MOODY'S INVESTORS SERVICE

ASSESSMENT

28 February 2023

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Contacts

Amaya London Sustainable Finance Analyst

Lena Gillich Associate Analyst

Adriana Cruz Felix VP-Sustainable Finance

Tobias Lindbergh *SVP-Sustainable Finance*

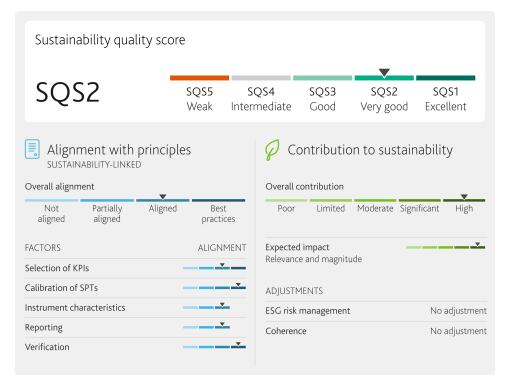
Rahul Ghosh MD-Sustainable Finance

Pandora A/S

Second Party Opinion – Sustainability-linked Finance Framework Assigned SQS2 Sustainability Quality Score

Summary

We have assigned an SQS2 Sustainability Quality Score (very good) to Pandora A/S' sustainability-linked finance framework dated 27 February 2023. Pandora has created this sustainability-linked finance framework to issue sustainability-linked instruments to finance general corporate purposes and has selected three key performance indicators (KPIs). KPI 1 and 2 are related to reductions in greenhouse gas (GHG) emissions, and KPI 3 is related to the share of recycled silver and gold in Pandora's jewellery. The main feature of this type of financing is the change in the instruments' financial characteristics, depending on whether or not the issuer achieves predefined sustainability targets. The framework is aligned with the five core components of the International Capital Market Association's Sustainability-Linked Bond Principles (SLBP) 2020, and the Loan Market Association, Asia-Pacific Loan Market Association and Loan Syndications & Trading Association's (LMA/APLMA/LSTA) Sustainability-Linked Loan Principles (SLLP) 2022. The framework demonstrates a high contribution to sustainability.



Scope

We have provided a Second Party Opinion (SPO) on the sustainability credentials of Pandora's sustainability-linked finance framework, including its alignment with the ICMA's SLBP 2020 and the LMA/APLMA/LSTA's SLLP 2022. The company has selected three sustainability KPIs related to GHG emissions and recycled materials, which are outlined in Appendix 2 of this report.

Our assessment is based on the last updated version of the Pandora's sustainability-linked finance framework, dated 27 February 2023, and our opinion reflects our point-in-time assessment of the details contained in this version of the document, and other public and nonpublic information provided by the company.

We produced this SPO based on our Framework to Provide Second Party Opinions on Sustainable Debt, published in October 2022.

Issuer profile

Headquartered in Copenhagen, Denmark, Pandora A/S (Pandora) is a world leader in the design, manufacturing and marketing of jewellery. Pandora markets its products in more than 100 countries on six continents, with more than 6,500 points of sale. The company employs more than 32,000 people worldwide, of whom more than 13,500 are located in Thailand, where the company produces its jewellery in jewellery-crafting facilities.

The company's sustainability strategy includes both social and environmental elements. On environmental issues, the company is seeking to reduce its GHG emissions by adopting low-carbon business initiatives and aims for circular innovation through responsible sourcing practices. Regarding overarching sustainability goals, the company has publicly set additional GHG reduction targets for 2040.

Strengths

- » The Key Performance Indicators (KPIs) address significant challenges for the jewellery sector.
- » The sustainability performance targets (SPTs) are set in accordance with international standards.
- » The timeline, baseline and trigger events of SPTs are clearly disclosed.
- » KPI data undergoes both internal and external verification.
- » Verification will be conducted until maturity of the sustainability-linked instruments.

Challenges

» Records of the actual energy consumption data from Pandora's owned-and-operated stores to calculate scope 2 emissions are partially missing.

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Alignment with principles

Pandora's sustainability-linked finance framework is aligned with the ICMA's SLBP 2020 and LMA/APLMA/LSTA's SLLP 2022:

O Green Bond Principles (GBP)	 Social Bond Principles (SBP) 	O Green Loan Principles (GLP)
O Social Loan Principles (SLP)	${rac{{arsigma}}{{arsigma}}}$ Sustainability-Linked Bond Principles (SLBP)	♂ Sustainability Linked Loan Principles (SLLP)
Selection of key performance indicators		
	_	

Not aligned	Partially aligned	Aligned	Best practices

Definition – ALIGNED

Pandora has clearly detailed the characteristics of the selected KPIs, including the units of measurement, the rationale and process for selecting the KPIs, the calculation methodologies, and the scope. These details have been disclosed in the framework. The company has selected three KPIs. KPI 1 aims at reducing absolute emissions from the company's own operations (scope 1 and 2), while KPI 2 is focused on reducing absolute value chain emissions (scope 3). Both KPIs are calculated in metric tons of carbon dioxide equivalent (mtCO₂e). KPI 3 addresses the increase in the share of purchased silver and gold in Pandora's jewellery and is presented as a percentage of recycled silver and gold.

Measurability, verifiability and benchmark – ALIGNED

The KPIs selected by the company are measurable and externally verifiable by independent auditors. The calculation methodology is consistent and in case of any change in methodology, the issuer commits to informing the investors about such changes.

The KPIs' definitions rely on external references, allowing them to be benchmarked. The methodology used for KPIs 1 and 2 follows the Greenhouse Gas Protocol Corporate Standard. KPI 3, or the percentage of recycled silver and gold, is calculated as the share of the total purchased silver and gold. The issuer states that the recycled percentage is a combination of recycled silver and gold from certified standards and suppliers' self-declarations. In the past, supplier self-declarations were not validated by Pandora, which is now subject to internal review as well as a third-party audit. In addition, the issuer aims to source materials exclusively in accordance with the Responsible Jewellery Council's voluntary Chain of Custody standard (RJC-COC) or equivalent standards by 2025.

Historical performance data for all three KPIs for at least the last three years have been disclosed in the company's sustainability report. Data for KPI 1 and 2 are externally verified and for KPI 3, the external verification is available since 2021 only.

Relevance and materiality – ALIGNED

The selected KPIs are relevant, core and material to Pandora's business strategy for its current and future operations as low-carbon business and circular innovations have been identified as priorities in the company's materiality matrix. In 2022, the scope of coverage of KPI 1 was estimated at 6% on a stand-alone basis. Taken in isolation, KPI 1 only partially reflects relevant and significant sustainability issues. The issuer, however, has committed to always using KPI 1 together with KPI 2, with KPI 2 accounting for 94% of Pandora's footprint in 2022. The combined use of the two KPIs results in full coverage of the company's carbon footprint. KPI 3 covers 100% of purchased silver and gold used in Pandora's jewellery by 2025. According to the issuer, all jewellery contains some degree of gold or silver.

In addition, the KPIs cover key sustainability challenges for the retail and apparel sector, including carbon transition and risks related to natural capital. The level of relevance and the significance of the KPIs is analysed in detail in the "Contribution to sustainability" section.

Best practices identified

- » There is continuity or traceability, with independent verifiers, in case of a change in the methodology used to measure KPIs
- » The KPIs definitions explicitly rely on external references, allowing them to be benchmarked

Calibration of sustainability performance targets

Not aligned	Partially aligned	Aligned	Best practices

Consistency and ambition – ALIGNED

The selected SPTs are consistent with the issuer's sustainability strategy, which is to achieve net zero emissions by 2040 and to purchase 100% recycled silver and gold by 2025. The strategy is part of a company-wide vision to address climate change, and to accelerate the transformation towards circular production and consumption models in the retail and apparel sector. The SPT performance of KPI 1 demonstrates a trend aligned with the company's business-as-usual (BaU), where significant improvements have already been achieved between 2019 and 2022, and the reduction rate remains at the same level until the observation date. The SPTs of KPIs 2 and 3 represent a material improvement to the issuer's BaU scenario. All three SPTs show higher ambition than those of the key sector peers of Pandora. In addition, SPTs 1 and 2 have been benchmarked against the science-based scenarios. SPT 3 follows the guidelines included in the RJC-COC standard and is expected to include similar other equivalent standards as reference over time. The level of ambition for the three SPTs is analysed in detail in the "Contribution to sustainability" section.

The means for achieving the SPTs are disclosed in the framework and in internal documentation, and are considered credible. The respective contribution is described in broad terms, but will not be publicly available in absolute figures.

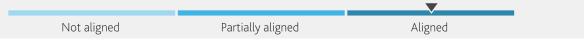
Disclosure – BEST PRACTICES

The timelines, baseline and trigger events have been disclosed in the framework. The issuer has set annual targets for its KPIs, allowing sufficient visibility for their performance measurement over time. The selected baselines are relevant and reliable for the three KPIs.

Best practices identified

- » Disclosure of the means for achieving the SPTs as well as any other key factors beyond the issuer's direct control that may affect the achievement of the SPTs
- » The means for achieving the SPTs are credible
- » Disclosure of the timeline, baseline and trigger events, including relevant intermediate targets
- » The selected baselines are relevant and reliable

Instrument characteristics



Variation of structural characteristics – ALIGNED

Pandora has confirmed that the instruments issued under this framework will be subject to variations in their financial characteristics, depending on the achievement of the SPTs. There will be only one possible coupon step-up date. The exact mechanism and impact will be detailed for each instrument in the corresponding instrument documentation (financial terms). Pandora plans to systematically use KPI 1, 2 and 3 jointly across all issuances under this framework.

If some of the reporting or verification requirements for the applicable target observation date(s), as set out in the security-specific documentation (trigger event), are not met, a predetermined coupon adjustment or repayment amount adjustment, among others, may occur.

Reporting

		$\mathbf{\nabla}$
Not aligned	Partially aligned	Aligned

Transparency of reporting – ALIGNED

The issuer has committed to report annually until the maturity of the bond. The intended scope and granularity of the reporting are clear and exhaustive, covering all the required and recommended elements, including information on the performance of the KPIs and any relevant information enabling investors to monitor the level of ambition of the SPTs. The reporting will be made publicly available in Pandora's sustainability report, which will be published annually on the company's website.

Verification



Verification process – BEST PRACTICES

The performance of the KPIs against their SPTs will be externally verified, on an annual basis and in case of significant changes affecting the sustainability-linked instrument's financial or non-financial characteristics, or both, until the maturity of the instruments. The verification assurance report will be made publicly available as part of Pandora's sustainability report or provided as a separate report.

Best practices identified

» Verification will be conducted until maturity of the bond or loan

Contribution to sustainability

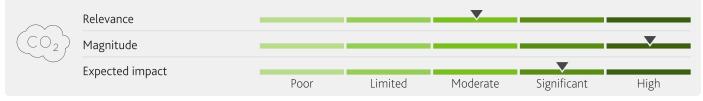
The framework demonstrates a high expected contribution to sustainability.



Expected impact

The expected impact of the KPIs on environmental objectives is high. A detailed assessment is provided below.

KPI 1: Reduce absolute scope 1 and 2 GHG emissions by 90% by 2025 from a 2019 baseline



The relevance of KPI 1 is considered moderate. Along with water pollution and soil erosion, reducing GHG emissions is one of the key sustainability challenges in the jewellery sector. It should although be noted that the sector is not one of the highest emitting sectors.¹ and of all the processes, the preparation of the open ground and mining are estimated to account for 95% of the carbon footprint for the entire gem and jewellery industry. The jewellery manufacturing processes make up the remaining 5% of the total aforementioned carbon footprint.² The relevance of KPI 1 is further strengthened by the issuer's commitment to always use KPIs 1 and 2 together, thus considering scope 3 emissions, which can account for a substantial portion of a jewellery manufacturer's total GHG footprint. As stated in the sustainability report 2022, to calculate scope 2 emissions, the issuer shall apply both the location- and the marketbased methods, including the purchase of Renewable Energy Certificates (RECs). In addition, the spend-based method is used for the owned-and-operated stores in cases where no data on actual energy consumption is available. In an internal communication, the issuer indicates that a detailed spend-based methodology with updated price and emission factors is available. The specificity of the marketbased method consists in allowing an organisation to report scope 2 emissions based on a financial transaction that does not change its physical energy consumption or emissions physically associated with its operations or facilities.³ The use or RECs by companies with science-based targets has led to inflated estimates of the effectiveness of the mitigation measures. However, we acknowledge the specificity of the markets in which the issuer operates and where RECs are the only alternative to the local energy mix. It must also be taken into account that Pandora strives to replace RECs with Power Purchase Agreements (PPAs) over time, where feasible and available. Furthermore, the issuer has indicated that it uses International Energy Agency (IEA) emission factor data, which is consistent with internationally recognised practices. Eventually, the selected KPI is core to the sustainability challenges faced by the company based on its 2022 materiality assessment, which identified "climate change" as one of the 12 most material topics and is also in line with the company's goal of achieving net zero emissions by 2040.

The magnitude of SPT 1, which reflects its ambition, is considered high based on the combination of three benchmarking approaches. Pandora's target is an improvement over its BaU scenario, although SPT 1 declines by an annual average of 32% over 2019-22 and is projected to decline at the same rate until 2025. We still consider this an improvement, because a slower pace or the same level of reduction towards the end of the targeted trigger event may be accompanied by diminishing returns. Pandora's target significantly exceeds the ambition of its sector peers in terms of scope 1 and 2 GHG emission reduction volumes and the length of the time frame. As for international standards, jewellery manufacturers are currently classified under the SBTi's "Textiles, Apparel, Footwear and Luxury Goods" category with a near-term target status of officially validated. In 2021, the SBTi validated Pandora's target to be aligned with

a 1.5°C trajectory by 2030. The issuer commits to achieving the 2030 target by 2025. This is a best-in-class outcome and exceeds the near-term commitments of Pandora's major sector peers.

The strategy to achieve the SPT will mainly include energy-saving measures and the expansion of the use of renewable energy, all of which are credible means of emissions mitigation used commonly. As of 2022, 70% of energy needs are covered by the purchase of RECs. However, the issuer is committed to exploring and supporting opportunities for further on-site renewables and PPAs in Thailand, where there is currently no market for them is established, and to exploring alternative REC opportunities for Pandora's remaining owned-and-operated international activities towards 2025.

KPI 2: Reduce absolute scope 3 emissions by 42% by 2030 from a 2019 baseline

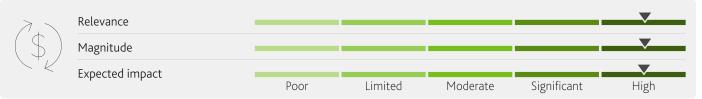


The relevance of KPI 2 is considered significant. Along with water pollution and soil erosion, reducing GHG emissions is one of the key sustainability challenges in the jewellery sector. As outlined in the section on the expected impact of KPI 1, Pandora's business in itself has a small share of the overall carbon footprint of the gem and jewellery industry because the most carbon-heavy part of the supply chain is attributable to the open ground and mining processes. Scope 3 emissions, however, account for most of Pandora's total carbon footprint, representing 94% in 2022, which is fully covered by KPI 2, resulting in a significant materiality to Pandora's business. KPI 2 covers all upstream emissions (scope 3 categories 1-8) and one downstream emission category (scope 3 category 14), thereby excluding nearly all downstream-related activities. However, given sector-specific characteristics, the impact associated with the use and processing of sold products is relatively insignificant in terms of its likely contribution to climate change.⁴ We also recognise that according to international standards such as the GHG Protocol, the inclusion of downstream activities is not mandatory if only indirect use-phase emissions apply for the use of sold goods.⁵ Eventually, the selected KPI is also core to the sustainability challenges faced by the company based on its 2022 materiality assessment, which identified "climate change" as one of the 12 most material topics, and is also in line with the company's goal of achieving net zero emissions by 2040.

The magnitude of SPT 2, which reflects its ambition, is considered high based on the combination of three benchmarking approaches. The company's target represents an improvement from its BaU scenario. In 2019-22, SPT 2 grew at an average annual rate of 2%, mainly because of increased production volumes and the fact that the supplier engagement program, which aims to support suppliers to switch to renewable energy and increase savings related to energy efficiency measures, is still being implemented. GHG emissions peaked in 2023, followed by a projected absolute decline in emissions until 2030, with 2026 being the year from which emission volumes are likely to be below the 2019 baseline level. This translates into an average annual decrease of 2% in the period 2019-27, 3% in the period 2019-28, 4% in the period 2019-29 and 5% in the period 2019-30, which shows an overall significant improvement relative to the company's BaU. The performance of Pandora's sector peers shows weaker results in scope 3 emissions reduction efforts. The issuer's commitment to reduce its scope 3 emissions by 42% by 2030 represents the most ambitious target among its peers as of January 2023. As for international standards, Pandora is currently classified under the SBTi's "Textiles, Apparel, Footwear and Luxury Goods" category with a near-term target status of officially validated. To date, the SBTi does not classify scope 3 targets by temperature. However, the SBTi still mentions that scope 3 targets are evaluated during the validation process and that they have to meet at least a well-below 2°C linear reduction from an absolute reduction approach. The Carbon Disclosure Project (CDP) Global Supply Chain Report 2021 also suggests that reducing scope 3 emissions by more than 40% shall be classified as the highest maturity level on the pathway to more sustainability in procurement.⁶ Additionally, according to data produced by Moody's Analytics, the company's target for 2027 (covering scope 1, 2 and 3) is considered to be aligned with a "well-below 2°C" trajectory and the company's targets for the 2028-2030 period are considered to be aligned with a "well-below 2°C" trajectory (1.5°C).

In addition to the above-mentioned introduction of a supplier engagement program, the strategy to reduce scope 3 emissions includes switching to low-carbon point-of-sales materials, working with franchisees in sourcing renewable energy for their shops and increasing the use of low-carbon transport.

KPI 3: 100% recycled silver and gold by 2025 from a 2019 baseline



The relevance of KPI 3 is considered high. The jewellery sector accounts for around 50% of the world's gold demand² and 21% of the world's silver demand⁸. Therefore, the environmental and social footprint of the jewellery sector is inherently linked to the environmental and human impacts of raw metal extraction activities. Mining has many negative externalities in terms of water consumption and pollution, loss of biodiversity, soil erosion, air pollution and GHG emissions. The mining sector is also exposed to numerous human rights issues as well as child labour and labour rights violations. By definition, the sourcing of recycled gold and silver contributes significantly to the reduction of the environmental and social footprint of jewellery as it avoids further negative externalities linked to mining activities. For example, recycled gold is deemed to produce up to 99.8% fewer greenhouse gas emissions than mined gold (99.8% for recycled gold from jewellery and 93.7% for recycled gold from Electronic waste). Recycled gold from jewellery accounts for 90% of the recycled gold stock. Recycled silver produces up to 86% lesser GHG emissions than mined silver. The items sourced by Pandora are first and foremost silver, gold, copper, palladium and human-made stones. Silver accounted for around 77% of Pandora's purchased product materials in 2022 in terms of weight and accounted for 76% of its raw material carbon emissions. The selected KPI is also core to the sustainability challenges faced by the company based on its 2022 materiality assessment, which identified "responsible sourcing" as one of the 12 most material topics.

The magnitude of SPT 3, which reflects its ambition, is considered high based on the combination of three benchmarking approaches. The company's target represents an improvement from its BaU scenario. After an initial decline in the share of recycled gold and silver (from 60% in 2019 to 54% in 2021) because the company tightened the requirements for recycled metals, as the existing methodology was solely based on supplier self-declarations, slow grow was recorded in 2022, resulting in an annual average rate of 1% over 2019-22 period. An average annual growth rate of 12% is projected for the period 2023-25. The objective to reach 100% recycled gold and silver by 2025 from 2019 demonstrates a material improvement from Pandora's BaU scenario. When benchmarking against its sector peers, the SPT shows a higher ambition. Pandora is one of the few jewellers to have committed to sourcing 100% of silver and gold from recycled and verifiable sources by 2025. In comparison, most of its peers have committed to 100% traceability of their metal sourcing, but without differentiating between newly mined or recycled sources. Several peers target to achieve 100% traceable gold by 2025 and another relevant peer has committed to sourcing all metals from responsibly managed and recycled sources by 2030. Finally, some competitors have chosen to commit to sourcing from mines that are small scale and fairly mined, which partially addresses negative externalities, particularly in terms of human and labour rights, by working as close as possible to local communities, but does not prevent the negative environmental externalities of extractive activities from occurring. The precious metals supply chain is by nature very complex and diverse, involving many stakeholders (including mining companies, refiners and retailers) and often operates in emerging market countries with significant human rights and armed conflict issues. Compared with international standards, the SPT is aligned with several of the most commonly used standards of the sector, including but not limited to the Responsible Jewellery Council - Chain of Custody 2017⁹ on or the LBMA Responsible Sourcing Programme, Responsible Gold Guidance. The traceability of metal from recycled sources remains a substantial challenge for the sector.

Pandora seems to recognise this challenge and the strategy to achieve the SPT will mainly rely on the implementation of a thirdparty audit mechanism for suppliers inspired by the RJC's standard for chain of custody and provenance claims with the objective to only purchase certified recycled silver and gold by 2025 (rather than the gold and silver being declared as recycled by the suppliers themselves). Pandora relies on a limited number of suppliers, some of which have had their supply chain externally audited by recognised external parties.

ESG risk management

We have not applied a negative adjustment for environmental, social and governance (ESG) risk management to the expected impact score. The KPIs do not seem to lead to any associated environmental or social negative externalities.

Coherence

We have not applied a negative adjustment for coherence to the expected impact score because the company's strategy seems aligned with the targets set under this framework.

Appendix 1 - Mapping KPIs to the United Nations' Sustainable Development Goals

The three KPIs included in Pandora's sustainability-linked financing framework are likely to contribute to three of the United Nations' (UN) Sustainable Development Goals (SDGs), namely:

UN SDG 17 Goals	KPI	SDG Targets
GOAL 7: Affordable and Clean Energy	Reduce emissions from own operations (absolute scope 1 and 2)	7.3: Double the global rate of improvement in energy efficiency
GOAL 12: Responsible Consumption and Production	Share of recycled silver and gold in jewellery	12.5: Substantially reduce waste generation through prevention, reduction, recycling and reuse
GOAL 13: Climate Action	Reduce emissions from own operations (absolute scope 1 and 2)	13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
	Reduce value chain emissions (absolute scope 3)	
	Share of recycled silver and gold in jewellery	

The UN's SDGs mapped in this SPO consider the KPIs and associated sustainability objectives/benefits documented in the issuer's sustainability-linked finance framework, as well as resources and guidelines from public institutions, such as the ICMA SDG Mapping Guidance and the UN SDG targets and indicators.

Appendix 2 - Summary of KPIs in Pandora's sustainability-linked finance framework

KPIs	SPTs	Unit	Sustainability Objectives
KPI 1 – Reduce emissions from own operations (absolute scope 1 and 2)	SPT 1 – 90% absolute reduction in total scope 1 and 2 and carbon neutral in own operations by 2025 from a 2019 baseline	mtCO ₂ e	Climate Change Mitigation
KPI 2 – Reduce value chain emissions (absolute scope 3)	SPT 2.1 - 14% absolute reduction in scope 3 emissions by 2027 from a 2019 baseline	mtCO ₂ e	Climate Change Mitigation
	SPT 2.2 - 23% absolute reduction in scope 3 emissions by 2028 from a 2019 baseline	3	
	SPT 2.3 - 31% absolute reduction in scope 3 emissions by 2029 from a 2019 baseline	5	
	SPT 2.4 - 42% absolute reduction in scope 3 emissions by 2030 from a 2019 baseline	5	
KPI 3 – Share of recycled silver and gold procured for jewellery production	SPT 3 - 100% recycled silver and gold procured for the production of Pandora's jewellery by 2025	% of recycled silver and gold	Transition to a Circular Economy

Moody's related publications

Second Party Opinion analytical framework:

» Framework to Provide Second Party Opinions on Sustainable Debt, October 2022

Topic page:

» ESG Credit and Sustainable Finance

Endnotes

- 1 CO2 and Greenhouse Gas Emissions, Our world in Data, May 2020
- 2 Gem and Jewelry Industry Sets to Reduce Carbon Footprints, GIT Information Center, March 2021
- 3 "location-based" or "market-based" method to estimate corporate Scope 2 GHG emissions; Carbon Offset Guide, 2021
- 4 Gold and climate change: Current and future impacts, World Gold Council, October 2019
- 5 Corporate Value Chain (Scope 3) Accounting and Reporting Standard, WRI and WBCSD, September 2011
- 6 CDP Global Supply Chain Report 2021, CDP in collaboration with BCG, February 2022
- 7 Gold Demand Sectors, World Gold Council, January 2023
- 8 Silver Supply & Demand, The Silver Institute, January 2023
- 9 Chain of Custody Standard, Responsible Jewellery Council, November 2019

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