Accelerating Decarbonisation in the Watch & Jewellery Sector

2025

High-Level Roadmap for Companies in the Journey to Net Zero.

20 YEARS
RESPONSIBLE JEWELLERY COUNCIL

CARBON TRUST

CONTENTS

WELCOME

Dear Members, Stakeholders and Board Members,

This report, prepared in collaboration with the Responsible Jewellery Council (RJC) and the Carbon Trust with a grant from the ISEAL Innovations Fund (supported by SECO), is a strategic guide to help companies at all stages of their climate journey, particularly small and medium-sized enterprises (SMEs), which make up a large portion of our industry and often face the steepest challenges.

Our industry is inherently tied to Earth's natural systems. The gemstones we cut and polish formed hundreds of kilometres beneath the Earth's surface, under extreme heat and pressure some, like diamonds, are over 1 billion years old. The precious metals we trade; gold, platinum and silver are not just valuable commodities; they are finite, non-renewable resources that took millions of years to form through geological processes.

In 2021, archaeologists found the world's oldest 'jewel' in a cave in Morocco. It was a string of shell beads with polished edges which were 150,000 years old[1]. To put that into context, the earliest writing systems came into being around 5,000 years ago which makes jewellery older than recorded history. The jewellery and watch industry today have taken those shell beads and reimagined them using precious materials like gold, first mined 6-7,000 years ago[2] in Bulgaria and Egypt and diamonds first discovered in India[3] in the 4th century over 2,500 years ago. Ancient techniques continue to be used today but when the Industrial Revolution gave birth to advanced manufacturing processes in 1760, emissions and pollution increased with the subsequent rise of globalisation driving an unprecedented expansion.

According to PWC, 50% of annual gold production (2,000 tonnes) is used in watch and jewellery making in the luxury industry and only 25% of the gold used is recycled which presents a huge opportunity for the industry[4]. The UNGC say that Scope 3 emissions account for 70% of a business's carbon footprint and must be tackled to affect significant climate action[5]. For watch and jewellery companies, this means creating an actionable plan to cut CO_2 emissions and to decarbonise in order to satisfy regulation such as the ESPR (Eco-design for Sustainable Products Regulation) CSRD (Corporate Sustainability Reporting Directive) and the CSDDD (Corporate Sustainability Due Diligence Directive). Also to assure the 70% of US consumers who place ethical considerations at the top of their purchase requirements[6] and to meet the explosive growth potential of sustainable jewellery.

Climate change and CO_2 emissions are the largest single factor affecting the watch and jewellery industry according to findings from The State of the Art Summit hosted at Harvard University by the RJC, GIA and Harvard Mineralogical Museum and reported by Forbes in 2023[7]. That hasn't changed. Human labour and the conditions around production should also be prioritised in tandem with emissions because when we talk about supply chains, we are really talking about people. Every stage of the supply chain is and will be impacted by both. This report demonstrates the RJC's continued commitment to helping its members and industry as a whole implement practical steps to ensure the sparkling future that watches and jewellery deserve, and do justice to their historic and important past.

1. ArtNet, 2021. **Archaeologists Just Discovered the World's Oldest Jewelry: This Set of 150,000-Year-Old Snail-Shell Beads in Morocco**
2. Wikipedia, 2025. **Gold mining - Wikipedia**
3. Brilliance, 2025. **History of Diamonds, Where Do Diamonds Come From**
4. PWC, 2025. **Circular economy: watches and luxury goods | PwC Switzerland**
5. UNGC, 2025. **Scope 3 Emissions**
6. PWC, 2023. **Global Consumer Insights Pulse Survey**
7. Forbes, 2023. **Climate Change Is Biggest Issue Facing Jewelry Industry**

1. INTRODUCTION

1.1. Background: Climate Action in the Watch and Jewellery Sector

The latest climate science, detailed in the most recent reports from the Intergovernmental Panel on Climate Change (IPCC), indicates that human activities are increasing the average temperature of the planet when compared with pre-industrial levels[8] at an unprecedented rate. The World Meteorological Organisation (WMO) confirmed 2024 as the warmest year on record, with global temperatures reaching 1.55°C above the 1850-1900 average[9].

Without significant reductions in atmospheric emissions, the consequences of climate change and global warming may intensify dramatically. There may be an escalation of extreme weather like intense heatwaves, prolonged droughts, and powerful floods, causing widespread and, in cases, irreversible social and economic impacts. To limit the temperature increase and the more severe effects, the world should work towards substantial reductions in atmospheric emissions by mid-century. This means achieving a balance between the greenhouse gases (GHG) released into the atmosphere, which should be decreased rapidly, and those removed from it.

The watch and jewellery sector, although not typically seen as a major contributor to climate change, is closely connected to carbon-intensive activities, and, as such, has a responsibility to understand and address the GHG emissions generated in its value chains. Many of the core materials used in the sector—such as gold, diamonds, and other precious metals and stones—are sourced from the mining industry, which is a significant emitter of greenhouse gases. Gold mining alone generates an average of 829 kg CO2e per ounce of gold produced (based on analysis across 146 sites globally in 2022)[10]. These materials then undergo energy-intensive refining and manufacturing processes before reaching consumers. In a recent market analysis, KPMG highlights that consumers "demand brands to embrace sustainable practices, adopt the notion of circular economy and guide the rest of the brands to that direction"[11]. This trend is particularly evident in high-income markets, where much of the watch and jewellery sector's demand lies and where consumers are increasingly climate-conscious, with growing expectations for sustainable sourcing and lower-carbon lifestyles.

At the same time it is important to acknowledge that millions of people across the world earn their living and feed their families from the mining and processing of gold and other minerals. Gold has contributed to humanity throughout recorded history. Moreover, gold and silver are infinitely recycled, therefore once extracted and transformed, precious metals are permanent. Equally important is that all minerals and metals require refining and manufacturing before reaching the consumer. No modern society is possible without minerals and metals, which are used in literally every aspect of life, in everything we do.

As a result of climate change, the watch and jewellery sector should be aware of a range of emerging risks, including:

- **Transition Risks,** which refer to the potential negative impacts on businesses that arise from the shift to a low-carbon economy. These can be:
  - **Policy and Legislation Risks,** resulting from more stringent laws and regulations, carbon pricing and legal liability costs to the business;
  - **Market Risks,** driven by shifting consumer preferences and customer demand, as well as the emergence of voluntary initiatives in the market;
  - **Reputational Risks,** driven by increasing expectations from consumers, suppliers, staff and the community, especially in a brand-driven industry where perceptions of environmental irresponsibility can damage customer trust, investor confidence, and competitive positioning;
  - **Technology Risks,** emerging from the development of new, cleaner technologies and the phasing out of high-emission technologies, which can result in asset obsolescence and high upgrade costs
- **Physical Risks,** including acute events (e.g. extreme weather disrupting mining, transport, or retail operations) and chronic changes (e.g. altered water availability or rising temperatures affecting production)

While climate change presents significant risks, the sector also has a crucial opportunity to support the transition to a low-carbon economy while benefiting from strategic advantages. By embracing sustainable sourcing, improving emissions performance, and increasing transparency, companies can drive value for their business in the form of differentiation and enhanced brand value, improved resilience across supply chains and strengthened long-term customer loyalty. Taking action on climate is not just a responsibility – it is a strategic imperative with a justifiable business case. This is supported by research from the World Economic Forum, which found that every dollar invested in climate adaptation and decarbonisation can yield up to $19 in avoided losses, while also enhancing innovation and long-term competitiveness[12].

Effectively assessing and managing these climate-related risks requires a multi-faceted approach. A key foundation for success lies in the ability to accurately evaluate a company's GHG emissions. This should then be followed by the identification of emissions hotspots, the development of credible decarbonisation targets, and the establishment of a robust, clear, and transparent strategy to achieve them. While awareness of both climate-related risks and opportunities is growing, the sector now stands at a pivotal moment to deepen its understanding of how carbon emissions flow through its intricate value chain.

8 IPCC. 2023. **IPCC SIXTH ASSESSMENT REPORT (AR6) "CLIMATE CHANGE 2023"**

9 World Meteorological Organisation (WMO). 2025. **Global climate predictions show temperatures expected to remain at or near record levels in coming 5 years**

10 S&P Global. 2023. **GHG and gold mines – Canada emissions drop the most**

11 KPMG Future of Consumer Goods. 2024. **The market of luxury goods**

12 World Economic Forum. 2025. **The resilience imperative: Why companies must adapt to a +1.5 degrees world.**

Effective decarbonisation strategies for the watch and jewellery sector have been difficult to implement due to a range of factors that are discussed in this report. Key contributors include the inherent complexity of the value chains, data gaps, limited awareness and capacity, and a lack of standardised reporting amongst the many different participants. By actively addressing these challenges and committing to a net-zero future, companies can not only mitigate climate risks but also unlock new commercial opportunities and strengthen their competitiveness and brand value. This proactive approach, when combined with a favourable sectoral governance focus, will be key to ensuring long-term resilience and securing a sustainable future for the industry.

1.2. Purpose of this Report

This report aims to equip the watch and jewellery sector with a clear understanding of climate action in an industry context. It covers the key sources of emissions across the value chain, offers practical guidance on setting decarbonisation targets, and, at its core, provides a strategic roadmap to accelerate progress towards emissions reduction, helping companies overcome common barriers to effective climate strategy development.

Drawing on the expertise of the Responsible Jewellery Council (RJC), the leading standards-setting body for the global watch and jewellery industry, the report draws on insights from RJC member interviews, survey responses, and the Carbon Trust's independent analysis. It highlights the company- and system-level actions required to scale carbon measurement and reporting, unlock decarbonisation opportunities, and support the transition to a more sustainable industry.

The report is aimed at RJC member companies of the following forums, with particular focus on small and medium-sized businesses:

- **Diamonds, Coloured Gemstones and Precious Metals Miners** who are the foundational source of raw materials
- **Laboratory Grown Diamonds and Gemstones Producers** who manufacture these materials for the jewellery sector
- **Precious Metals Traders, Refiners and/or Hedgers** who manage the flow and purity of valuable metals
- **Diamonds and Coloured Gemstones Traders, Cutters and/or Polishers** who are central to the initial processing of precious stones
- **Jewellery and Watch Manufacturers and/or Wholesalers** responsible for transforming raw materials into finished products
- **Jewellery and Watch Retailers** who have direct interface with consumers
- **Service Industry** encompassing entities like Assay Offices & Gemmological Laboratories, providing essential verification & expertise
- **Industry Trade Associations** who play a crucial role in setting industry standards and facilitating collaboration

2. UNDERSTANDING EMISSIONS & SCIENCE BASED TARGETS

2.1. Scope 1, 2, and 3 Explained

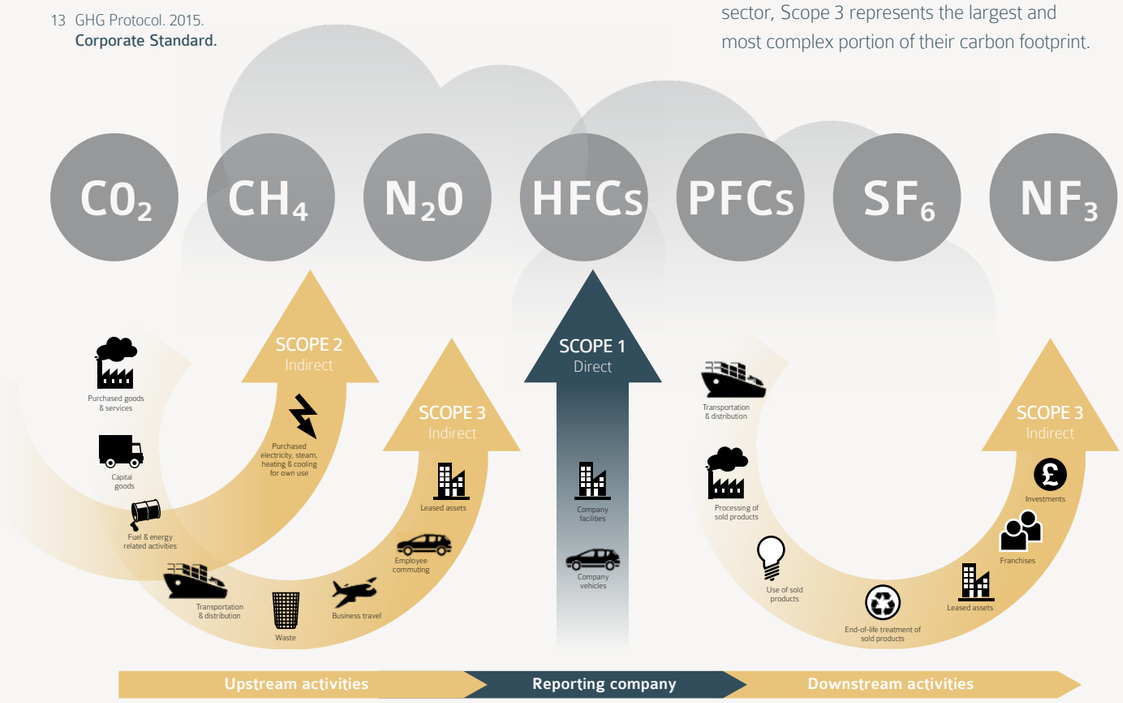
The GHG Protocol[13] provides the most widely used, standardised framework for measuring and reporting GHG emissions. It categorises emissions into three distinct scopes:

Scope 1: Direct emissions from sources that are owned or controlled by a company. For example, fuel combustion in company-owned delivery vehicles or on-site generators.

Scope 2: Indirect emissions from the generation of purchased energy, such as electricity, heat, or steam used to power mining operations, offices, workshops, or retail stores. For example, emissions associated with purchased electricity, generated by a coal-fired power station. While the emissions occur off-site, they result from the company's purchased energy consumption.

Scope 3: All other indirect emissions that occur across a company's value chain, both upstream and downstream. These include emissions from the extraction of raw materials, the refining and processing of those materials, the manufacturing of components, the transportation of goods, and the emissions associated with the final consumer's use and eventual disposal of the product. For most companies, including in the watch and jewellery sector, Scope 3 represents the largest and most complex portion of their carbon footprint.

13 GHG Protocol. 2015. **Corporate Standard.**



2.2. Setting Science Based Targets

Setting credible, science-based decarbonisation targets requires a clear understanding of key concepts such as Net Zero, the 1.5°C emissions pathway, and globally recognised best practices for target setting.

Net Zero is the state in which GHG emissions released into the atmosphere are balanced by an equivalent amount of removals. Achieving global Net Zero by 2050 may be critical to limiting global warming to 1.5°C above pre-industrial levels and avoiding the most severe impacts of climate change[14]. For companies, this involves setting near-term science-based targets to drive deep, year-on-year emissions reductions.

To guide corporate climate action, the Science Based Targets initiative (SBTi) released the first Corporate Net-Zero Standard in 2021[15], which is now the most widely adopted framework for setting credible Net Zero targets. As of July 2025, over 11,000 businesses have made commitments to set targets or have already set targets through the SBTi[16], driven by growing investor pressure and global climate momentum.

The SBTi's Target Setting Process

- **Register:** Begin by registering on the SBTi Services portal.
- **Commit:** Publicly commit to setting a science-based target via the portal.
- **Develop:** Develop targets that align with SBTi criteria. This involves:
  - **Baseline Emissions Footprint:** Establish a comprehensive baseline for Scope 1, Scope 2 and Scope 3 emissions.
  - **Near-Term Targets:** Set 5-10 year targets for significant reductions across Scope 1, 2, and often Scope 3.
  - **Long-Term Targets:** Aim for deep decarbonisation (generally 90% reduction) across all scopes by no later than 2050 to align with the 1.5°C goal.
- **Neutralisation:** After meeting long-term targets, neutralise any remaining emissions through high-quality carbon removals.
- **Beyond Value Chain Mitigation (BVCM):** Invest in BVCM activities, such as forestry projects, in parallel with decarbonisation efforts to support broader climate action.
- **Submit:** Submit the developed targets to the SBTi for validation via the online portal.

  Communicate: Once validated, publicly announce the targets

  Disclose: Annually report on progress against these targets, often using SBTi reporting tools and guidance.

14 IPCC. 2007. **Annexes.**

15 Science Based Targets 2024. **The Corporate Net-Zero Standard.**

16 Science Based Targets. 2025. **Target dashboard**

The SBTi continuously refines its guidance to ensure targets remain aligned with the latest climate science[17]. The upcoming SBTi Net Zero Guidance V2 (expected to be finalised in 2026 for use from 2027), represents a significant evolution in corporate climate target setting and accountability. This new iteration is anticipated to provide more detailed requirements for companies aiming for Net Zero, with a stronger emphasis on rapid and deep emission cuts and enhanced enforceability, as targets will need to be revalidated every 5 years. The new draft proposes new approaches to Scope 3, and requires separate Scope 1 and 2 targets. To catalyse action towards permanent carbon removal, the new standard also proposes to offer clearer guidance on the roles of neutralisation for residual emissions and Beyond Value Chain Mitigation (BVCM).

For the watch and jewellery sector, the forthcoming SBTi Net Zero Guidance will raise the bar for what constitutes credible climate action. Companies will need to strengthen their emissions tracking, particularly across Scope 3, and potentially accelerate mid-term reductions while preparing for more transparent reporting and stricter scrutiny of carbon credit use. Those that act early to align with the evolving standard will be better positioned to meet stakeholder expectations, demonstrate leadership, and future-proof their Net Zero commitments.

While the SBTi is the most widely recognised standard for setting science-based emissions reduction targets, several other frameworks offer valuable guidance that supports different aspects of Net Zero target setting and strategy. Companies should assess which framework best fits their specific context, while ensuring alignment with core principles of scientific rigour, transparency, and ambition.

Key examples include:

- **ISO Net Zero Guidelines (IWA 42:2022)**[18], by the International Organization for Standardization: provides a framework of guiding principles and recommendations for organisations of all sizes and sectors to achieve net zero emissions no later than 2050, offering a structured approach for establishing and communicating robust climate strategies. ISO is currently developing a Net Zero Standard for organisations, which is expected to build on the foundations of IWA 42:2022, and which will enable independent verification of climate action.
- **International Energy Agency (IEA) Energy Technology Perspectives (ETP)**[19] and **Net Zero by 2050**[20]: provide scenarios and analyses of energy transitions, which can be invaluable for companies, including those in energy-intensive jewellery manufacturing, to inform their long-term decarbonisation strategies. These provide the foundation for a range of sectoral pathways developed by the SBTi.

17 Science Based Targets. 2025. **SBTi Corporate Net-Zero Standard Version 2.0**

18 ISO. 2022. **Net Zero Guidelines.**

19 IEA. 2024. **Energy Technology Perspectives 2024.**

20 IEA. 2021. **Net Zero by 2050.**

- **Exponential Roadmap Initiative (ERI) Climate Solutions Framework**[21] provides a framework for defining solutions that contribute to GHG reductions and accelerating their growth, to accelerate the climate transformation.
- **Transition Plan Taskforce (TPT) Disclosure Framework**[22]**:** provides a comprehensive framework for high-quality, private-sector climate transition plans. The TPT has also published sector-specific guidance for the metals and mining industry[23], which includes decarbonisation levers, metrics, and disclosure recommendations tailored to mining and mineral-processing operations. This guidance is particularly pertinent for larger, listed watch and jewellery firms that need to articulate credible Net Zero pathways to investors and regulators.

Market research shows that the adoption of science-based targets within the watch and jewellery sector is still in its early stages. As of July 2025, only 88 companies in the mining sector have set SBTs[24] .

Nevertheless, a growing number of pioneering RJC member companies are setting a positive example by actively measuring, disclosing, and developing robust plans to address their emissions. Tiffany & Co., the first luxury jewellery brand to receive SBTi approval for its Net Zero emissions target, has set near-term goals to reduce Scope 1 and 2 emissions by 70% and Scope 3 emissions by 40% by 2030, using a 2019 baseline[25]. Looking ahead, the company aims to achieve Net Zero emissions across its entire value chain by 2040, including a 90% absolute reduction in Scope 1, 2, and 3 emissions. To address any remaining residual emissions, Tiffany & Co. plans to use high-quality carbon removals, including investments in nature-based solutions.

21 ERI. 2024. **Climate solutions framework.**

22 TPT. 2023. **Disclosure Framework.**

23 TPT, 2024. **Metals & Mining Sector Guidance**

24 Science Based Targets. 2025. **Target dashboard**

25 National Jeweller. **Tiffany & Co. Gets Approval for Net-Zero Emissions Target | National Jeweler**

3. SECTOR EMISSIONS & DECARBONISATION CHALLENGES

3.1. Emissions Hotspots

The watch and jewellery sector is built on a global value chain that transforms raw materials into high-value consumer products. Each stage involves distinct processes and actors, and can span multiple geographies. The five stages outlined below represent the core phases of production and delivery in the industry from extraction of raw materials through to retail.

The Five Stages of The Watch and Jewellery Value Chain

While all stages contribute to GHG emissions, much of the climate impact in the sector is embedded in the upstream stages, particularly in mining and refining. These upstream emissions form part of the embodied carbon in final products, which is accounted for in the Scope 3 emissions of companies further down the value chain. This section breaks down emissions sources and dynamics across the five key stages of the value chain.

Large and Small-Scale Mining

This stage involves the extraction of raw materials from the earth, such as gold, silver, platinum group metals (PGMs), diamonds and coloured gemstones. Mining is the most carbon-intensive stage in the value chain and emissions at this stage are Scope 1, arising from activities directly controlled by mining companies. These include diesel-powered haulage trucks, excavation machinery, and on-site electricity generation primarily

using fossil fuels. In both large-scale industrial and small-scale artisanal mining, fuel combustion is a major emissions source. Crushing and initial material preparation (often performed at mine sites to facilitate downstream processing), are further contributors to energy use.

Mining also drives land use change (LUC) emissions. The extraction of raw materials often requires clearing large areas of land, sometimes in biodiverse and ecologically sensitive areas. When raw materials extracted from deforested sites enter the supply chain, the LUC-related emissions become embodied into the carbon footprint of refined metals, polished gemstones, and finished jewellery. Effectively addressing mining-related emissions, therefore, requires attention not only to energy and fuel use, but also to land transformation impacts. For brands and manufacturers in the sector aiming to align with Net Zero goals, visibility into these upstream land use impacts is essential—and hinges on data sharing and collaboration with mining partners.

A significant proportion of upstream emissions stems from heavy machinery and onsite power generation (Scope 1) and processing and ventilation (Scope 2). Reducing emissions from operations and energy use is not only a foundational step toward decarbonisation, but also one where companies have the most direct control.

While deploying onsite renewables and improving energy efficiency can substantially reduce emissions, diesel-powered heavy equipment and high-heat processing remain a core obstacle. These are hard-to-abate with current technologies, and meaningful reductions will depend on transformative solutions such as green hydrogen, electrified mining fleets, and carbon capture systems (most of which are still maturing or economically prohibitive without supportive policy and finance mechanisms). Still, by proactively investing in cleaner technologies and renewable energy now, mining operations can mitigate future regulatory penalties, carbon taxes, and reputational damage associated with high-emission activities. This foresight ensures long-term operational viability and attractiveness to investors who are increasingly scrutinising environmental performance.

Processing and Refining

Processing and refining activities are primarily driven by a heavy reliance on electricity which depends on carbon-intensive grid power, making Scope 2 emissions for this stage of the value chain significant. The energy-intensive nature of these operations, particularly smelting and refining, can involve furnaces operating at over 1,000°C. Extracted and pre-crushed materials are processed to isolate and purify the metals or gemstones. For metals, this includes smelting, chemical leaching, and electro-refining to produce bullion, granules, or other refined forms. For gemstones, it involves basic sorting and cleaning prior to more detailed work in cutting centres.

For lab-grown diamonds, this stage includes the energy-intensive growth process, typically using High Pressure High Temperature (HPHT) or Chemical Vapour Deposition (CVD) methods, which produce gem-quality stones in controlled laboratory conditions.

Cutting and Polishing

Rough diamonds and gemstones are cut, shaped, and polished to meet design and quality specifications. This precision-driven process enhances the appearance and value of the stones and is often performed in specialist centres around the world using both manual and machine-based techniques. The cutting and polishing stage typically uses moderate amounts of electricity and often involves manual labour. As such, their carbon footprint is substantially lower than upstream activities, though regional differences in electricity carbon intensity can influence overall emissions.

Jewellery Manufacturing

This stage covers the design and production of finished goods and jewellery components. It includes alloying metals, casting, stone setting, machining, assembly, engraving, and finishing. Manufacturers may operate in-house or through third-party suppliers and may produce at scale or for bespoke orders. This stage is characterised by a moderate climate impact, with emissions from businesses responsible for these operations varying according to production techniques, energy sources, and material choices. The level of automation, energy efficiency, and the carbon footprint of electricity used play a major role in shaping emissions profiles.

Downstream businesses typically face lower operational complexity than the upstream stages. Their emissions are predominantly Scope 2, arising from buildings and transport. These companies are well-positioned to decarbonise rapidly through existing technologies: procuring 100% renewable electricity through Power Purchase Agreements (PPAs) or green tariffs, upgrading to energy-efficient systems, and transitioning to electric vehicles and machinery. The barriers are mostly financial or organisational – not technical – with many solutions readily available and offering both emissions and cost savings over time.

Retail

The final stage involves marketing, distribution, and sale of products to end consumers. This includes physical retail stores, branded boutiques, e-commerce platforms, and authorised dealers. Retailers also play a role in packaging, customer service, product care, and increasingly, sustainability communication. Retail operations are generally associated with low direct emissions, mostly from building energy-use such as lighting, air conditioning, and IT systems. While Scope 1 and 2 emissions from this stage are minimal, retailers still carry a notable share of Scope 3 emissions due to the embodied emissions in the products they sell, as well as a potentially high share of emissions from transport and distribution. These indirect emissions are passed down from upstream stages and can be significant, especially for luxury products with high material and processing intensity.

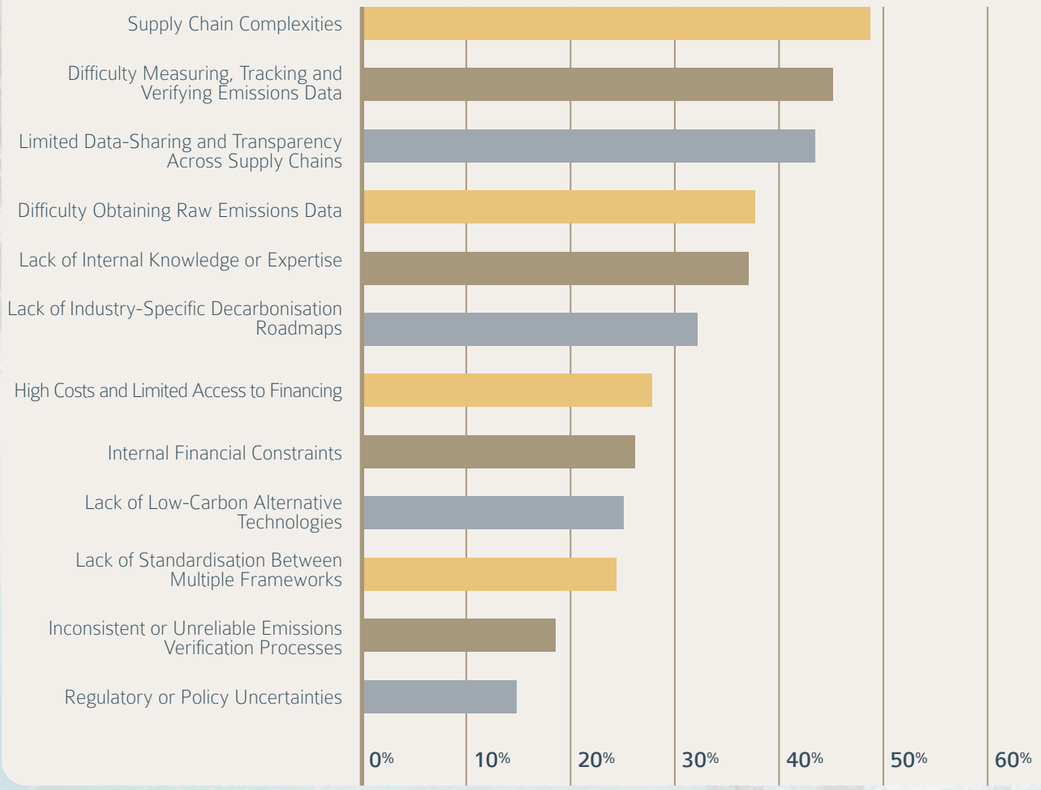
Scope 1, 2, and 3 Emissions Hotspots in the Watch and Jewellery Value Chain

* Embodied emissions refer to the upstream carbon footprint embedded in materials, components, or products received from earlier stages of the value chain. These emissions are not generated on-site but are carried forward through the chain, accumulating in the final product's overall footprint. (Bubble size reflects relative emissions contribution within each stage of the value chain only. Comparisons across stages should not be made).

3.2. Barriers to Decarbonisation

Businesses in the watch and jewellery sector face a range of barriers that can limit their ability to decarbonise. Through our market research, RJC members indicated several significant challenges to measuring and reporting their GHG emissions.

RJC Member Challenges in Implementing Climate Strategies



Intricate Global Supply Chains

Tracing materials and products from extraction to retail is challenging due to the numerous actors and processes involved. This complexity particularly affects Scope 3 emissions, where upstream and downstream activities are often outside the reporting company's direct control.

Limited Supplier Engagement

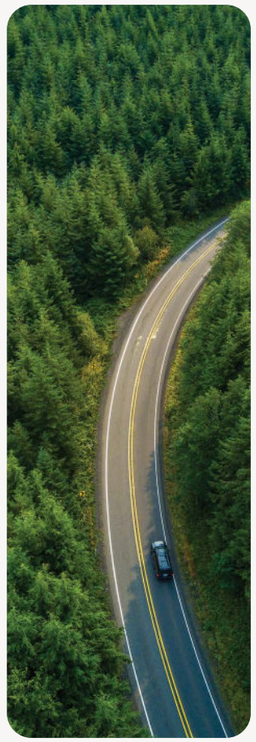
Limited data-sharing and transparency across supply chains was cited by 43% of survey respondents as another major challenge, which is rooted in the lack of strong incentives or requirements across the value chain to assess and address emissions and make third-party verified data available. For Scope 3 emissions, many companies lack visibility over supplier activities or do not yet see supplier engagement as part of their decarbonisation role. Suppliers may be unaware of carbon reporting expectations or unable to provide the necessary data, creating gaps in value chain assessments and limiting the sector's ability to identify and act on emissions hotspots.

Complex Framework Interpretation

While most companies are able to work with widely accepted carbon reporting frameworks such as the GHG Protocol, applying them across diverse business models with varying energy profiles and emissions sources can present practical challenges. This is especially true for smaller organisations with limited in-house expertise. Scope 1 and 2 boundaries can be nuanced for vertically integrated operations, while Scope 3 accounting often requires more tailored guidance to reflect the specific characteristics of the sector's value chains.

Limited Awareness and Internal Capacity

45% of respondents cited difficulty in measuring and tracking emissions, likely resulting from a limited awareness, capacity and resources. Many businesses, particularly SMEs, are still building their understanding of carbon accounting fundamentals. For Scope 1 and 2, there is often limited awareness of what activities are in scope, what data needs to be collected, and how to apply emission factors accurately. Even when awareness exists, lack of internal resources or dedicated sustainability staff hinders implementation.



Fragmented Regulatory Landscape

Companies struggle to reconcile international reporting requirements with diverse domestic obligations, a task that is both complex and resource-intensive. This uncertainty can undermine confidence in emissions data and discourage data sharing, especially when reporting practices for Scope 3 vary widely across jurisdictions.

Limited Consumer Pressure

While consumer awareness around sustainability is on the rise –the jewellery industry has been slower to experience significant market-driven pressures compared to other sectors (with the notable exception of natural diamonds). The sector is distinct from other industry segments in factors such as the often-discretionary nature of purchases, the perceived timelessness of products and a historical focus on craftsmanship and intrinsic value over environmental impact. Until consumer demand translates more directly and powerfully into purchasing decisions that prioritise sustainability reporting and performance, the economic incentive for widespread and robust climate action within the watch and jewellery sector will likely remain subdued.

Limited Internal Sector Pressure

Within the sector itself, there is limited peer pressure to report emissions and discuss climate change and decarbonisation. Unlike more competitive industries where a "race to the top" has emerged, driven by both regulations and market demands, companies in the watch and jewellery sector often don't feel a strong competitive disadvantage if they're not reporting their environmental impact. This absence of internal sector pressure means fewer proactive efforts to measure, manage, and ultimately reduce carbon footprints.

Financial Constraints

Progress in improving energy efficiency is being held up by significant upfront capital costs, especially for smaller firms. This is evident in the UK where SMEs report that a lack of available capital is a primary barrier to adopting more sustainable practices[26]. Whether it's upgrading outdated equipment, electrifying vehicle fleets, or investing in on-site renewables, these changes can require substantial investment—even though the long-term operational costs are often lower. While low-carbon technology is often available, particularly for clean electricity, the financial barriers to adoption remain high.

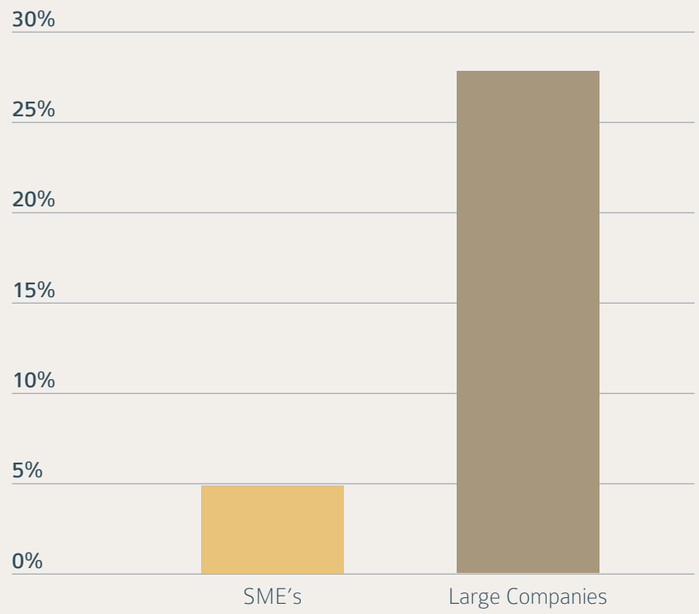
26 **https://willowreview.com/**

Low Commercial Viability of Low-Carbon Alternatives

A quarter of surveyed RJC members highlighted the lack of low-carbon alternatives as a challenge, but the greater constraint is often the lack of access to funding and financial incentives. To address this, companies should explore low-interest financing options, leasing models, or equipment-as-a-service arrangements that reduce upfront capital requirements. These mechanisms can enable more businesses to deploy renewable energy systems and invest in low-carbon machinery without needing large, immediate cash outlays.

Other challenges highlighted by RJC members included a lack of clear industry-specific roadmaps for carbon reduction, technological or operational limitations, misaligned priorities across the supply chain, and gaps in policy and regulatory support.

RJC Member Companies Monitoring Climate-Related Impacts of Suppliers and/or Business Partners



Survey results reveal a stark difference in practice between businesses of different sizes. This disparity is particularly noteworthy given that large companies are often under greater regulatory and stakeholder pressure to rigorously measure their own emissions and are increasingly expecting the same from their suppliers, many of whom are SMEs.

Consistent data collection and standardised reporting are highly beneficial for comparability across companies, for building a complete picture of the sector's carbon footprint and for creating the foundation for accelerating decarbonisation in the sector.

The World Gold Council has highlighted this challenge, noting the need for greater convergence on Scope 3 emissions accounting and reporting practices in the gold mining sector, where inconsistencies remain prevalent[27]. A study on the carbon footprint of a silver ring illustrates this issue: while primary data from the manufacturing facility was accessible, the researchers had to rely on less precise secondary data and assumptions for Scope 3 emissions, such as transportation of raw materials[28].

Other industries have made notable strides in enhancing their practices. The fashion industry, with its similar complex supply chains, has developed sector-specific carbon footprinting tools[29]. Likewise, the oil and gas industry has improved data quality and reporting consistency through unified frameworks like GRI 11: Oil and Gas Sector Standard[30]. Comparable tools developed specifically for the watch and jewellery sector can significantly contribute to reporting accuracy and transparency, and address the challenge highlighted by the survey results. To ensure credibility and effectiveness, any sector-specific guidance developed should align with and build on widely accepted accounting standards, such as the GHG Protocol.

Historically, the focus of sustainability efforts has been on ethical sourcing and labour practices. The sector is not widely perceived to be a major contributor to global carbon emissions, especially compared to high-emitting industries like oil and gas, as the most emissions-intensive activities occur early in the supply chain and can seem detached from the products of the sector.

27 World Gold Council: **World Gold Council, 2024. Gold Mining and Scope 3 GHG Emissions Accounting and Reporting; Guidance notes**

28 Usapein and Tongcumpou. 2006. **Greenhouse Gas Emissions in Jewellery Industry: A Case Study of Silver Flat Ring**

29 Carbonfact. 2025. **Carbonfact**.

30 GRI 2021 **GRI - Sector Standard for Oil and Gas**

The Importance of Supporting SMEs in Scope 3 Emissions Reporting

Smaller enterprises make up a substantial share of the watch and jewellery sector's supply chains and are critical to enabling accurate value chain (Scope 3) emissions reporting. However, survey results indicate that only 21% of these businesses have measured their full Scope 1, 2, and 3 footprint.
This highlights a pressing need to support SMEs in understanding, calculating, and disclosing their Scope 3 emissions, which typically represent the largest portion of a company's total climate impact.

What Are The Barriers?

As many SMEs are in the infancy of emissions accounting, they face significant challenges in reporting Scope 3 emissions, which stem from activities beyond their direct control—such as the extraction, processing, and transportation of raw materials. Key barriers include:

- Limited technical expertise and internal capacity: Many SMEs operate with tight budgets and lack staff trained in emissions measurement and reporting, particularly for complex Scope 3 categories.
- Complexity of Scope 3 methodologies: Mapping and quantifying emissions across multi-tiered supply chains is often unfamiliar territory for SMEs, especially without clear, sector-specific guidance.
- Data access and exchange difficulties: SMEs frequently struggle to obtain emissions data from suppliers and customers and often lack tools or platforms to support efficient data-sharing.

What Are The Opportunities?

Bridging the disparity in emissions reporting between SMEs and larger enterprises requires a multi-pronged approach that builds SME capacity and removes key barriers. Opportunities include:

- Targeted training and guidance: Developing practical, hands-on programmes that offer step-by-step instruction on Scope 3 methodologies—such as supplier engagement, use of emission factors, and boundary setting.
- Modular, accessible learning formats: Designing training resources that are flexible and tailored to SMEs' time and resource constraints.
- Scalable digital tools and platforms: Equipping SMEs with simplified data collection templates and access to collaborative platforms that streamline supplier data exchange and improve emissions traceability.

By equipping SMEs with the right knowledge, tools, and support, the sector can build a more complete and credible picture of its value chain emissions—and ensure that decarbonisation efforts extend across all tiers of the supply chain.

4. ACCELERATING ACTION TOWARDS DECARBONISATION

Decarbonising any economic sector requires system-level change and company-level change.

System-level change refers to a deep, fundamental shift in operations that focusses on the root cause of an issue, requiring collaboration between multiple stakeholders. Imperative to this is an enabling governance environment, supportive policy, legislation (e.g. EU CSRD), incentives and standards that promote emissions reductions (including the RJC's 2024 Code of Practices that require members to quantify and document its annual Scope 1 and 2 GHG emissions, and material energy consumption by source[31]). It also involves the decarbonisation of national power grids, low-carbon transport and logistics infrastructure, and scale-up of emerging low-carbon technologies.

Company-level change refers to actions which are within the direct control of individual businesses, such as procuring renewable energy, improving energy and resource efficiency, and pivoting towards lower-carbon products and business models –particularly those that embrace circularity.

An additional element is the role that consumers can play by demanding more sustainable products and making informed purchasing choices. For this potential to be fully realised, companies across the sector also have a critical role to play in educating consumers, increasing transparency, and clearly communicating the environmental impact of their materials and products.

Against this backdrop, high-level strategic actions have been identified by the Carbon Trust to help the watch and jewellery sector accelerate progress toward emissions reduction. The actions identified are practical and targeted, aiming to support companies in developing and implementing effective carbon strategies.

31 RJC. 2024. **Code of Practices**

4.1. Corporate Strategy

Corporate action for decarbonisation begins with measuring emissions across Scope 1, 2, and key Scope 3 categories. Once an organisation has a clear understanding of its operations and emissions hotspots, the next step is to set clear, time-bound decarbonisation targets.
These targets should be supported by a robust strategy for delivery, describing how a company will reduce all its emissions – from its direct operations (Scope 1), the energy it buys (Scope 2), and its value chain (Scope 3). For successful implementation, reduction plans must become a fundamental part of the company's overall business strategy, day-to-day operations and core decision-making, embedded within corporate governance through the integration of climate-related KPIs.

Companies should also align their climate-related disclosures with evolving green and sustainable finance frameworks, such as the EU Taxonomy, ISSB standards, and broader investor-driven initiatives like Climate Action 100+. This helps ensure that decarbonisation targets and transition are not only credible and transparent but also grounded in approaches investors recognise – improving access to sustainable finance and investment. Demonstrating alignment between corporate climate strategy and investor expectations can reinforce a company's positioning when exploring increasingly common solutions like green bonds, sustainability-linked loans, or other performance-based finance mechanisms.

Public communication of metrics and targets strengthens trust and accountability, reinforcing the credibility of a company's climate strategy with stakeholders. Reporting frameworks like Carbon Disclosure Project (CDP) can support public disclosure of GHG emissions and progress against strategic climate objectives and complement regulatory reporting requirements such as the CSRD.

As companies approach their Net Zero target, they should strategically plan to neutralise any remaining residual emissions through high-quality carbon removals, including both nature-based solutions and technological approaches such as Direct Air Capture (DAC) and Bioenergy with Carbon Capture and Storage (BECCS). It is expected that the carbon removal market will grow significantly over time, as technologies evolve and demand increases.

In addition to these direct carbon removal activities for residual emissions, the SBTi strongly encourages companies to engage in global mitigation efforts on their journey through Beyond Value Chain Mitigation (BVCM) activities. BVCM refers to mitigation actions or investments outside a company's direct operations and value chain. BVCM is aimed at mobilising vital climate finance into underfunded climate solutions and demonstrates climate leadership, accelerating near-term global emission reductions.

The table below lists corporate-level interventions that companies can implement to accelerate action.

4.1.1. Corporate-Level Actions

ACTION DESCRIPTION	CARBON REDUCTION PATHWAY	CARBON REDUCTION POTENTIAL (Low Potential / Medium Potential / High Potential)
MEASURE BASELINE CARBON FOOTPRINT		
Establish a comprehensive understanding of current GHG emissions across scopes 1, 2, and 3.	Not a direct reduction measure, but a fundamental step that enables all future reductions. Primarily an internal process.	
SET AND DISCLOSE DECARBONISATION TARGETS		
Define measurable goals for reducing GHG emissions and publicly communicate these commitments. Targets should be aligned to an established framework (e.g. SBTi).	Not a direct reduction, but crucial for driving action. A quick win once baseline has been established. A strategic decision and a public commitment.	
DEVELOP A STRATEGY FOR MEETING TARGETS		
Create a detailed plan outlining the specific actions, investments, and timelines required to achieve established decarbonisation targets.	Without an action plan for achieving reductions, targets remain aspirational. Requires in-depth analysis of value chain, financial implications, technology options and stakeholder collaboration.	
INTEGRATE CLIMATE KPIS INTO PERFORMANCE FRAMEWORKS		
Embed climate KPIs into existing performance frameworks to drive and incentivise decarbonisation efforts. Requires integration into existing governance frameworks.	Directly links to behaviour and accountability, leading to widespread, measurable carbon reductions. Involves amendments to HR policy, as well as culture change.	
ACHIEVE NEAR-TERM DECARBONISATION TARGETS		
Implement the actions defined in the decarbonisation strategy to meet near-term (5-10 years) GHG emission reduction goals.	This represents the actualisation of carbon reductions, directly contributing to emission cuts. Requires continuous monitoring.	
3RD PARTY VERIFICATION & CERTIFICATION		
Engage with an accredited 3rd party to audit, verify, and certify organisational carbon footprint data.	Does not directly reduce carbon but requires formal audit and data quality review in order to verify decarbonisation efforts.	
NEAUTRALISATION OF RESIDUAL EMISSIONS		
Address unavoidable, hard-to-abate emissions that remain after maximum decarbonisation efforts by purchasing high-quality permanent carbon removal (e.g. DACS, BCCS).	Long-term removal (2030-2040) that achieves true Net Zero by offsetting remaining emissions that cannot be eliminated. Availability and scalability of high-integrity technologies still under development.	
BEYOND VALUE CHAIN MITIGATION (BVCM)		
Complement internal decarbonisation by investing in climate action beyond the sector's own value chain.	Accelerates global net-zero by financing additional emission reductions/removals. Requires due diligence to select credible projects and transparent reporting.	

4.2. Supply Chains

As consumer expectations and investor pressure around sustainability continue to rise, companies must look beyond their direct operations and take responsibility for the full carbon footprint of their value chain. Reaching Net Zero requires deep emissions reductions across all scopes—not just within a company's operations (Scope 1 and 2), but throughout its supply chain. In the specific case of the watch and jewellery sector, each segment of the value chain requires a tailored approach. The stages – mining, processing, manufacturing, and retail – present very distinct emissions profile, infrastructure constraints, and technology readiness levels, all of which shape the pace and nature of their transition to Net Zero.

Rapid wins are feasible in downstream segments before 2030, while upstream actors will require longer lead times, phased investment, and innovation support to achieve deeper decarbonisation by 2040 and beyond. This nuanced, tiered approach recognises the differing roles each segment plays—and ensures ambition remains grounded in operational and financial reality.

Supplier engagement programmes tailored to SMEs builds capacity through targeted training, peer-to-peer learning, and access to simplified toolkits for measuring and reporting emissions. Companies should also explore mechanisms that can incentivise adoption of low-carbon technologies and processes, such as joint investment funds, concessional loan programmes, or preferential contracting and invoicing arrangements. Such financial partnerships can ease the burden of capital expenditure for smaller suppliers and help distribute the cost of transition more equitably across the value chain.

Integrating internal carbon pricing further incentivises emission reductions across operations and within the supply chain. By placing a monetary value on carbon emissions, an internal carbon price encourages businesses to favour suppliers with lower carbon footprints and to invest in decarbonisation projects. Complementing this, companies should update procurement and supplier onboarding processes to include climate criteria that drives sustainable procurement —such as emissions performance, carbon disclosure, and reduction plans—as part of contract requirements and evaluation scoring. Over time, such requirements can become key drivers of change, particularly as suppliers compete for long-term partnerships.

This financial mechanism helps to embed sustainability criteria into procurement decisions and investment strategies, driving a shift towards more sustainable practices throughout the entire supply chain.

Additionally, adapting procurement policies to favour lower-carbon options and suppliers will be key. Industry examples such as De Beers' Best Practice Principles (BPPs) and Signet's Environmental & Social (E&S) Supplier Programme demonstrate effective frameworks for driving responsible practices, including environmental performance, throughout the supply chain.

Without supportive policy environments or tailored funding mechanisms, companies may struggle to prioritise sustainability over short-term business pressures. Tools like sustainability-linked loans, green bonds, and technology readiness assessments can help de-risk investments and accelerate progress by financing green technology, particularly for SMEs.

The table below lists supply chain interventions that companies can implement to accelerate action.

4.2.1. Supply Chain Actions

ACTION DESCRIPTION	CARBON REDUCTION PATHWAY	CARBON REDUCTION POTENTIAL Low Potential Medium Potential High Potential
SUPPLIER ENGAGEMENT PROGRAMME		
Encourage and incentivise Tier-1 suppliers to cascade emissions tracking and decarbonisation down to their own sub-suppliers, fostering comprehensive Scope 3 understanding and shared climate responsibility across the value chain.	Not a direct reduction, but significant Scope 3 reduction potential by unlocking data and action across the entire value chain. Requires multi-tier collaboration, data harmonisation, and transparency.	
SUSTAINABLE PROCUREMENT		
Implement a Supplier Sourcing Policy (or set internal targets) for supply chain due diligence to support responsible purchasing decisions. Use supplier selection criteria to incentivise upstream carbon disclosures or reductions as a condition for doing business.	Significantly reduces Scope 3 emissions from raw materials, mitigates deforestation, lowers energy in primary extraction, and reduces ethical risks.	

ACTION DESCRIPTION	CARBON REDUCTION PATHWAY	CARBON REDUCTION POTENTIAL Low Potential Medium Potential High Potential
SECTOR-SPECIFIC EMISSION FACTOR DATABASE		
Develop sector-specific emission factor database to ensure accurate and consistent emission calculations. Companies across sector to conduct PCF/LCA of their products and common goods.	Enables precise carbon footprinting crucial for targeted reduction and Net Zero tracking.	
TRANSITION TO LOW-CARBON LOGISTICS		
Mandate low-carbon transport methods such as EVs, sustainable aviation/maritime fuels, and optimised network routes. Phased replacement of fossil fuel vehicles, dependent on fleet/equipment renewal cycles.	Substantially reduces Scope 1 emissions from company-owned fleets and Scope 3 from outsourced logistics. Requires mature technologies and significant infrastructure development.	
IDENTIFY SUPPLY CHAIN HOTSPOTS		
Pinpoint the largest sources of indirect (Scope 3) emissions within the supply chain via comprehensive mapping, gathering data from key suppliers and assessing product LCAs.	Provides the necessary insights to target the most impactful reductions within the value chain, driving long-term decarbonisation. Relies heavily on supplier engagement and data availability.	
SUPPORT SME CAPABILITY		
Provide education, training, and tailored guidance to SMEs to build their capacity for understanding, measuring, and implementing decarbonisation strategies.	Not a direct reduction measure but potential for collective carbon reductions by empowering a significant portion of the global supply chain. Effective outreach is key.	

ACTION DESCRIPTION	CARBON REDUCTION PATHWAY	CARBON REDUCTION POTENTIAL Low Potential Medium Potential High Potential
GREEN FINANCE AND CO-INVESTMENT		
Leverage green finance and co-investment to overcome financial barriers, enabling value chain investment in renewable energy, energy efficiency, and low-carbon technologies. Secure access to low-interest loans, leasing options, green bonds and sustainability-linked loans.	Direct reduction by financing renewable energy, efficiency, and low-carbon tech adoption in companies and supply chains.	
BENCHMARK ENERGY EFFICIENCY & CARBON INTENSITY		
Compare organisational energy efficiency and associated emissions against industry averages, best practices, or specific peers.	Not a direct reduction measure, but it is crucial for identifying inefficiencies. Requires robust data collection.	
TRANSITION TO 100% RENEWABLE ENERGY		
Shift all energy consumption (electricity and heating) to renewable sources, through direct generation, power purchase agreements, or renewable energy certificates. Involves securing long-term contracts, and on-site generation.	Directly reduces Scope 2 emissions. A strategic procurement and investment decision, involving energy-market navigation.	

4.3. Product and Design

Unlike many consumer goods destined for landfill, these products are rarely disposed of. Instead, they are typically retained, inherited, gifted, sold, or recycled, ensuring their materials remain in circulation. This presents a significant opportunity in product design: to integrate circular economy principles from the outset. By designing for durability, timelessness, and efficient material recovery, brands can minimise their environmental footprint and develop new value streams, moving beyond the predominant linear model and contributing to a sustainable product lifecycle.

Product and design choices sit at the heart of decarbonisation. Decisions made during the design phase have a lasting impact, determining the materials used, the energy intensity of manufacturing, and whether a product can be repaired, reused, or recycled at end-of-life. Without addressing product design, companies risk locking in emissions and material waste for years to come. This is particularly important in a sector where products are often made from high-impact materials like gold, platinum and steel, and where the embodied emissions of products often outweigh those from downstream operations[32].

While circular design can unlock long-term cost savings and strengthen customer loyalty, the upfront investment and unfamiliarity with new design processes often act as deterrents. Without clear market signals that reward circular approaches, smaller brands may see redesigning products as complex and costly.

To overcome these barriers, businesses can begin by evaluating the feasibility of buy-back, repair, and refurbishment programmes. Establishing such programmes extends product lifespans and significantly reduces the need for new material extraction and production. At the same time, companies should embrace design for circularity, prioritising durability and making products easier to repair, upgrade, or dismantle. Crucially, this includes a robust focus on using recycled materials.

The sector should actively seek out and integrate secondary input metals, including precious metals recovered from other waste streams, such as those found in e-waste. This innovative approach means viewing waste from unrelated sectors as valuable resources, transforming what was once discarded into high-quality materials for watches and jewellery. Over time, this approach can evolve into full circularity models, where materials continuously flow through the value chain, and the need for virgin inputs is minimised.

Some brands[33] are showing an appetite for innovation and circularity[34] through take back schemes, modular designs, and repair services which reduce emissions and redefine customer expectations. Even with complex supply chains and strong design aesthetics, a focus on repairability and material recovery can yield both environmental and commercial advantages – without compromising on quality, heritage, or aesthetic value.

32 Thammaraksa et al. 2017. **Corporate Environmental Assessment of a Large Jewelry Company: From a Life Cycle Assessment to Green Industry.**

33 Votch, 2024. **Take Back Give Back Recycling Scheme.**

34 Patagonia. 2025. Worn Wear – **Better than New**

The table below lists product and design interventions that companies can implement to accelerate action.

4.3.1. Product and Design Actions

ACTION DESCRIPTION	CARBON REDUCTION PATHWAY	CARBON REDUCTION POTENTIAL (Low Potential / Medium Potential / High Potential)
BUY-BACK, REPAIR AND REFURBISHMENT PROGRAMMES		
Enhance the circular economy by optimising material use and create robust systems for reducing production waste and recycling end-of-life products. Implement systems to extend product life.	Significantly reduces emissions by avoiding new material extraction, processing, and manufacturing, leading to lifecycle carbon savings. Requires analysis of customer demand, market research, new process set up and customer offerings.	☁
DESIGN PRODUCTS FOR CIRCULARITY		
Design watches and jewellery for durability, repair, reuse, and material recovery (precious metals from e-waste, gemstones) to minimise waste and resource impact.	Reduces emissions by avoiding new material extraction/processing and extending product lifespan, saving significant lifecycle carbon. Involves internal design, R&D, and product specifications.	☁
DRIVE FULL CIRCULARITY MODELS		
Implement comprehensive circular business models that go beyond simple repair, creating closed-loop systems for material recapture, refurbishment, and re-commerce to maximise resource utility and eliminate waste.	Achieves significant carbon reduction by minimising reliance on new material extraction and processing, and extending product life.	☁

4.4. Consumer Engagement

Consumer engagement is an important but currently underused driver of climate action in the watch and jewellery sector. As climate awareness grows, consumers are increasingly expecting transparency and accountability from the brands they support[35]. This presents a powerful opportunity – in a sector where brand value is deeply rooted in heritage, storytelling, and emotional connection, integrating sustainability into the customer experience can not only build trust and loyalty but also create demand for lower-carbon products. By giving consumers the tools and information to make more informed choices, the sector can turn its customer base into an active force for decarbonisation – supporting sales of lower-impact goods, which drive wider shifts in value chain practices and Scope 3 emissions.

Yet product-level carbon data is rarely made public, and few companies communicate their climate strategies in a clear or consistent way. This is partly due to the technical challenge of calculating product carbon footprints across complex, global supply chains. But it also reflects hesitation – some brands fear scrutiny or accusations of greenwashing if their data isn't perfect. As a result, consumers are often left in the dark, unable to distinguish genuine efforts from superficial claims. This lack of visibility risks eroding trust and forfeiting a major opportunity to differentiate on climate action.

To shift this dynamic, companies need to bring transparency to the forefront of their consumer engagement strategies. Similarly to corporate journeys, the first step is to measure product carbon footprints (PCF) across the full lifecycle, enabling companies to identify emissions hotspots and set informed targets. Communicating these efforts in a credible and engaging way – through climate commitments, progress updates, and storytelling – can build consumer confidence and brand integrity.

Adopting carbon labelling on products provides a powerful tool to make environmental impact visible at the point of purchase. The importance of this step cannot be overstated, as credible verification is crucial for building and maintaining consumer confidence. By having PCF data and associated claims independently verified by a third party, brands can demonstrate accuracy and robustness. This process acts as a safeguard against accusations of greenwashing, as it ensures that sustainability efforts are genuine and transparent. Verification gives consumers the assurance that the information they are using to make purchasing decisions is reliable, thereby fostering trust and strengthening a brand's integrity in the long term.

When done well and backed by third-party verification, this not only empowers consumers to make lower-carbon choices but also builds competitive pressure across the market. Over time, these efforts can contribute to a broader shift: influencing demand for low-carbon luxury by embedding sustainability into the idea of what high-quality, desirable products look like[36].

Additionally, a strategic communications campaign is a useful tool for influencing a customer base. These campaigns go beyond simply providing data and instead use storytelling and emotionally resonant messaging to bring a brand's sustainability efforts to life. By crafting a clear and consistent narrative across all channels, from social media to in-store displays, companies can proactively shape consumer perception and create demand for lower-impact products. This approach not only educates customers on the climate challenges and a brand's commitments, but also builds a sense of shared purpose, empowering them to feel part of the solution and reinforcing brand loyalty.

There are strong examples of how this consumer engagement approach works in other sectors. In the food and beverage sector, brands like Oatly[37] and Quorn[38] have introduced carbon labels on their products, helping consumers understand the climate impact of their choices and reinforcing their own climate commitment. These labels have improved brand perception, driven internal supply chain improvements, and helped shape more climate-conscious buying habits. Research backs this up: a recent McKinsey and NielsenIQ study found that products with ESG-related claims grew significantly faster than their conventional counterparts[39], and PwC's 2024 Voice of the Consumer Survey found that 80% of global consumers are willing to pay more for sustainably produced or sourced goods[40].

By building transparency into consumer communications today – through carbon footprint measurement, clear commitments, and labelling – the sector can help shape tomorrow's demand for low-carbon luxury, while reinforcing the long-term value, resilience, and relevance of its brands.

35 Plastic Bank, 2025. **How consumer demand is fueling the sustainability shift/**

36 Carbon Trust. 2025. **Product carbon footprint label.**

37 Oatly. 2025. **Product Climate Footprint Explained.**

38 Quorn. 2025. **Carbon Footprint Labelling.**

39 McKinsey. 2023. **Consumers care about sustainability – and back it up with their wallets**

40 PwC. 2024. **Consumers willing to pay 9.7% sustainability premium, even as cost-of-living and inflationary concerns weigh: PwC 2024 Voice of the Consumer Survey.**

The table below lists consumer engagement interventions that companies can implement to accelerate action.

4.4.1. Consumer Engagement Actions

ACTION DESCRIPTION	CARBON REDUCTION PATHWAY	CARBON REDUCTION POTENTIAL
		Low Potential Medium Potential High Potential
MEASURE AND VERIFY PRODUCT CARBON FOOTPRINTS		
Conduct and verify a comprehensive LCA for specific watch and jewellery products to measure their full GHG emissions. Ensure adherence to international standards (ISO14040 and GHG Protocol Product Standard).	Provides critical data to inform and enable future carbon reduction strategies in design and sourcing, rather than direct reduction. Involves detailed data collection and calculation.	
COMMUNICATE CLIMATE COMMITMENTS		
Communicate climate goals, strategies, progress, and challenges transparently with all stakeholders through channels such as annual reports, dedicated sustainability reports, and company websites.	Does not directly reduce carbon but fosters transparency, builds trust and drives accountability.	
ADOPT CARBON LABELLING		
Display the measured carbon footprint of individual products directly on packaging, product information, or online platforms to inform consumer choice. Involves verifiable PCF measurement for each item.	Does not directly reduce carbon but empowers consumer choice towards lower-impact products and incentivises brands to reduce their product footprints. Requires engagement with 3rd party carbon labelling companies.	
INFLUENCE CONSUMER DEMAND		
Educating and engaging consumers to prioritise and demand products with significantly lower carbon footprints through direct engagement and comms campaigns. Long term market transformation achieved via storytelling and product labelling.	Indirectly drives substantial carbon reductions by creating market demand for more sustainable products, incentivising decarbonisation. Involves marketing, education, and challenging traditional luxury values.	

4.5. Sector-Level Governance

A governance-led approach to support standardised sustainability reporting and springboard widespread action towards decarbonisation goes well beyond what individual companies in the sector could achieve alone.

Collaborative efforts and working groups spearheaded by industry groups – such as the RJC's Standards Committee and SDG Taskforce– can facilitate alignment on key metrics, ensure consistent reporting practices, and support the development of baseline datasets for commonly used materials.

In specific industries, targeted tools and benchmarks have proven highly effective (such as the Higg Index, developed by the Sustainable Apparel Coalition). Such tools demonstrate how industry-led initiatives can complement regulation by enabling transparent, consistent and comparable climate data across value chains.

This approach of sector governance bodies helping drive tools for easy application of relevant standards and databases would be particularly beneficial for SMEs, who often lack the financial and human resources to conduct extensive research independently. By pooling resources and harmonising reporting approaches (e.g., by standardising Scope 3 data collection methodologies for the sector), the industry can build a more coherent and credible emissions data landscape. This, in turn, will support individual company target setting, align with emerging regulatory requirements, and ultimately position the industry for long-term climate action.

The gemstone industry provides a compelling reference point for the successful implementation of data disclosure solutions. Through initiatives such as blockchain-enabled certification schemes and the Kimberley Process[41], it has made major advances in traceability and ethical sourcing, demonstrating how standardisation can drive transparency and trust. Applying these same principles to GHG accounting—particularly Scope 3 emissions, which are often the most opaque—could lay the groundwork for a robust and credible framework for climate action.

More robust climate policies and regulations are on the horizon. The EU's CSRD mandates comprehensive sustainability reporting for a broad range of companies, including their environmental impact. The EU Emissions Trading System (ETS) imposes stringent reporting and reduction obligations on energy-intensive manufacturing and transportation. The Carbon Border Adjustment Mechanism (CBAM) aims to prevent carbon leakage by placing a carbon price on imported goods. These initiatives reflect a commitment to driving down emissions through policy. While some nations are making strides, others lack the comprehensive frameworks seen in their developed

41 Kimberley Process. 2019. **The Kimberley Process.**

counterparts. This can lead to a patchwork of regulations, making it challenging for businesses to navigate and potentially allowing some to operate without sufficient accountability for their emissions. The absence of a strong, consistent policy often means that the impetus for emissions tracking and reduction remains voluntary, which can hinder progress.

Industry bodies are well-positioned to advocate for climate policies that benefit the watch and jewellery sector. They represent the industry's interests to policymakers, ensuring new regulations are practical and effective. By advocating for SMEs and highlighting the sector's specific needs, these organisations can influence the development of policies that encourage emissions reduction without placing undue burdens on businesses.

Regulation, whether national or regional, has a key role to play in driving decarbonisation. However, compelling examples also exist of voluntary sector-specific governance bodies effectively driving and enabling this shift without needing updated legal frameworks. These range from standard-setting bodies and trade associations to technology innovation, incubation and deployment initiatives and joint procurement bodies.

The table below lists sector-level interventions that governance bodies can implement to accelerate action.

4.5.1. Sector-Level Actions

ACTION DESCRIPTION	CARBON REDUCTION PATHWAY	CARBON REDUCTION POTENTIAL
DEVELOP SME TOOLKITS		
Create practical guides, tailored for SMEs, detailing sector-specific guidance on carbon accounting and decarbonisation strategies.	Not a direct reduction, but a vital first step for empowering numerous SMEs to embark on their decarbonisation journey.	
SECTOR-WIDE WORKING GROUPS		
Establish working groups to create a common set of reporting standards for decarbonisation metrics. Define consistent baselines, set shared targets and provide clear guidance to the entire sector.	Essential for enabling consistent data collection, benchmarking, and effective emissions reduction strategies. (Refer to the RJC's Standards Committee and SDG Taskforce).	
SECTOR-SPECIFIC REPORTING FRAMEWORKS		
Implement standardised reporting frameworks for emissions enabling consistent measurement, based on industry consensus. Define key metrics, create templates for different business sizes and provide training.	Indirect but vital: Enables significant future reductions by providing the necessary data for targeted action. (Refer to the RJC's 2024 COP that require the disclosure and measurement of Scope 1 and Scope 2 GHG emissions).	
CLIMATE POLICIES AND REGULATORY ALIGNMENT		
Advocate for national and regional policy frameworks that support sector decarbonisation. Engage with governments to shape practical climate regulations, promoting the needs of SMEs, and ensuring alignment between industry initiatives and public policy.	While not delivering direct emissions cuts, enabling policy is critical in accelerating broader sector-wide decarbonization over time.	
DIGITAL GHG REPORTING PLATFORMS AND TOOLS		
Streamline emissions data collection via digital platforms for accuracy and consistency. Platform to feature data validation, performance tracking and data management.	Facilitates accurate tracking and compliance, accelerating Net Zero.	

CARBON REDUCTION POTENTIAL: Low Potential; Medium Potential; High Potential

5. CONCLUSION

The watch and jewellery sector is at a pivotal point. With increasing global pressure to address climate change, the industry must expand its focus beyond ethical sourcing and craftsmanship to include a comprehensive climate strategy. This report has detailed the sector's emissions landscape, the challenges, and the opportunities available through alignment with global Net Zero targets and credible decarbonisation strategies.

Although the sector's direct emissions may not be as prominent as those of heavy industries, its supply chains are linked to carbon-intensive activities. The necessity for action is evident, as is the potential benefit. By taking concrete steps to reduce emissions, companies can reduce risk, increase brand value, improve resilience and satisfy the increasing demands of consumers, investors, and regulators.

To achieve this, it is suggested that the sector take the following steps:

- **Corporate Strategy:** Integrate decarbonisation targets into core business planning and governance, supported by verified emissions data.
- **Supply Chain:** Engage suppliers, especially SMEs, with training, tools, and incentives to improve emissions transparency and performance. Prioritise energy efficiency and transition to renewable energy sources across all operational sites.
- **Product and Design:** Embed circular economy principles into product development by using recycled materials, continue to design for longevity and explore refurbish and repair programmes.
- **Consumer Engagement:** Communicate transparently with consumers through carbon labelling, storytelling, and verified sustainability claims to build trust and drive demand for low-carbon products.
- **Sector-Level Governance:** Establish collaborative platforms and leverage existing alliances to standardise emissions reporting, share best practices across the industry and address common challenges for the sector.

Reducing emissions is an ambitious goal that will be challenging. It will require leadership, innovation, collaboration and a readiness to challenge current practices. By working collectively, the watch and jewellery industry can help to create a future where luxury is better perceived as sustainability.

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6. APPENDIX

6.1. Research Approach and Limitations

The report is based on in-depth interviews undertaken with selected RJC members, a survey of all RJC members, to which 160 responses were received the knowledge of the industry and decarbonisation expertise of the Carbon Trust, and additional desktop research to supplement and contextualise the findings. This approach ensured that the report is informed by real-world experiences and perspectives from within the industry. Stakeholders' feedback underscored the urgent need for a comprehensive understanding of carbon impact and Net Zero strategies, directly supporting the report's aim to bridge this knowledge gap and empower businesses to take meaningful climate action. While this report provides valuable insights into the carbon footprint and Net Zero pathways of the watch and jewellery sector, some limitations remain. The number of stakeholder interviews was limited, and survey responses were concentrated towards watch and jewellery manufacturers. Resultantly, the varying levels of understanding, capacity, and challenges faced by all industry players – especially SMEs that form a significant part of the supply chain but often lack the resources for comprehensive emissions reporting – may not be fully represented.

6.2. Glossary of Terms

TERM	DEFINITION
BECCS	Bioenergy with Carbon Capture and Storage.
BVCM	Beyond Value Chain Mitigation.
Carbon Footprint	Total GHG emissions caused directly and indirectly by an entity.
Carbon Trust	Organisation providing sustainability consultancy and tools.
CDP	Carbon Disclosure Project.
Circular Economy	Economic system aimed at eliminating waste and continual use of resources.
CSRD	Corporate Sustainability Reporting Directive (EU).
Direct Air Capture (DAC)	Technology to remove CO_2 from the atmosphere.
ESG	Environmental, Social, and Governance.
GHG Protocol	Standard for measuring and managing GHG emissions.
GIA	Gemmological Institute of America.
Green Financing	Loans and investments tied to environmental performance.
Greenhouse Gas (GHG)	Gases contributing to global warming.
GRI	Global Reporting Initiative.
Inclusive Funding	Financial mechanisms supporting sustainability.
ISO 14064-3	Standard for GHG verification.
Kimberley Process	Certification scheme for conflict-free diamonds.
Net Zero	A state where greenhouse gas emissions are balanced by removals.
OECD	Organisation for Economic Co-operation and Development.
PACT	Partnership for Carbon Transparency.
PAGE	Partnership for Action on Green Economy.
RJC	Responsible Jewellery Council.
SBTi	Science Based Targets initiative.
Scope 1, 2, 3 Emissions	Categories defined by the GHG Protocol for direct and indirect emissions.
SDG	Sustainable Development Goals.
SMEs	Small and Medium-sized Enterprises.
SRSP	Signet Responsible Sourcing Protocol.
TPT Disclosure Framework	Transition Plan Taskforce guidance.
WBCSD	World Business Council for Sustainable Development.
WWF	World Wide Fund for Nature.

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