

MKS PAMP SA
ZAUFS00591 – Gold 999.9
Carbon Neutral Lady Fortuna 1oz
Gold Minted Bar

Qualifying Explanatory Statement
in support of the
Achievement of and ongoing
commitment to carbon neutrality

Application Period: 1st September 2022 – 31st August 2023

Date: 23rd September 2022 **Updated:** 8th February 2023

1. Executive summary

This document is the Qualifying Explanatory Statement (QES) which provides collected evidence in support of the declaration that MKS PAMP SA:

1. has achieved carbon neutrality for its ZAUFS00591 - Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar marketed in globally for the period commencing 1st September 2022 to 31st August 2023 (see Section 3); and
2. is committed to maintaining carbon neutrality for its ZAUFS00591 - Gold 999.9 1 oz Standard Rectangular ingot - Fortuna (see section 4).

The carbon neutrality declaration has been made and the collected supporting evidence has been provided in accordance with the requirements prescribed by PAS 2060:2014 – Specification for the demonstration of carbon neutrality.



Marwan Shakarchi

CEO

17.08.2022

2. General information

PAS 2060 Requirement	Information Relating to the Carbon Neutral Declaration
Entity making PAS 2060 declaration:	MKS PAMP SA
Subject of PAS 2060 declaration:	ZAUFS00591 - Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar
Description of Subject:	This certification subject is based on the bestselling and most popular version of the minted ingot from the Fortuna product series. Made of 999.9 purity gold, it is aimed towards collectors and gold admirers alike.
Rationale for selection of the subject:	MKS PAMP SA was the first precious metals fabricator to use an artistic design to decorate the reverse of its minted bars, also referred to as minted ingots. The Lady Fortuna™ is today considered by many bullion distributors and their retail customers to be the world's most iconic ingot motif, and as a result, the Lady Fortuna™ minted ingot design has been trademarked. Gold and other precious metals are commodities, traded on the world's leading futures markets, and the

	daily market or 'spot' price is conventionally based on the 1 troy ounce weight. The 1 oz denomination is one of the most popular bullion weights with retail bullion investors because it is easy to store and is highly liquid when reselling to distributors or bullion dealers.
Boundary:	Cradle-to-Grave
Type of conformity assessment:	Independent third-party certification (see Annex 4)
Baseline date for PAS 2060 programme:	1 st January 2020 – 31 st December 2020 (footprint year) 1 st September 2022 – 31 st August 2023 (offset year)
Individuals responsible for evaluation and provision of data necessary for declaration:	Giovanni Calabria – ESG Manager Marco Villari – ESG Officer

3. Declaration of achievement of carbon neutrality

PAS 2060 Requirement	Information relating to the carbon neutral declaration
Declaration of achievement:	Carbon neutrality of ZAUFS00591 - Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar achieved by MKS PAMP SA in accordance with PAS 2060 on 23 rd September 2022 for the period commencing 1 st September 2022, certified by the Carbon Trust.
Recorded carbon footprint of the subject during the period stated above	2,738.5 kgCO ₂ e/kg of gold. 22,146.57 tCO ₂ e based on forecast sales of 260,000 troy ounces (approximately 8.087 tons). See section 3.2 for further details. Actual sales will be reviewed during reconciliation at the end of the certification period and the footprint, and number of offsets required will be adjusted.
Carbon footprint reduction target for period	In Year 2 (1 st September 2023 – 31 st August 2024), MKS PAMP SA plans to reduce the product footprint by at least 1.22 % from Year 1, translating into at least 33.4 kgCO ₂ e reduced emissions per kg of gold. See Annex 2 for further details on year-on-year targeted reductions.
Carbon footprint reduction achieved for period	As MKS PAMP SA Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar is a new product, in the first year of certification, the product emission data will be used as a baseline year for future reduction. As such, no reduction has taken place Year 1 (1 st September 2022 – 31 st August 2023). Reduction is targeted as of Year 2. See section 3.3 for further details.
Carbon offsets purchased	22,152 tCO ₂ e

	See section 3.4 for further details.
--	--------------------------------------

3.1. Carbon footprint methodology

PAS 2060 Requirement	Information relating to the carbon neutral declaration
<p>Description of the standard and methodology used to determine GHG emissions and reductions</p>	<p>The methodology for calculating the carbon footprint was as follows: The footprint was calculated by the Carbon Trust, using primary data provided by MKS PAMP SA for operations from 1st January 2020 to 31st December 2020. The annual footprint was divided by the mass of gold bar output to yield a kgCO₂e footprint per kg.</p> <p>MKS PAMP SA produces many products at their facility in addition to the Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar. Therefore, MKS PAMP SA allocated raw material inputs, outputs, and utility usage for each process step based on the mass output of all products manufactured at their factory.</p> <p>Inbound and outbound transportation distances and modes were provided by MKS PAMP SA, and end-of life emissions were calculated using secondary data and assumptions.</p> <p>Activity data was multiplied by emission factors to calculate emissions. For the virgin gold supply, MKS PAMP SA provided the Carbon Trust with supplier-specific emission factors based on reported figures and calculations. Since MKS PAMP SA also uses recycled gold as an input, the virgin gold emission factor was inputted into the EU Product Environmental Footprint Circular Footprint Formula to yield the overall emission factor that was applied to the gold input. Other emission factors were sourced from Government publications (i.e. BEIS), Ecoinvent v3.7.1., and published literature.</p>
<p>Justification for the selection of the methodologies chosen</p>	<p>The carbon footprint of the listed product was calculated using a recognised methodology that was based on the following document:</p> <ul style="list-style-type: none"> - ISO 14067 is an internationally recognised specification for outlining the principles, requirements, and guidelines for the quantification and reporting of a product carbon footprint. The provisions of the methodology for calculating the carbon footprint were applied as detailed and the principles set out in PAS 2060 were met. <p>The following assumptions were made in quantifying GHG emissions:</p> <p><u>Raw materials:</u></p> <ul style="list-style-type: none"> - The virgin emission factor for gold was provided by PAMP for the top 78% of suppliers on a mass basis; the weighted average EF was applied to all virgin inputs. - Potassium fluoroborate EF was not reported in Ecoinvent 3.7.1 so the EF for sodium fluoroborate was used instead.

- Certain EFs for chemicals were not available, proxies were used, for example trimercaptotriazine.
- Black water and white water are outputs provided by PAMP. It is assumed that water consumption is the sum of these two. In the absence of specific information, it is assumed that raw materials used in packaging are virgin materials. Since packaging makes up a small proportion of the total footprint, this has a negligible impact.
- It is assumed that there is a 100% recycling rate of the Fortuna minted product at the end of its life.

Packaging:

Assumed that packaging materials are virgin.

Transport:

Road freight, vehicle type and fuel unknown, assigned Rigid lorry 3.5 to 7.5 tonne 2 axle UK and diesel emissions by volume EU. Single footprint was calculated for all markets as downstream distribution makes up less than 0.1% of total product carbon footprint, therefore variation across markets will have immaterial impact.

End of life:

For packaging end-of-life, an EU average was used due to the absence of global factors. However, this does not have a material impact on the footprint

3.2. Carbon footprint summary

Carbon Footprint <i>(for latest footprinting year)</i>	Information relating to the carbon neutral declaration
Total Carbon Footprint	The total emissions for all products sold in the boundary is as follows: 22,146.57 tCO₂e See Annex 1 for further details.
Carbon Footprint per functional unit	The total emissions per functional unit is as follows: 2,738.5 kgCO₂e/kg See Annex 1 for further details.

3.3. Carbon reduction

PAS 2060 requirement	Information relating to the carbon neutral declaration
Reductions achieved	The carbon footprint reductions between the current carbon footprint (see section 3.2) and the baseline period are as follows: Intensity reduction: 33.4 kgCO ₂ e / kg for Year 2 (1 st September 2023 – 31 st August 2024) from Year 1 (1 st September 2022 – 31 st August 2023). Include reductions for each product groupings. Percentage intensity reduction: 1.22% for Year 2 (1 st September 2023 – 31 st August 2024) from Year 1 (1 st September 2022 – 31 st August 2023)
Baseline period	1 st January 2020 – 31 st December 2020
Confirmation that there has been no change to the definition of the subject	The subject remained unchanged at every stage of the methodology. There has been no material change to the subject.
Description of the means by which reductions have been achieved and any applicable assumptions or justifications	As the MKS PAMP SA Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar is a new product, in the first year of its certification, reduction has not been achieved yet. See section 4.1 for the carbon management plan that details MKS PAMP SA planned means for reduction.

3.4. Carbon offsets

PAS 2060 Requirement	Information Relating to the Carbon Neutral Declaration
Offset methodology	Carbon Credits amounting to a total of 22,152 tonnes of CO₂e are purchased from the VCS program, offsetting for Scope 1, 2, and 3 of the

	emissions from the fabrication of the Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar. See Annex 3 for methodology details.
Offset Confirmation	The offsets generated represent genuine, additional GHG emission reductions elsewhere. Projects involved in delivering offsets meet the criteria of additionality, permanence, leakage and double counting. Carbon offsets are verified by an independent third-party verifier. The credits from the selected carbon offset projects are: <ul style="list-style-type: none"> - Only issued after the emission reduction has taken place. - Retired within 1 month from the date of the declaration of achievement. - Supported by publicly available project documentation on a registry which provides information about the offset project, quantification methodology and validation and verification procedures. - Stored and retired in an independent and credible registry.
Offsets	Full details of the carbon offsets included in making this declaration are provided in Annex 3.

4. Declaration of ongoing commitment to carbon neutrality

PAS 2060 Requirement	Information Relating to the Carbon Neutral Declaration
Declaration of on-going commitment:	MKS PAMP SA commits to maintain carbon neutrality for the Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar in accordance to PAS 2060 for the period 1 st September 2022 – 31 st August 2023. Carbon neutrality for the Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar for the period 1 st September 2023 – 31 st August 2024 will be achieved by September 2024.

4.1. Carbon management plan

PAS 2060 Requirement	Information Relating to the Carbon Neutral Declaration
Targets for GHG reduction for the defined subject appropriate to the timescale for achieving carbon neutrality	Based on the baseline Year 1 (1 September 2022- 31 August 2023), MKS PAMP SA aims to reduce the GHG emissions of ZAUF00591 - Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar as follows:

	<p>Short Term: In Year 2 (1st September 2023 – 31st August 2024), by at least 1.22 % from Year 1, translating into at least 33.4kg CO2e reduced emissions per kg of gold.</p> <p>Medium Term: In Year 5 (1st September 2026 – 31st August 2027), by at least 4.88 % from Year 1, translating into 133.6 kg CO2e reduced emissions per kg of gold.</p> <p>Long Term: In Year 8 (1st September 2029 – 31st August 2030), by at least 8.54 % from Year 1, translating into 233.9 kg CO2e reduced emissions per kg of gold.</p> <p>Moreover, MKS PAMP SA has set SBTi-approved GHG reduction targets for their Scope 1,2 and 3 by 2030, which demonstrates the company's wider ambitions on overall GHG emission reduction goals.</p>
<p>Planned means of achieving avoided GHG emissions</p>	<p>The plans mean of achieving avoided Scope 1 GHG emissions lay primarily in action at our production site, as these are means that are in our full control. These include three key actions in our manufacturing process that are taken in the short-term:</p> <p><u>Avoid use of diesel in boilers:</u> Diesel was the second highest emission source in our manufacturing process and as such we have been working since 2019 to stop using diesel in all our process. An initial transformation has been done in 2020 to natural gas; and although shifts in gas supplies have varied in Europe, MKS PAMP SA has committed to avoid using Diesel at all costs.</p> <p><u>Avoid use of fossil fuels for electricity:</u> Committed to sourcing 100% from Europe, MKS PAMP SA is currently purchasing Swiss Hydroelectric certificates. This is in line with our SBTi commitments set for 2030. MKS PAMP SA has been sourcing 100% renewable electricity as of January 2022 (and as of 2017 at its Production facility), and plans on continuing to source 100% renewable electricity in the long-term.</p> <p><u>Avoid using an excess of energy in our manufacturing:</u> MKS PAMP SA has conducted a full energy analysis of its manufacturing process to ensure that a plan for energy monitoring is in place as of FY24. This would avoid excess emission of GHG. Better energy management would avoid excess GHG emissions across its production.</p>
<p>Planned means of achieving and maintaining GHG emissions reduction</p>	<p>As the product emissions are almost all in MKS PAMP SA inbound of raw gold materials, action in point 1-3 are focused on engaging with the supply chain of the product. Actions in point 4 and 5 focus on the manufacturing and packaging of the product. MKS PAMP SA will take the following actions to ensure that reduction occurs for their product:</p> <ol style="list-style-type: none"> 1. Select sources that have set GHG emissions reduction goals, have taken steps to reduce or adopt additional reduction initiatives.

2. Redraft our refining contracts and onboarding documents of our precious metal suppliers to include information on GHG emission
3. Revise our strategy to include a greater focus on new clients' base that have GHG considerations
4. Convert the composition of our packaging to increase recycled materials.
5. Change our machines that impact negatively our GHG emissions in our production.

1. Source selection

The general sourcing of gold bars includes a mix of mined and recycled sources. The sourcing mix usually depends on market fluctuation regarding the pricing of the material and availability of different sources, and the end consumer's demand. MKS PAMP SA plans to set specific mechanisms to ensure that GHG emissions are considered while making decisions on our sourcing mix.

Short-term focus: Maximize recycled materials. GHG emission reduction plans at mining sites take time to implement. As such, MKS PAMP SA commits to making choices in the balance of the overall mix (mined vs. recycled) of our general feed which is used to produce the Carbon Neutral bars. MKS PAMP SA intends to maximize secondary recycled materials when mines have not yet adopted actions to ensure necessary GHG emission reduction in their activities.

Medium-term focus: Establish internal controls for sourcing carbon emission management. MKS PAMP SA plans to continuously monitor its supply flow to ensure no significant discrepancies in the sourcing mix. Intake in sources is done daily at the production site once each shipment is received. MKS PAMP SA will put in place a process led by the ESG team that estimates monthly the overall and per kg GHG footprint for precious metals input and compare it to targets. Adjustments will be sought to address excesses. When that process is in place, the effective vs. targets figures will be reported to strategic teams within MKS PAMP SA on a quarterly basis.

Long-term focus: MKS PAMP SA is committed to providing the most stable sourcing balance ahead of 2030. It is primordial to MKS PAMP SA that GHG emission reduction occurs across mining and recycling suppliers.

Evaluate our working relations with mining sources. MKS PAMP SA will collaborate with its mining partner to ensure GHG reductions in their activities and will choose to supply from mines depending on their reduction capacity.

Improve our refining capacity for recycled materials. MKS PAMP SA plans to expand its refining process to include infrastructure and technology better adapted to intake recycled materials, increasing its capacity for recycled sources. MKS PAMP SA has considered the

potential effects that an increase in supply from secondary sources may lead to an increase in emission related to the refining of the material as the composition of the inbound material may require more energy & chemicals for the fine metal refined.

2. Client-relation documents

MKS PAMP SA starts working with clients only after the compliance department approves the clients' onboarding process. To ensure that new clients' emission reduction pathways align with MKS PAMP SA strategy, we will require mining clients to disclose their GHG reduction ambition during this process. Accordingly, we will not take on new mining clients who do not present any pathway for reduction. For existing clients, MKS PAMP SA will revise their refining contract to ensure disclosure of their GHG emissions and allow MKS PAMP SA to act accordingly.

Short-term focus: Amend existing refining contract within mining sources. MKS PAMP SA includes a clause that requires clients to disclose their names to MKS PAMP SA and Scope 1, 2 and 3 GHG current and prospective data only for our internal evaluation purpose by 3rd party consultants or auditors mandated by MKS PAMP SA and bound by strict confidentiality clauses. This information will not be disclosed to any other external party, without the consent of the client.

Medium-term focus: Incorporate carbon measurement and reduction requirements in clients' onboarding forms and compliance reviews.

MKS PAMP SA will ensure clients disclose their GHG data, intention to reduce carbon emissions, ambitions, and action plans. Clients will be reviewed and onboarded based on their commitment to GHG reductions and their capacity to act.

Long-term focus: Formalize clients' carbon reduction targets. MKS PAMP SA plans to add in their contractual agreements with mines, carbon reduction pathways that they set with the clients. Based on the meeting MKS PAMP SA will hold with the client (in line with their sales strategy), they will set joint reduction emission targets adapted to each supplier that align with MKS PAMP SA's Scope 3 reduction target.

3. Governance and strategy

MKS PAMP SA sales team is the primary interface with our precious metal supplier. They meet with suppliers regularly (including through on-site visits) and have the most in-depth understanding of the applicability of GHG emissions reduction targets. MKS PAMP SA intends to adapt its governance documents (bylaws) to ensure that its sales strategy includes GHG emissions consideration while engaging with current precious metal suppliers and target new suppliers.

Short-term focus: Change MKS PAMP SA bylaws to include sustainability. MKS PAMP SA will modify the objectives and the duties of the company purpose to mention the necessity for it to strive for a

material positive impact on society and the environment. In line with the Swiss Board Alliance 2030 initiative, these amendments will allow greater internal enforceability and a clear message to our precious metal supplier on our GHG reduction commitments.

Short-term focus: Conduct market analysis. MKS PAMP SA will analyze mines based on their GHG emissions and will focus on starting or increasing working relationships with those who emit less GHG or have plans to reduce their GHG emissions in the coming years.

Medium-term focus: Meet with precious metals suppliers regularly. MKS PAMP SA will meet with mines regularly and allocate a part of their plan to GHG emission reduction. The aim would be to:

- Sensitize mines with MKS PAMP SA reduction actions.
- Acquire firsthand yearly carbon emission data from our mining sources.
- To collaborate with the mine to set a pathway for GHG reduction (MKS PAMP SA would then include this pathway in refining contracts).

Long-term focus: Onboard new clients. MKS PAMP SA will work towards establishing business relationships with new clients that have GHG emissions in line with our GHG emissions goals.

4. Packaging

All our Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar are individually packaged in plastic CertiPAMP. These are then set in thermoplastic boxes for shipping. MKS PAMP SA plans to reduce the emissions related to the production of the packaging as follows:

Short-term focus: MKS PAMP SA will **analyze new material for packaging** to seek out possibility of maximizing recycled sources in the packaging composition. MKS PAMP SA will start by **converting the thermoplastic boxes to 100% recycled materials**.

Medium-term focus: Convert CertiPAMP packaging materials to increase its composition **up to 45% recycled material**.

Long-term focus: MKS PAMP SA will continuously monitor and analyze the composition of CertiPAMP to maximize recycled material.

5. Production

MKS PAMP SA aims to improve the efficiency of the production of its minting facility. As such, key considerations such as GHG emissions of machinery and process will be evaluated.

Short-term focus: MKS PAMP SA will **conduct an analysis of the current machines** and those **to be purchased in the future** to ensure that they fall in line with MKS PAMP SA GHG reduction commitment. Before purchasing a new machine, MKS PAMP SA will evaluate the

	<p>machines and the suppliers on a multitude of factors including cost, efficiency and GHG emissions.</p> <p>Medium-term focus: Swap out old machinery that has negative effects on GHG emissions and replace with new machinery that emit less or optimizes processes that in turn would reduce the amount of scrap and waste.</p>
<p>The offset strategy to be adopted for residual emissions</p>	<p>For a count of 260,000 troy ounces tons total production of ZAUFS00591 - Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar we are estimating 22,147 tCO2e necessary to be offset.</p> <p>This estimate is based on forecasted sales. There will be a reconciliation at the end of the certification period to ensure that the correct number of credits are purchased to offset the emissions of the actual volume sold during the certification period.</p> <p>See Annex 3 for the nature of the offsets and likely number of credits.</p>

Annex of Qualifying Explanatory Statement

Annex 1: Greenhouse gas emissions summary

A1.1 Carbon footprint details

Product	Stock Keeping Unit	Geographic Area	Total Net gCO _{2e} not rounded	gCO ₂ per Functional Unit not rounded	gCO ₂ per Functional Unit rounded	Functional Unit
1 oz Fortuna	ZAUFS00591	Global	22,146,570,000	85.18	85.00	gCO _{2e} / oz

A1.2 Methodology overview

Requirement	Information Relating to the Carbon Neutral Declaration
Boundary of the product	MKS PAMP SA is a provider of financial and physical trading services, and precious metals refinery based in Switzerland and member of the MKS PAMP GROUP. The product is MKS PAMP SA Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar which is a best-in-class precious metals product to accommodate every segment of the market, with particular emphasis on investment products. The Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar is manufactured at the MKS PAMP SA refinery in Ticino, Switzerland to the highest industry standards. This Minted Bar is primarily used by clients for investment purposes and is sold to dealers, distributors, retailers, financial institutions and banks worldwide.
Boundary of carbon footprint (the greenhouse gas emissions system considered)	Carbon Trust Assurance Limited certifies that MKS PAMP SA has calculated the carbon footprint representing all Gold Fortuna (1oz) sold Cradle-to-Grave (Business-to-Consumer) and marketed globally, in accordance with PAS 2060:2014.

MKS PAMP SA Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar are finished products that are produced at MKS PAMP SA refinery in Ticino, Switzerland and shipped to customers globally. The minted bars are listed and sold wholesale through MKS PAMP SA's MTB Metals Inc division as well as by Gold Avenue, MKS PAMP SA's online retailer.

The cradle-to-grave product carbon footprint includes all emissions from raw material extraction, value chain logistics (up and downstream distribution), manufacturing, packaging, and storage from the sourcing site to MKS PAMP SA refinery to the end-of-life storage of the product. Further information on each stage is listed below:

Raw materials

Gold inputs come from both virgin and recycled sources. The short-term mix of both being dependent on market fluctuation regarding the pricing of the material and availability, and the end consumer's demand. The carbon neutral product is based on MKS PAMP SA general feed of sources from the baseline year 2020 and includes approximately 50% mined and 50% recycled sources. All relevant chemicals used in the different stages of production were taken into account.

Manufacturing

For manufacturing, electricity was the main energy source and 100% of the electricity was derived from hydroelectric power. Other energy sources used at the plant were natural gas and propane.

Packaging

Packaging was carried out at MKS PAMP SA's facility. Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar are individually packaged in plastic. In terms of activity data, the mass of materials for one box or pallet was provided.

Downstream distribution

Finished products are transported by road from MKS PAMP SA in Switzerland to Zurich airport or to the final customers in Switzerland. For Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar the products are flown to USA, Canada, and Germany. From here, the products are transported to the end customer, by air and/or road.

End-of-life

	For the Fortuna, it is assumed 100% of the metal is recycled. The End-of-Life profile for packaging was calculated using the calculator already present in the FPX which considers different disposal methods.
Functional unit	1oz

A1.3 Lifecycle Overview

Life cycle stage	Description	GHG Emissions Category	Excluded emissions & Justification	Primary data sources	Secondary data sources	Data quality and uncertainties
Raw materials	Gold inputs come from both virgin and recycled sources. Chemicals.	Scope 3 Category 1		The total mass of the raw material inputs for each footprinted product over the reporting year. Chemicals: kg/year for each process step.	<p>The emissions factors for the gold sources (both recycled and mined) were calculated using the EU Product Environmental Footprint Circular Footprint Formula (PEF CFF). The emission factors for mined sources were calculated from specific suppliers and provided by MKS PAMP SA. Recycled emission factors were taken from literature and averaged.</p> <p>For other chemical inputs, emission factors were taken from the FPX v4.5 database (mostly BEIS 2020) or EcoInvent</p>	Gold: MKS PAMP SA provided the gold sourcing data of the used mines, with the mines name anonymized due to pre-existing confidentiality provisions in contractual agreements between MKS PAMP SA and its clients. The certification team was thus, unable to provide the direct mapping to each individual used source, and the calculated figures are in consequence affirmed only at aggregated level. The plausibility check was

					<p>3.7.1. In the cases when the emission factors were not available in either database, an emission factor of a similar chemical was applied from EcoInvent. If this also wasn't available, a generic emission factor was applied – 'chemical, organic' or 'chemical, inorganic' (also from EcoInvent).</p>	<p>conducted against industry data, per the requirement of ISO 14067 standard. MKS PAMP SA has taken measures to ensure that disclosures of mine-specific data including the name of the source will be available in the future, as it is a prerequisite for recertification.</p> <p>Other inputs: Obtaining supplier-specific emission factors would increase the accuracy of the footprint as generic emission factors would no longer be required.</p> <p>Packaging: Increase percentage of recycled percentage within for example the packaging of the finished materials, this would decrease the overall emissions.</p>
Manufacturing	Fuels (Gas, Propane), Electricity, and waste	Scope 1, Scope 2, Scope 3 Category 5		Based on invoice of suppliers of MKS PAMP SA. Electricity:	Electricity and fuels: The full lifecycle emission factor for hydroelectric power was taken from www.hydropower.org Emission factors from BEIS 2020 were used for natural gas	Attaining more clarity over the transportation stages could improve footprint accuracy. For example, it may be that the suppliers use electric

				<p>MWh / year for electricity</p> <p>Natural gas and propane: m3 / year for each process step.</p> <p>Waste: data in percentage of mass of product (kg) is waste per year.</p>	<p>and propane. For each process step a specific amount of kgCO2e emissions were associated with them, namely for example the first moulting or the anode casting.</p> <p>Waste: BEIS 2020 was used for waste treatment emission factors.</p>	<p>vehicles, or particularly efficient logistical practices.</p>
Packaging	<p>1oz gold Fortunas are individually packaged in plastic. As with 1kg gold bars, 25 Fortunas are packaged in one thermoplastic box for shipping.</p>	<p>Scope 1, Scope 3 Category 1 and Scope 3 Category 4</p>		<p>Packaging is carried out as MKS PAMP SA's facility.</p>	<p>Packaging is carried out by MKS PAMP SA's facility. Emission factors applied to the packaging materials came from the Carbon Trust's FPX v4.5 database.</p>	<p>N/A</p>

Downstream distribution	Transport of Gold Bars from MKS PAMP SA to global markets	Scope 3 Category 9		Locations (country) the product was transported to, the distance and mode of transport (air, sea, road), and the distance used by each of the mode of transport.	Emission factors were applied to these activity data which derive from Carbon Trust FPC v4.5 transportation calculator.	N/A
End of life	Disposal of Gold and Packaging	Scope 3 Category 12	Gold, as it is considered infinitely recycled.	Packaging: The mass of materials for one box or pallet of packaging and the disposal methods of the packaging.	Emission factors applied to these packaging materials came from the Carbon Trust's FPX v4.5 database.	N/A

A1.4 Geographical Areas of Emissions Overview:

Geographical Area	Relevant Emissions				
	Raw Material (Gold + Other Input)	Inbound Transportation	Manufacturing	Downstream Distribution	End of life
Global	2722.9 kgCO2e	6.0 kgCO2e	2.2 kgCO2e	7.4 kgCO2e	0.1 kgCO2e

Annex 3: Offsets

The below information relates to the compensation of residual emissions (i.e. offsetting):

The volume of emissions reduced or sequestered via carbon offsetting corresponds to the residual emissions of the products in question. As per the requirements of PAS2060, it has been confirmed the offsets have been retired on a public registry to avoid double accounting. The internal process for ensuring there is no double accounting of offsets is as follows:

The internal process for ensuring there is no double accounting of offsets is as follows: MKS PAMP SA has designated an officer within the ESG team to oversee that all purchased offsets are correctly accounted for. MKS PAMP SA has set up a manual accounting system (in line with its financial accounting system) to track offset allocation supported by our data system (Power Bi). Once offsets are retired, they are assigned to the corresponding SKU within the system, MKS PAMP SA calculates the total amount of offsets available per product. After every purchase of a Gold 999.9 Carbon Neutral Lady Fortuna 1oz Gold Minted Bar, the ESG officer will make a report to the product management team with the amount (in kg) of product sold, the associated carbon offsets, and the remaining amount of Carbon Neutral gold and offsets available. Our offsetting team, sales team, and the head of ESG will then control these amounts for accuracy.

Project name	Country	Project type	Standard	Type of credits	Total credits	Generation period	Retirement date	Reference No. & link to registry	Offset volume (tCO ₂ e)	Offset Price	Justification for choice of offset
100 MW SOLAR PROJECT IN BHADRA IN RAJASTHAN	India	Energy industries (renewable/non-renewable sources)	VCS (Verra standard)	VCU	22,152	01.10.2020 to 31.12.2020	16.08.2022	https://registry.verra.org/ Registry: 1842 https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=174421	22,152	below €10/tCO ₂	Based on its global footprint, MKS PAMP SA decided to focus on avoidance projects. Carbon avoidance projects contribute to climate action by preventing carbon that would have been released into the atmosphere. MKS PAMP SA selected projects

											<p>that generate renewable energy: with three different technologies in three different geographies.</p> <p>Identifying offset projects had three key criteria for MKS PAMP SA 1) the project had to leverage the power of technology 2) the project had to be based in a country where it either operates or sources from and 3) be in line with its corporate values.</p>
										Total tonnes (tCO₂e) offset	22,152



Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 16 Aug 2022, 22,152 Verified Carbon Units (VCUs) were retired on behalf of:

MKS PAMP SA

Project Name

100 MW SOLAR PROJECT IN BHADLA IN RAJASTHAN.

VCU Serial Number

13476-505623029-505645180-VCS-VCU-1491-VER-IN-1-1842-01102020-31122020-0

Additional Certifications

Powered by APX

VERRA Standards for a Sustainable Future

Home

RETIRED UNITS

From Vintage	To Vintage	Serial Number	Quantity of Units	Unit Type	Project ID	Project Name	Project Type	Additional Issuance Certifications	Origination Program	Project Site State/Province	Project Country	Account Holder	Retirement Reason	Beneficial Owner	Retirement Reason Details	Date of Retirement
01/10/2020	31/12/2020	13476-505623029-505645180-VCS-VCU-1491-VER-IN-1-1842-01102020-31122020-0	22152	VCU	1842	100 MW SOLAR PROJECT IN BHADLA IN RAJASTHAN.	Energy industries (renewable/non-renewable sources)			Rajasthan	India (IN)	ClearSky Limited	Retirement for Person or Organization	MKS PAMP SA	These offsets are being retired on behalf of MKS PAMP SA as part of their requirements for Carbon Neutrality certification given by the Carbon Trust for their 1oz minted product.	16/08/2022

1 - 1 - 1

[Home](#) [My Profile](#) [My Projects](#) [My Retirements](#) [My Certifications](#)

[top of page](#) | [Privacy Policy](#)

Verra Registry - Powered by APX Technology

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=1744>

Annex 4: Independent third-party assurance



Certificate of Achievement

MKS PAMP

has achieved carbon neutrality and is committed to on-going carbon neutrality of the total carbon footprint of its

Carbon Neutral Lady Fortuna 1oz Gold Minted Bar

Carbon Trust Assurance Limited certifies that MKS PAMP has calculated the carbon footprint representing all Gold Fortuna (1oz) sold Cradle-to-Grave (Business-to-Consumer) and marketed globally, in accordance with:

- PAS 2060:2014 – Specification for the demonstration of carbon neutrality

A detailed list of certified results can be found in the associated Certification Letter CERT-13342.

Awarded: **1st September 2022**

Valid Until: **31st August 2023**

for and on behalf of Carbon Trust Assurance Ltd,

A handwritten signature in black ink, appearing to read "Hugh Jones".

Hugh Jones,
Managing Director

This certificate is for presentation purposes only. Please do not copy or circulate this certificate without the Certification Letter and associated Annexes where full details on the scope of the certification are documented. This certificate remains the property of Carbon Trust Assurance Limited and is bound by the conditions of the contract. Information and Contact: Carbon Trust Assurance Limited is registered in England and Wales under Company number 06547658 with its Registered Office at Dorset House, Stamford Street, London, SE1 9NT. Telephone: +44 (0) 20 7 170 7000. Carbon Trust Assurance Limited is a fully owned subsidiary of the Carbon Trust.

Annex 5: Additional supporting information for interested parties

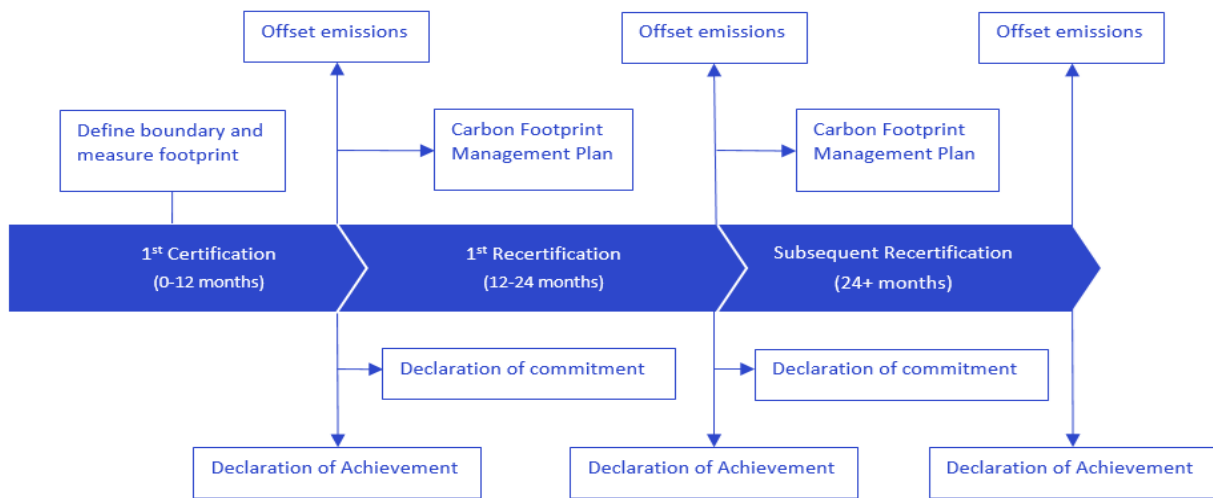


Figure 1. PAS 2060 certification process

Source: Carbon Trust. Adapted from “BSI - PAS 2060:2014: Specification for the demonstration of carbon neutrality: Figure 1 – Illustration of the cyclical process for demonstrating carbon neutrality, taking into account permitted baseline period exceptions”. [Simplified version]

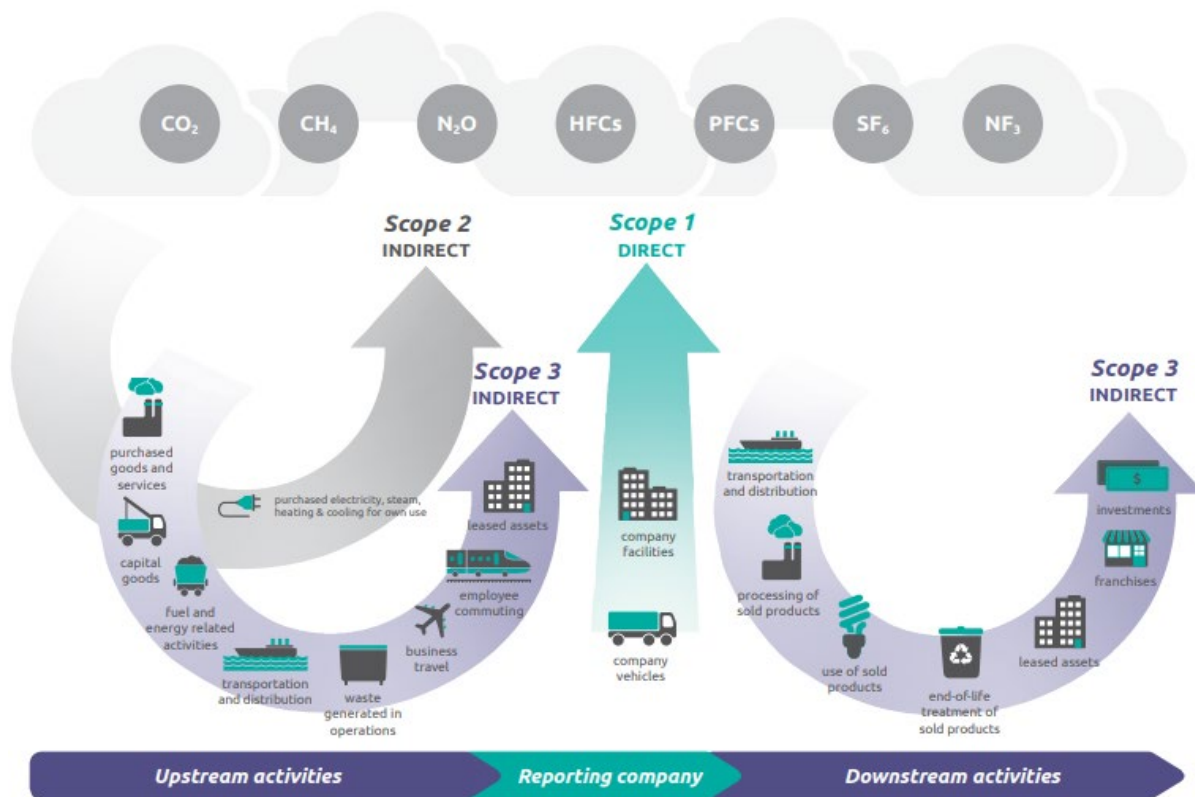


Figure 2. Organisational carbon footprinting

Source: Greenhouse Gas Protocol: <http://ghgprotocol.org/>