OECD guidelines address the responsibility by multinational enterprises and represent a new, comprehensive and significant process relative to earlier approaches to due diligence<sup>1</sup>, they have been criticized for being a non-binding code of conduct, which suffers from a lack of monitoring and implementation.

## Discussion of the rating results

### About the rating

In the selection of the brands, various aspects were taken into account: (1) focusing entirely on Switzerland and Swiss-based companies to show the role and positioning of Switzerland in the industry; (2) looking at consumer-facing brands and not at often less-known conglomerates and holding companies; and (3) including the most relevant players in the industry, based on an *external evaluation of brand value*<sup>46</sup>. Together, these brands represent the 15 biggest Swiss watch and jewellery companies.

The objective of WWF Switzerland's first rating of the watch and jewellery sector is to serve as a baseline study to advance in WWF's vision of a more sustainable industry. WWF wishes to see significant improvements within the companies towards operating inside the planetary boundaries and is keen to encourage and collaborate with companies to foster such progress. The aim is to include more watch and jewellery brands in the future and repeat this rating at regular intervals. By applying this approach, WWF intends to identify areas for improvement, enable monitoring of future developments and track overall progress.

The evaluation is based on criteria co-developed by WWF and the renowned sustainability experts at BHP - Brugger and Partners. BHP worked with specialist analysts and their well-proven rating methodology to assess the 15 companies in the study's scope.

To build a comprehensive picture of the evaluated companies, BHP's analysts collected and analysed available corporate information (reports of the company, corporate website, policy documents, etc). It is important to note, that the assessment's focus was on the level of the individual brands (maisons) and not on group information. At the time of the initial compilation of the rating, all companies were given the opportunity to comment on and complement the findings of the pre-assessment. Cartier, Piaget, Jaeger-LeCoultre, Vacheron Constantin and IWC (all members of the Richemont Group) and TAG Heuer provided feedback during these review rounds and supplemented the draft rating with additional internal company information and other valuable inputs.

The specific rating criteria were developed based on WWF's broad experience with ratings in other sectors such as banking, retail, food and textiles. In addition, BHP's expertise in company evaluations played a significant part in structuring and finalising the questionnaire. The data used for this report were compiled and updated between May and early September 2018. WWF attributed a weighting to the different criteria, applying a standardised, formalised approach, and did not overbalance any of the three main areas (Strategy & Governance, Environmental Management and Company Engagement).

The findings of the rating are discussed and elaborated in more detail below.

Company	Active Participation in Rating Process	Overall score environmental rating	Governance structure & policies	Due Diligence	Materiality analysis & target setting	Monitoring & reporting	GHG emissions (inventories, reduction targets, etc.)	Waste management and product packaging	Sustainable procurement	Traceability & emissions of transportation	Environmental impact of products	Transparency and certification of raw materials	Environmental certification and % coverage of certified raw materials	Sourcing & environmental projects for raw materials	Capacity building of suppliers	Engagement with employees	Customer awareness on sustainability impacts	Membership in business initiatives for sustainability	
			Audemars Piguet		non-transparent														
Breguet		non-transparent																	
Cartier	X	upper midfield																	
Chopard		lower midfield																	
IWC	X	ambitious																	
Jaeger-LeCoultre	X	upper midfield																	
Longines		non-transparent																	
Omega		non-transparent																	
Patek Philippe		non-transparent																	
Piaget	X	upper midfield																	
Rolux		non-transparent																	
Swatch		non-transparent																	
TAG Heuer	X	lower midfield																	
Tissot		non-transparent																	
Vacheron Constantin	X	upper midfield																	

### Governance & policies

This section evaluates whether companies have adopted a comprehensive governance structure and an environmental policy. The aim is to get a better understanding of how environmental management is being implemented and enforced through structures and responsibilities as well as its integration into top management.

Audemars Piguet		<p><b>Discussion:</b> The results show that IWC and Cartier clearly outperform the other companies in respect of governance structure and policies. IWC, for example, has a formal commitment that covers the relevant parts of their operations and there is a clear management structure as well as a sustainability board. Jaeger-LeCoultre, Piaget and Vacheron Constantin show only an informal, anecdotal governance structure, yet there is some integration of sustainability aspects in decision-making processes. These companies do have reasonable policies and systems in place but have received a lower grade, for instance, due to the lack of information on management structures and responsibilities. Five out of twelve analysed companies do not have a formal and transparent approach to environmental management policies and systems. These companies provide no or very limited information on their commitment to environmental issues and apparently lack the means to measure and manage their environmental impacts. For a higher score in this section, companies should have a dedicated position responsible for environmental sustainability which reports directly to the executive board. Furthermore, sustainability aspects need to be fully integrated in all decision-making processes.</p>
Breguet		
Cartier	X	
Chopard		
IWC	X	
Jaeger-LeCoultre	X	
Longines		
Omega		
Patek Philippe		
Piaget	X	
Rolux		
Swatch		
TAG Heuer	X	
Tissot		
Vacheron Constantin	X	

## Due diligence

This part in the questionnaire is mainly concerned with the company's due-diligence process when choosing suppliers and working with partners. For instance, it is assessed how business' reputational and sustainability risks are included as decision criteria. In particular, it was evaluated how environmental criteria were included when doing due diligence and to what extent it covers the company's suppliers and partners.

Audemars Piguet	Red
Breguet	Red
Cartier	Yellow
Chopard	Red
IWC	Light Green
Jaeger-LeCoultre	Red
Longines	Red
Omega	Red
Patek Philippe	Red
Piaget	Yellow
Rolex	Red
Swatch	Red
TAG Heuer	Red
Tissot	Red
Vacheron Constantin	Yellow

**Discussion:** Only IWC was able to achieve a more ambitious result, followed by other Richemont brands: Cartier, Piaget and Vacheron Constantin. The main reason for IWC's better performance is the implementation of its own supplier code of conduct. Overall, the Richemont group publicly communicates that its *maisons* conduct third-party external audits of key suppliers' compliance with the Code of Conduct (publicly available) as part of their internal risk management processes. *Maisons* are required to follow up with remedial action plans as part of the on-going supplier relationship. Richemont established a coordinated approach across the Group, where *maisons* help each other audit their suppliers.

The remaining companies either do not communicate on their due-diligence process or do not have such processes in place. Thus, most of the evaluated companies were rated as Non-transparent or Lower Midfield because there is little or no evidence of due diligence, especially regarding environmental criteria.

## Materiality analysis & target setting

This section looks at how companies are incorporating environmental aspects in their decision-making and planning. Particularly, it was assessed whether a materiality analysis was performed and if it was based on scientifically relevant data (e.g. LCA, environmental risk assessments or comparable methods) and how the stakeholders were involved in the process. Furthermore, this part evaluates if and how performance figures and targets regarding environmental aspects were defined (e.g. greenhouse gas emissions and renewable energy/green electricity, biodiversity conservation in the value chain and sustainable chemical and water management).

Audemars Piguet	Red
Breguet	Red
Cartier	Yellow
Chopard	Red
IWC	Light Green
Jaeger-LeCoultre	Light Green
Longines	Red
Omega	Red
Patek Philippe	Red
Piaget	Red
Rolex	Red
Swatch	Red
TAG Heuer	Red
Tissot	Red
Vacheron Constantin	Red

**Discussion:** Jaeger-LeCoultre and IWC performed best in this category. While IWC conducted its own materiality assessment and set goals regarding greenhouse gas emissions and packaging, Jaeger-LeCoultre based its decision on the group materiality analysis by Richemont and set specific targets for itself to reduce energy use and the impact on climate change.

The remaining companies either do not mention any environmental performance figures / targets or are not considering environmental aspects in their decision-making and planning. Due to the lack of disclosure by most brands, this is very difficult to define and assess.

In general, companies should not only conduct a materiality analysis and set ambitious targets (qualitative/quantitative) and performance figures for all relevant environmental aspects but should also base these processes on scientifically proven concepts (e.g. towards one-planet living, the 1.5°C target, etc.) and all relevant stakeholders should be consulted or included in the process.

### Monitoring & reporting

This section analyses the collection, monitoring and verification of relevant performance figures. Also, it assesses what channels for reporting and communicating environmental information are used (e.g. publicly available environmental or sustainability report, information on website) and what standards were applied (e.g. GRI, G4). The verification of the data is another critical evaluation criterion since relevant sustainability data should be assured by an external party to increase credibility for stakeholders.

Audemars Piguet	Red	<p><b>Discussion:</b> IWC is the only company that publishes its own sustainability report, which is done on a bi-annual basis. The report is written in accordance with the GRI G4 standard and includes many relevant environmental aspects. Cartier and Jaeger-LeCoultre are rated as Upper Midfield due to internal monitoring efforts regarding key environmental figures (i.e. energy, water, fuel), but still without comprehensive monitoring and reporting activities. The remaining companies have no or only qualitative / anecdotal monitoring and reporting on environmental sustainability.</p> <p>There are various brands that conduct consolidated monitoring and reporting at the group level, but it is often not evident whether the individual companies (maisons) are applying these measures at their level with the same structured approach.</p> <p>Companies should implement regular (at least bi-annual) and systematic internal quantitative monitoring and reporting (including follow-up activities) for all environmental targets. Furthermore, a systematic public sustainability report with quantitative reporting on all targets, according to e.g. GRI standards should be standard procedure and relevant publicly reported information needs to be assured by a third party to increase credibility.</p>
Breguet	Red	
Cartier	Yellow	
Chopard	Red	
IWC	Light Green	
Jaeger-LeCoultre	Yellow	
Longines	Red	
Omega	Red	
Patek Philippe	Red	
Piaget	Red	
Rolex	Red	
Swatch	Red	
TAG Heuer	Red	
Tissot	Red	
Vacheron Constantin	Red	

### Greenhouse gas emissions (inventories, reduction targets, etc.)

This part of the rating focuses on the scope and activities covered by greenhouse gas inventories, the disclosure of calculation methods and publicly communicated reduction targets. It is therefore assessed whether the surveyed companies measure greenhouse gas emissions of their operations and business activities, how these emissions have developed over the years and what targets the companies have set to achieve substantial emission reductions in the future.

Audemars Piguet	Red	<p><b>Discussion:</b> The results in this section show that measuring and actively reducing greenhouse gas emissions is fairly new to the industry and many of the companies are still in the development phase. Even though several companies show comprehensive measurement of GHG emissions (at least for scope 1 &amp; 2), and some efforts to reduce emissions are evident, the reason for the poor performance is also due to no or only anecdotal reduction targets and a lack of historical data gathering.</p> <p>Overall, it needs to be highlighted that almost 2/3 of the evaluated companies have adopted no or non-comprehensive measures for GHG emissions or do not communicate publicly about it.</p> <p>To increase their performance, companies should have comprehensive measurement of GHG emissions (scope 1, 2 &amp; 3) and ambitious objectives for the near and remote future should be published and in line with science-based climate approaches (e.g. the 1.5°C scenario or one-planet living).</p>
Breguet	Red	
Cartier	Yellow	
Chopard	Red	
IWC	Yellow	
Jaeger-LeCoultre	Yellow	
Longines	Red	
Omega	Red	
Patek Philippe	Red	
Piaget	Yellow	
Rolex	Red	
Swatch	Red	
TAG Heuer	Yellow	
Tissot	Red	
Vacheron Constantin	Yellow	

### Waste management and product packaging

This section analyses whether companies have adopted strategies and processes for waste management and handling and for materials optimisation (e.g. regarding recycling, downcycling, durability of products, closed material cycles). It further asks about specific strategies and targets to reduce waste and optimise waste management in general. A particular focus is also placed on companies' strategies and guidelines for minimising the environmental impact of their packaging.

Audemars Piguet	Red
Breguet	Red
Cartier	Yellow
Chopard	Yellow
IWC	Yellow
Jaeger-LeCoultre	Red
Longines	Red
Omega	Red
Patek Philippe	Red
Piaget	Yellow
Rolex	Red
Swatch	Red
TAG Heuer	Red
Tissot	Red
Vacheron Constantin	Yellow

**Discussion:** Waste management and product packaging is another category where the evaluated companies seem to be far from sustainable practices. Most have general recycling and waste handling structures in place, but none were convincing with their waste management strategies and processes, since most achievements are concerned with mere optimisation rather than substantial improvements and innovation.

Achieving a higher score means that numerous relevant optimisations or documented reductions of the environmental impact of packaging and waste (based on environmental impact data) are needed. Ambitious guidelines and targets and comprehensive processes should be in place for substantial packaging and waste reduction and optimisation (regarding environmental compatibility, reusability, recyclability, closed material cycles, etc.). Also, companies should work towards a circular economy approach.

### Sustainable procurement / Supplier requirements

Regarding sustainable procurement and environmental management in the supply chain, here the requirements and coverage of environmental supplier standards and guidelines are assessed. This section also looks at procedures to ensure compliance with environmental supplier standards and guidelines, how they are implemented and what companies do if suppliers are non-compliant with the requirements.

Audemars Piguet	Red
Breguet	Red
Cartier	Yellow
Chopard	Yellow
IWC	Light Green
Jaeger-LeCoultre	Red
Longines	Red
Omega	Red
Patek Philippe	Red
Piaget	Yellow
Rolex	Red
Swatch	Red
TAG Heuer	Yellow
Tissot	Red
Vacheron Constantin	Yellow

**Discussion:** Again, IWC is the only company that achieves a satisfactory score in this section. IWC provides information on how environmental standards are enforced in the supply chain. The company requires the application of several industry standards (RJC, the Kimberly Process, etc.) and communicates about it accordingly. For the majority of the companies, however, no relevant procurement requirements, monitoring & follow-up procedures are evidenced. Cartier, TAG Heuer, Chopard, Piaget and Vacheron Constantin show the application of some general environmental requirements, compliance monitoring and follow-up activities, but no effective systematic approach is apparent.

It is recommended that companies integrate relevant mandatory norms like ISO 14000 or other environmental management systems, as along with quantitative reduction targets in sourcing guidelines and procurement policies for all relevant suppliers/supply chains. Furthermore, they should establish systematic compliance monitoring & follow-up activities, including an effective and transparent corrective action process, and it should be common practice to make the supplier code of conduct publicly available.

### Traceability & emissions of transportation

This section analyses efficient transport logistics and asks whether companies have access to an estimate/survey of transport (i.e. weight, distance and means of transport) for its products and soft commodities over all or parts of the value chain. It further assesses if and how companies model their GHG emissions of the transport of goods and whether they set targets to reduce GHG emissions in transport.

Audemars Piguet	Red
Breguet	Red
Cartier	Red
Chopard	Red
IWC	Yellow
Jaeger-LeCoultre	Yellow
Longines	Red
Omega	Red
Patek Philippe	Red
Piaget	Yellow
Rolex	Red
Swatch	Red
TAG Heuer	Yellow
Tissot	Red
Vacheron Constantin	Yellow

**Discussion:** TAG Heuer, IWC, Jaeger-LeCoultre, Piaget and Vacheron Constantin have access to transport data/estimates, at least for their own, internal logistics operations and/or tier-1 inbound/outbound. These companies moreover show endeavours to estimate emissions but have no significant GHG-reduction targets. For the rest of the evaluated companies, there are no significant transport and emission data/estimates and no relevant targets are indicated. To improve in this area, companies must implement measures to estimate or calculate transport emissions from origin to point of sale. Furthermore, they should have reduction targets for distance and GHG intensity based on a 1.5°C or similar science-based target concept. Finally, the implementation of these measures should be monitored and systematically tracked.

### Environmental impact of products (data collection / research)

This part of the questionnaire focuses on the measures taken by the companies to use environmental assessment tools, life cycle assessments and similar procedures (eco-audits or climate footprints, risk assessments, pathway to 1.5°C, etc.) in product design to minimise the environmental impact of products throughout their life-cycle. It analyses the approach and eco-design considerations, as well as the specific product group and the percentage of the total product portfolio which this applies to.

Audemars Piguet	Red
Breguet	Red
Cartier	Yellow
Chopard	Red
IWC	Yellow
Jaeger-LeCoultre	Yellow
Longines	Red
Omega	Red
Patek Philippe	Red
Piaget	Yellow
Rolex	Red
Swatch	Red
TAG Heuer	Red
Tissot	Red
Vacheron Constantin	Yellow

**Discussion:** None of the companies was able to achieve a satisfactory result in this section, yet some of the rated brands have started to look into the topic. The brands of the Richemont group mention several approaches where, for example, an eco-conception guide was developed or the company had selective applications of life cycle assessments. Since none of the companies were able to demonstrate a systematic eco-design approach based on a thorough eco-assessment, the room for improvement is huge. To receive a higher score in this section, companies should apply a strategic and systematic application of specific life-cycle assessments or similar approach. The method should be described accordingly or commonly acknowledged. Eco-design aspects moreover need to form an integral part of products and the companies should report on results in this area.

### Promotion of transparency and certification of origin for critical raw materials (metals, gemstones, leather etc.)

This section looks at companies' actions concerning critical raw materials (e.g. precious metals, gemstones, leather etc.). The focus is on the amounts of such materials, their countries of origin and the certifications / labels they have. With regard to precious metals, special attention was given to gold, so it was relevant to find out whether companies' policies and strategies could ensure the sourcing of gold from certified and responsible sources. Further, it was assessed whether the amounts of critical raw materials are published, and companies were asked about the traceability of critical raw materials and transparency efforts along the supply chain.

Audemars Piguet	Red
Breguet	Red
Cartier	Yellow
Chopard	Yellow
IWC	Yellow
Jaeger-LeCoultre	Red
Longines	Red
Omega	Red
Patek Philippe	Red
Piaget	Yellow
Rolux	Red
Swatch	Red
TAG Heuer	Red
Tissot	Red
Vacheron Constantin	Yellow

**Discussion:** IWC is the only company that publishes the amounts of their main raw materials (steel, gold, diamonds etc.), which is an important step towards more transparency in the industry. Unfortunately, the rest of the sector is still very secretive when it comes to the use of its raw materials. Furthermore, there are only a few examples, e.g. Cartier and Chopard, where it is possible to follow some raw materials to their origin. In the case of gold, the companies either buy directly from Fairmined or Fairtrade certified entities, where an independent third-party can look up the mines and sources of origin, or they actively obtain their gold through the Swiss Better Gold Association, which publishes all the mines / suppliers it sources from.

Overall, the performance of the assessed companies in this section is rather weak and transparency must be drastically improved to advance towards more sustainable and responsible sourcing practices.

### Environmental certification and % coverage of certified raw materials (metals, gemstones, leather etc.)

In this section, the percentage of certified raw materials (e.g. gold, precious metals, gemstones, leather) that is used in manufacturing the companies' products is evaluated. Specifically, the questionnaire asks about the percentage of certified raw materials in relation to the company's total purchasing volume. An exemplary list is provided of possible certifications for raw materials (e.g. RCJ Code of Practice, RCJ Chain of Custody, Fairmined / Fairmined eco, Fairtraide, Kimberley Process, Responsible Luxury Initiative's Animal Sourcing Principles). Another issue included in this section is the amount of recycled and newly mined materials sourced.

Audemars Piguet	Red
Breguet	Red
Cartier	Light Green
Chopard	Yellow
IWC	Light Green
Jaeger-LeCoultre	Yellow
Longines	Red
Omega	Red
Patek Philippe	Red
Piaget	Light Green
Rolux	Red
Swatch	Red
TAG Heuer	Yellow
Tissot	Red
Vacheron Constantin	Yellow

**Discussion:** Many of the assessed companies rely on the Responsible Jewellery Council when it comes to promoting raw materials such as gold, and this is considered more common than best practice. Some more ambitious examples can be seen especially from Cartier, IWC and Piaget, which apply more advanced standards regarding certifications with more specific information on what materials they apply to. Cartier, for instance, obtains some of its gold through certified ASM mines and is a member of the Swiss Better Gold Association. Another example worth mentioning is Chopard. The company is committed to only use 100% gold coming from either ASM mines participating in the Swiss Better Gold Association (SBGA), Fairmined and Fairtrade schemes or from RJC Chain of Custody certified entities. Generally, it can be said that the industry still has a very long way to go regarding transparency and certification of its raw materials. As long as certification schemes such as RJC or the Kimberley Process fail to increase transparency and provide civil society and industry representatives with equal decision-making power, enabling companies to widen the scope of their environmental assessment criteria to include a broader spectrum of stakeholders and relevant industry players (e.g. mines and mining companies), it is very difficult to assess their effectiveness and relevance.

### Sourcing & other environmental projects/measures for raw materials

This part of the questionnaire addresses whether companies support procurement and/or research projects to promote ecological and sustainable production of raw materials. Examples of this are lowering the amount of chemicals used in the sourcing of materials or taking measures towards energy efficiency. Companies were asked to list the projects implemented over the last three years for their most important raw materials. Moreover, they were requested to list any actions concerning sustainable water management and the encouragement of biodiversity in procurement.

Audemars Piguet	Red
Breguet	Red
Cartier	Yellow
Chopard	Red
IWC	Yellow
Jaeger-LeCoultre	Yellow
Longines	Red
Omega	Red
Patek Philippe	Red
Piaget	Yellow
Rolex	Red
Swatch	Red
TAG Heuer	Yellow
Tissot	Red
Vacheron Constantin	Yellow

**Discussion:** As the results clearly show, this topic is rather new to the industry and the companies are only slowly trying to better understand their procurement and its environmental impacts. Some of the better-rated brands at least mentioned a few projects with some impact on their supply chain. Overall, it is desirable that companies actively take responsibility for their procurement to reduce the environmental impact along the supply chain.

### Capacity building of suppliers

This section focuses on companies' implementation of environmental capacity building for their suppliers. Examples of this are the use of environmental management systems or the implementation of best practices for the reduction of environmental impacts in the supply chain. If companies implement capacity building, it is further evaluated how the suppliers were selected for the initiative, what percentage of the companies required training (weighted according to their purchasing volume in CHF) and how many have been trained to date.

Audemars Piguet	Red
Breguet	Red
Cartier	Yellow
Chopard	Red
IWC	Light Green
Jaeger-LeCoultre	Red
Longines	Red
Omega	Red
Patek Philippe	Red
Piaget	Yellow
Rolex	Red
Swatch	Red
TAG Heuer	Red
Tissot	Red
Vacheron Constantin	Red

**Discussion:** Only three out of 15 companies were able to achieve a rating above the "Non-transparent / Latecomer" category. IWC, for example, has its own IWC Supplier Operational Excellence Programme, where five strategic suppliers are involved. Cartier participates in the capacity building of small-scale mines towards the implementation of responsible practices through the Swiss Better Gold Association, and Piaget received a better scoring due to some basic information on supporting suppliers in the pre-audit assessment phase of RJC as well as training on the use of chemicals. Nevertheless, the results are generally quite worrisome and improvements along the supply chain will only be possible if the companies adopt a more cooperative and collaborative approach with suppliers.

## Engagement with employees

This part of the questionnaire tackles how companies inform and motivate their employees on environmental issues. It is relevant to know the content, scope, methodology, target groups and frequency of projects and programmes concerning environmental topics. In particular, the focus is on work-related training, the provision of general information on environmental issues (both related and unrelated to the industry), the encouragement of volunteering and the implementation of innovation programmes to identify suggestions from employees on ecological improvements.

Audemars Piguet	Red
Breguet	Red
Cartier	Yellow
Chopard	Red
IWC	Green
Jaeger-LeCoultre	Yellow
Longines	Red
Omega	Red
Patek Philippe	Red
Piaget	Yellow
Rolex	Red
Swatch	Red
TAG Heuer	Red
Tissot	Red
Vacheron Constantin	Yellow

**Discussion:** Few of the evaluated companies engage their employees in sustainability-related matters, establish work-related training or generally provide information on environmental issues. IWC mentioned that it engages its employees on sustainability through volunteering with the Forest Stewardship Council (FSC), sharing sustainability related surveys, publishing a dedicated CSR newsletter and holding “Lunch and Learn” sessions on sustainability topics and other climate change-related incentives. The rest of the companies have either only few general events, training sessions, etc. to inform or motivate employees on environmental issues, or there is no mention of projects and programmes to sensitise or motivate employees about environmental issues.

## Customer awareness on sustainability impacts of products

This section focuses on the presence of ecological sustainability campaigns or other measures carried out by companies to raise awareness of environmental issues among customers and consumers. In this context, it was also examined whether companies inform their consumers on the environmental impact of their products or encourage customers to become involved in achieving ambitious environmental goals like the 1.5°C target.

Audemars Piguet	Red
Breguet	Red
Cartier	Red
Chopard	Yellow
IWC	Yellow
Jaeger-LeCoultre	Yellow
Longines	Red
Omega	Red
Patek Philippe	Red
Piaget	Yellow
Rolex	Red
Swatch	Red
TAG Heuer	Red
Tissot	Red
Vacheron Constantin	Yellow

**Discussion:** Customer awareness on sustainability impacts of products does not seem to be high on the priority list of watch and jewellery companies. Most assessed companies did not show any efforts for awareness raising among customers and only a few have adopted some very basic measures (e.g. limited engagement at points of sale or through social media about general sustainability topics, training sessions for employees on how to communicate on sustainability to the consumers).

None of the companies showed an ambitious approach to proactively communicate the impacts of their products (e.g. via LCAs) to customers and or systematically and effectively engage customers for their own impact reduction.

### Membership of (inter)national business initiatives for sustainability

This last section is aimed at finding out whether companies are members of national or international sustainability or environmental business or any related initiatives. Companies were also asked to indicate in what environmental or sustainability projects of these initiatives they have actively taken part over the past three years.

Audemars Piguet	Red
Breguet	Red
Cartier	Light Green
Chopard	Light Green
IWC	Light Green
Jaeger-LeCoultre	Yellow
Longines	Red
Omega	Yellow
Patek Philippe	Red
Piaget	Yellow
Rolex	Red
Swatch	Red
TAG Heuer	Yellow
Tissot	Red
Vacheron Constantin	Light Green

**Discussion:** This is the section where many of the assessed companies achieved their highest scores. According to the evaluation, Cartier is the most actively involved company, with memberships and active participation in several relevant industry initiatives. Many other brands such as IWC, Chopard and Vacheron Constantin were also able to show a more ambitious commitment to collaboration within their industry. Unfortunately, over a third of the assessed brands still do not show any evidence of being members of sustainability or environmental business initiatives.

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**Why we are here**

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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