



SUSTAINABILITY REPORT 2023

CREATING SUSTAINABLE IMPACT THROUGH TECHNOLOGY

CONTENTS

03 MESSAGE FROM THE DIRECTOR MARKETING AND BUSINESS MANAGEMENT

04 2023 OVERVIEW

05 OUR MEMBERSHIPS AND SUSTAINABILITY RATINGS

06 BUSINESS & MARKET DEVELOPMENTS

07 BUSINESS MODEL AND BRANDS

08 THE HISTORY OF AOC

10 THE HISTORY OF MMD

11 OUR COMMITMENT TO THE ENVIRONMENT

12 EPEAT CLIMATE+

14 BLUE LIGHT CERTIFICATION

15 OUR SOCIAL INVESTMENT

16 TPV CARES

18 THEROCKINR

19 RED CROSS

20 PACT

22 ITSCI

24 GOVERNANCE

25 OUR GOVERNANCE

26 ESG GOVERNANCE

27 ANTI-CORRUPTION AND BRIBERY

27 DATA PRIVACY

28 ABOUT THIS REPORT

29 SCOPE OF REPORT

29 OTHER ESG POLICIES

30 APPENDIX



MESSAGE FROM THE DIRECTOR MARKETING AND BUSINESS MANAGEMENT



Dear reader,

> Economies and societies are facing ever greater challenges, whether it's the climate crisis - 2023 was the hottest year globally since records began - rising energy prices, or the increasingly dramatic shortage of raw materials coupled with growing mountains of electronic waste. Creative solutions are needed to counteract these on a large scale and make production processes more resource efficient.

At AOC & MMD, we successfully pursue a holistic approach along the entire value chain: from the procurement of sustainable or recycled materials for production to the greatest possible reduction of plastic and packaging materials. Our commitment to developing high-performance products in accordance with strict environmental standards was honoured at the end of last year with both of our brands becoming prestigious EPEAT Climate+ Champions - a significant step for us on the road to sustainability.

However, this is just the beginning. Our aim is for "circular thinking" to permeate all internal design and production processes in future and set new industry standards that will change display manufacturing globally. You can find out more about our commitment to the circular economy and our focus on the UN Sustainability Development Goals here in our sixth Sustainability Report. We look forward to your feedback, constructive criticism, and new ideas.

We wish you an inspiring read.

Stefan Sommer

Director Marketing and Business Management
at TPV (AOC & Philips Monitors, IT Accessories)

2023 OVERVIEW

RESPONSIBLE BUSINESS ALLIANCE

TPV has been a member of the RBA (Responsible Business Alliance) since the start of 2023. The RBA is a non-profit comprised of leading companies committed to supporting the rights and well-being of workers and communities worldwide that are affected by global supply chains.



RED CROSS NETHERLANDS

We have started to support a Red Cross Netherlands project in the city of Tacloban in the Philippines. It includes the training and equipment for over 350 Red Cross volunteers for risks assessment and disaster management, the construction of an evacuation centre, and the planting of more than 5,000 mangroves.



TOGETHER FOR CINEMA

In the UK, we have partnered with Together For Cinema CIC. It works with the AV industry to design and install home cinema rooms in children's hospices and other suitable locations across the UK. These rooms not only benefit the children and young adults, but also their families, caregivers, staff and volunteers.



ITSCI

TPV has been a member of ITSCI (International Tin Association) since February 2023. It's an award-winning multi-stakeholder programme contributing to better governance, human rights and stability.



THEROCKINR

TPV Cares supports TheRockinR with products for Medical Gaming Carts to help children and young people through the healing process as they undergo treatment and procedures in hospitals.



OUR MEMBERSHIPS AND SUSTAINABILITY RATINGS

> We are committed to supporting a range of international sustainability initiatives and measurement ratings that underpin our operations, ensure transparency, and track our progress.

SUSTAINABILITY RATINGS



Bold environmental action must begin with an accurate, transparent assessment of environmental impact and progress, which CDP scoring makes possible.



Climate Change



Water Security



Supplier Engagement



Our EcoVadis gold rating places us, as a part of TPV, within the top 5% of display manufacturing companies rated by EcoVadis across the World.



MEMBERSHIPS



We support the United Nations SDGs and remain committed to driving progress in our chosen key areas.



We are committed to the UNGC corporate responsibility initiative and its principles in the areas of human rights, labour, the environment and anti-corruption.



SCIENCE
BASED
TARGETS

We continue to support the SBTi, driving sustainable growth by setting ambitious, science-based emissions reduction targets.



We support and have joined the Responsible Minerals Initiative (RMI), helping to ensure positive contributions to global social economic development.



Responsible Business Alliance
Advancing Sustainability Globally

The RBA is a non-profit comprised of leading companies committed to supporting the rights and well-being of workers and communities worldwide that are affected by global supply chains. RBA members commit and are held accountable to a common Code of Conduct and utilise a range of RBA training and due diligence tools to support continual improvement in the social, environmental and ethical performance of their supply chains.



ITSCI is an award-winning multi-stakeholder programme contributing to better governance, human rights and stability currently in central Africa. ITSCI's purpose is to create responsible mineral supply chains that avoid contributing to conflict, human rights abuses, or other risks such as bribery.



BUSINESS & MARKET DEVELOPMENTS

BUSINESS MODEL AND BRANDS

➤ AOC & MMD provide monitors and displays that deliver our clients an outstanding experience, no matter the purpose of use. Our mother company TPV forms joint ventures with key component makers to secure stable supply and enhance cost structure.

The TPV Group is licensed to sell Philips brand TVs worldwide, with the exception of the United States, Canada, Mexico and certain countries in South America. Separately, the Group is licensed to sell Philips brand monitors globally. Philips’ strong brand recognition, R&D capabilities, and innovative products further seal TPV’s strong foothold in the display market. The two-pronged business model, Original Brand Manufacturing (OBM) and Original Design Manufacturing (ODM), broadens market reach and allows more efficient utilisation of resources.



Figure 1: Product market combinations AOC monitors

THE HISTORY OF AOC

> Founded in 1967, AOC is a globally leading monitor and IT accessories brand and a subsidiary of TPV Technology Limited, the world's largest LCD manufacturer. AOC's comprehensive portfolio provides the perfect monitor for every need – professional as well as personal applications.

AOC displays offer an excellent viewing experience wrapped in outstanding designs. With one of the strongest portfolios of high-performance gaming monitors, AGON by AOC is the number one gaming monitor brand in the world. For more information please refer to the AOC and AGON by AOC official [websites](#) or follow on [Facebook](#), [Twitter](#) or [Instagram](#).





Figure 2: Product market combinations MMD

THE HISTORY OF MMD

MMD-Monitors & Displays Holding B.V. ('MMD') is registered in the Netherlands, with its head offices in Amsterdam, and is a wholly owned company of TPV Technology Limited ('TPV'), which is one of the world's leading monitor and LCD TV manufacturers.

Since 2009, MMD-Monitors & Displays Holding B.V. ('MMD') exclusively markets and sells Philips-branded LCD displays worldwide under trademark licence by Koninklijke Philips N.V. By combining the Philips brand promise with TPV's manufacturing expertise in displays, MMD uses a fast and focused approach to bringing innovative products to market.

For more information about MMD, please visit mmdmonitors.com or follow MMD Monitors & Displays on [LinkedIn](#).



OUR COMMITMENT TO THE ENVIRONMENT

EPEAT CLIMATE+

> In a significant stride towards environmental responsibility and innovation in the electronics industry, we are proud to announce the achievement of the EPEAT Climate+ certification. This certification underscores our dedication to developing high-performance products that adhere to strict environmental standards.

In the face of the rapidly escalating climate crisis, there is an urgent need for innovative solutions across all sectors, particularly in the Information and Communication Technology (ICT) sector. This pressing environmental challenge calls for immediate action from both manufacturers and consumers.



The EPEAT Climate+ certification distinguishes AOC and Philips Monitors as leaders in the drive towards more sustainable electronic products.

The certification process, overseen by the Global Electronics Council (GEC), requires adherence to stringent criteria that ensure products are designed and manufactured with a focus on reducing their carbon footprint and mitigating climate change. EPEAT Climate+ Champions are manufacturers who have EPEAT registered products that have attained the EPEAT Climate+ designation.



To achieve the EPEAT Climate+ designation, products must meet several key criteria, reflecting a comprehensive approach to sustainability:

- Public and Third-Party Verified Product GHG Disclosures: transparent and verified disclosures of product greenhouse gas emissions.
- Energy Efficient Upstream Manufacturing Processes: manufacturing processes that prioritise energy efficiency.
- Science-Based GHG Reduction Targets: commitment to scientifically grounded targets for reducing greenhouse gas emissions.
- Renewable Energy Sourcing: utilisation of renewable energy sources in product manufacturing.
- Product Energy Efficiency Standards: compliance with high standards of product energy efficiency.

These criteria, developed in collaboration with a broad spectrum of stakeholders including manufacturers, scientists, policymakers, and sustainability advocates, are designed to ensure that products meet the highest industry standards for decarbonisation.

This certification is particularly meaningful in an era where consumers are increasingly conscious of the environmental impact of their choices. It helps purchasers to quickly identify technology products that are designed and manufactured with climate change mitigation in mind, thus contributing to the collective effort to alleviate the climate crisis.

BLUE LIGHT CERTIFICATION



➤ **Most people use monitors during their everyday life, for long hours, for work and entertainment. With the increased use of devices during the day, users are at a greater risk of exposure to high-energy visible (HEV) blue light and public interest on the issue has increased.**

Many Philips monitors do offer the Philips LowBlue Mode settings, which are LowBlue light software and hardware solutions to reduce blue light by lowering the blue channel emission. The software solution allows users to adjust the setting through the On-Screen Display, and the hardware solution achieves the result through tweaking the LED backlight.

Crucially, this reduces harm to the eyes without impacting viewing quality. To further provide users with the best and safest user experience, different models are now TÜV certified, proving the safety and quality standards required to be compliant with specific regulations.

With TÜV Eye comfort certification, we have the Philips 24B1U5301H, Philips Evnia 27M1C3200VL and many other TÜV-certified models, ensuring an ideal viewing experience, reducing eye strain, promoting well-being and convenience.

In 2020, Eyesafe, current the leading solution of Low Blue Light, was put into the TÜV certification scheme. Eyesafe Display certification proves that the product is designed to reduce long-term accumulated hazardous blue light by limiting the maximum exposure energy and blue light toxicity factor, while maintaining the normal colour. As an example, the Philips 45B1U6900CH is certified for Eyesafe and Low Blue Light.



“Philips Monitors are designed as benchmarks for safety and quality in the industry and comply with high-quality standards with the most renowned certifications in different areas,”

comments Kevin Yang, Technical Product & Compliance Lead at MMD Monitors. ***“Safety and ergonomic features for users’ comfort and wellness are always fundamental in our products because a monitor is much more than just a tool for productivity. Monitors have a huge role in our day-to-day activities, at work or at home. We need to do our part in ensuring the safest viewing experience.”***

OUR SOCIAL INVESTMENT



At TPV Europe we believe in the power of technology to create amazing and meaningful visual and sound experiences. Our products and our people are at the heart of all we do, and together we continuously explore meaningful ways to help people and communities reach their full potential – every single day.

TPV Cares is the home of our social and environmental impact initiatives. Powered by our business units AOC, MMD, PPDS and TP Vision, TPV Cares makes our visual and sound experience products - as well as financial and volunteer support - available to deserving community projects.

MISSION & VISION
 It is TPV Cares’ mission to help unlock the full potential of people and their communities, whether it’s to facilitate state-of-the-art eLearning solutions direct to people or via fundraising in support of finding a cure for spinal cord injuries.

 We want to help everyone to be able to get the most out of their situation in life and to help improve their health, well-being and education.

The projects we support are long term relationships with lasting impact. We support partners and initiatives that are intrinsically linked to our business, our products and our focus on the UN Sustainable Development Goals regarding Good Health & Well-being (SDG 3) and Quality Education (SDG 4). ›

As our products evolve and become more sustainable over the coming years, TPV Cares may also in the future look into expanding its initiatives by contributing to the more environmentally-focused areas covered by the Responsible Consumption and Production (SDG 12) and Climate Action (SDG 13) Goals. With our global footprint we see great opportunity in supporting local initiatives on a worldwide scale. By 2027, TPV Cares aims to have further strengthened and expanded its initiatives, contributing to the UN's Sustainable Development Goals via our products, our financial support and our people.

Our aim is to encourage 80% of our team to actively support, or to have had the opportunity to support, a local initiative through volunteer work.

- CUFA

● Eye Care Foundation

● ITSCI

● KLABU

● Mercy Ships

● Pact

● Red Cross Netherlands

● The Explorers Foundation

● TheRockinR

● Together for Cinema

● Trash Turtles

● Wings for Life World Run
- São Paulo

Vietnam, Suriname

Congo

Lesvos

Guinea, Senegal

Congo

Philippines

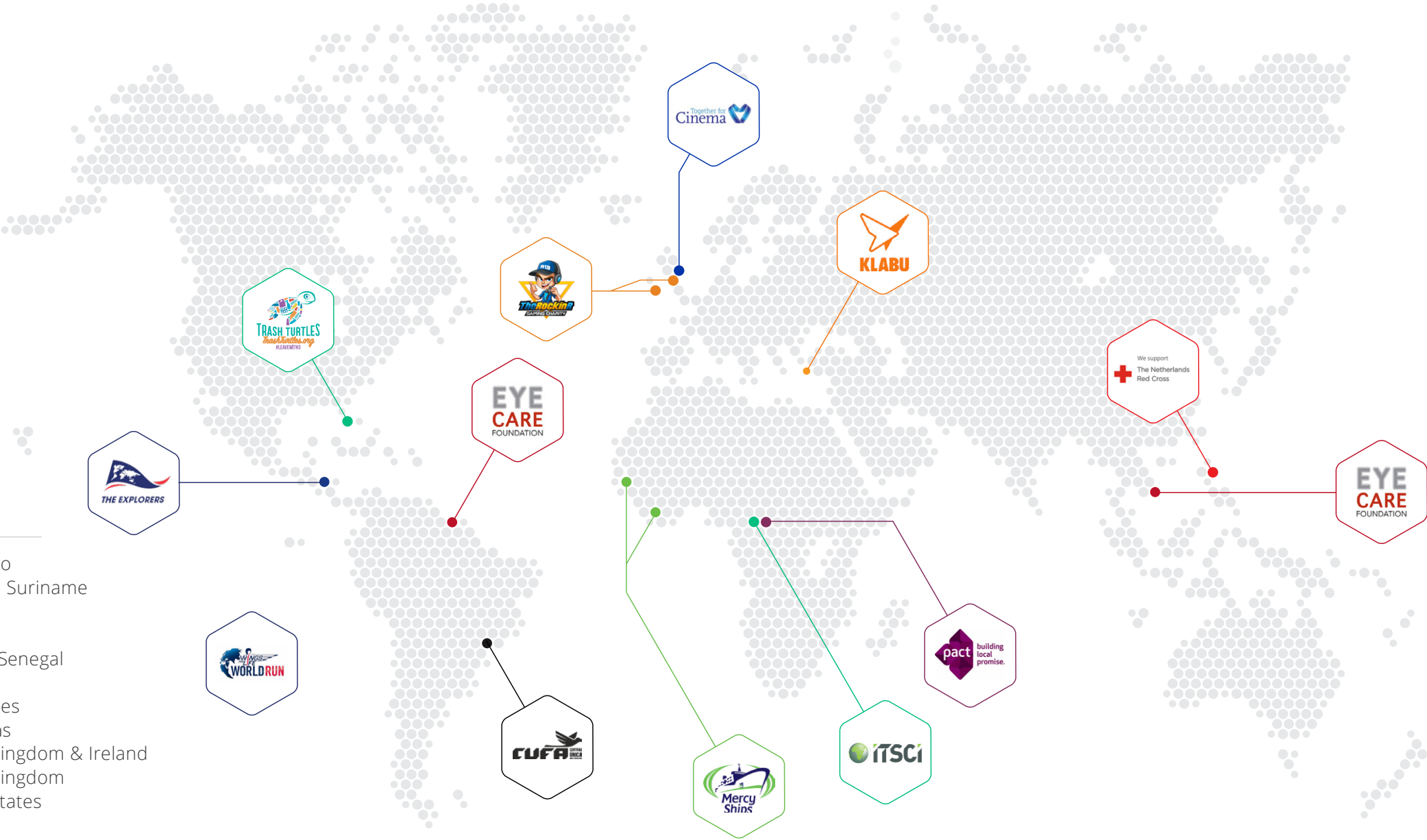
Honduras

United Kingdom & Ireland

United Kingdom

United States

Globally



CASE STUDY



THEROCKINR

➤ TheRockinR is a national charity which provides interactive Medical Gaming Carts to sick children and young people in hospitals throughout the United Kingdom & Ireland. In both research and practice gaming is increasingly being realised as a valuable resource for providing psychological and social support to recovering children and young people with many medical conditions.

TheRockinR has witnessed first-hand the positive impact gaming can have on the emotional well-being of children and young people. Clinicians have expressed how Gaming Carts allow young people access to activities that remove them from the constraints and anxieties surrounding the hospital environment. TPV Cares supports TheRockinR and the Medical Gaming Carts help children and young people through the healing process as they undergo treatment and procedures in hospitals.





CASE STUDY



RED CROSS

➤ Each year the Philippines faces approximately 20 tropical typhoons that cause incredible damage and human suffering. The Red Cross helps the people in the Philippines when disaster strikes, but also takes steps to reduce their risks, protect themselves, and prepare for emergencies before disasters.

This year, we started to support a Red Cross Netherlands project in the city of Tacloban with such a preventive focus. The project aims to support approximately 30,000 people living in the target neighbourhoods. It includes the training and provision of equipment for over 350 Red Cross volunteers for risks assessment and disaster management, the construction of an evacuation centre and the planting of more than 5,000 mangroves that retain clay and break waves, thus forming a natural coastal protection for the population.

CASE STUDY

PACT



➤ Bitala Mushoga is a father of five who supports his family in the Democratic Republic of Congo by working as an artisanal miner. He is a member of the Mining Cooperative for Community Development of North Kivu (COMIDECONOKI).

Like the other miners in his cooperative, for a long time, he mined without protective equipment. Every day, he set to work knowing how dangerous it was. “When I got to the tunnel face, I used to wonder whether I was going to make it out alive,” says Mushoga, 46. “I was exposed to several risks. I could bump my head against the roof of the pit, fall through the rock fragments inside the pit and die.” ➤



With support from Pact and local NGO partner BEPAT, through the Responsible Sourcing Project, Mushoga and the rest of his cooperative have made important changes. The miners now have personal protective equipment, and they received valuable training on occupation health and safety. “With this and other safety measures, my colleagues and I are now safe from dangers inside our pits,” Mushoga says. Recently completed, the Responsible Sourcing Project funded by AOC & MMD reached more than 7,200 miners, 400 government agents, and 700 community members throughout its three years of programming. This included a total of 3,914 mining operators and community members (3,369 men and 545 women) in 2023. Overall, the project was successful in working with government, industry and artisanal miners to improve miners’ health, hygiene and safety (OHS) at mining sites through training and awareness-raising activities. The project focused on the application of the 2018 DRC Mining Code and artisanal and small-scale mining (ASM). With the project’s support, ASM operators took ownership of the guidance, which aims to increase their safety and productivity.

Continued successful progress was achieved in the last year of project implementation, including project partners’ increased capacity to disseminate the Mining Code and regulations. The project increased miners’ awareness on the worst forms of child labour and improved their ability to denounce abuse and violence through the organisation

of 128 awareness-raising sessions to popularise the mining code and regulations, and the distribution of 250 simplified Mining Code manuals.

Key stakeholders, including mining cooperatives, state services, the mining police and mining communities’ residents, now know their responsibilities regarding responsible mining. Mineral traders understand the importance of acquiring their traders’ cards, and ASM stakeholders, including communities living around mining sites, are now well acquainted with the texts governing artisanal and small-scale mining. The various government services, including SAEMAPE, also strengthened and supported awareness raising among ASM stakeholders and communities living near mining sites to ensure compliance with the legislation governing ASM.

Thanks to the project’s numerous awareness-raising campaigns, in the five target mining sectors (Kibabi, Matanda, Shasha, Karuba and Ngungu), there were many examples of ASM operators undertaking activities to ensure compliance and application of the Mining Code. For example, partner mining cooperatives became involved in rehabilitating key community feeder roads used for transporting ore and farm produce, as well as constructing bridges linking mining areas. Thanks to awareness-raising implemented by their cooperatives, miners are now acquiring legal documents and are denouncing and combatting mining fraud.

Last year’s awareness-raising sessions on OHS were organised with the participation of artisanal miners, mining community members and mining state services, including SAEMAPE and the mines police. The sessions discussed several aspects of OHS at mining sites, including keeping an OHS register and following up with corrective actions; communicating and signposting hazards on sites; raising the importance of wearing personal protection equipment (PPE); underground ventilation to combat asphyxiation; dewatering and stopping groundwater ingress and shaft drownings; shaft lining and support; mine safety and measures to protect against cave-ins, landslides and shaft collapses; open-cast mining and stabilisation of stopes; occupational hygiene; waste rock management and environmental protection; first aid and the construction of latrines on sites to combat the risk of diarrhea diseases; the construction of sheds and first-aid posts on sites; the ban on night mining and reminders of the accidents that can occur when working at night.





CASE STUDY

ITSCI

➤ ITSCI works to achieve avoidance of conflict financing, human rights abuses, or other risks such as bribery in mineral supply chains. By making available unique and credible information to businesses, government authorities and civil society participation in ITSCI allows them to take appropriate and effective decisions on due diligence and steps towards progressive improvement.

The project's multiple components will be implemented in North and South Kivu Provinces. In conflict-affected and high-risk areas, risks related to human rights and security may arise due to lack of knowledge about legal instruments, protections, and responsibilities in the mining sector. To mitigate this, ITSCI will train local stakeholders on local laws and regulations most notably the DRC Mining Code. This will benefit artisanal miners, state mining services, public security forces, and local community members, whilst also increasing their understanding of their rights and enhancing governance of the mining sector overall. ➤

The project will particularly address the topic of gender challenges in mining, including women's rights and the fight against sexual and gender-based violence. Recognising the significant contribution made by women to artisanal and small-scale mining, ITSCI will implement awareness-raising activities to promote and enhance women's empowerment in the sector.

The project further focuses on Occupational Health and Safety (OHS) risks which are prevalent in artisanal and small-scale mining. Many of these risks can have significant human, social, and economic impacts, but can often be avoided through safer mining practices. ITSCI will conduct multiple trainings on OHS in mining for artisanal miners, cooperatives, and state services and will work with them to jointly support ongoing risk monitoring and mitigation at ITSCI monitored sites.

According to Mickaël Daudin, ITSCI Programme Manager: *"TPV's commitment to these activities builds on the work ITSCI has been supporting on the ground over the last 15 years. This project leverages ITSCI's presence in-country and the trust built through partnership over years of regular engagement with artisanal mining communities, state services, and government. This partnership supports due diligence efforts and contributes to enhancing governance in the mining sector."* Stefan van Sabben, Global Director CSR and

Sustainability at TPV added: *"We have been a member of ITSCI since February 2023 and, at the end of the year, we deepened our collaboration by supporting this project. We are excited and confident that as supply chain partners we can contribute to better governance, strengthened human rights, and improved stability. ITSCI has the right network and experience to create more*

awareness of the new DRC Mining Code but also to give the necessary OHS training. The new activities including the support of women-owned mining and mineral operations, and awareness-raising on gender, along with the research on disabilities, will lead to a more inclusive workforce with safer boundaries and better returns." Find out more about [ITSCI](#)



GOVERNANCE

OUR GOVERNANCE

> **Good corporate governance is embedded into our culture and behaviour, and involves all our employees as well as our suppliers.**

AOC & MMD embrace the ESG (Environmental, Social, and Governance) principles that prioritise sustainability, ethical conduct, and transparency, and represents a commitment to responsible business practices that consider environmental impact and social responsibility alongside effective corporate governance. It aligns our business with global sustainability goals.

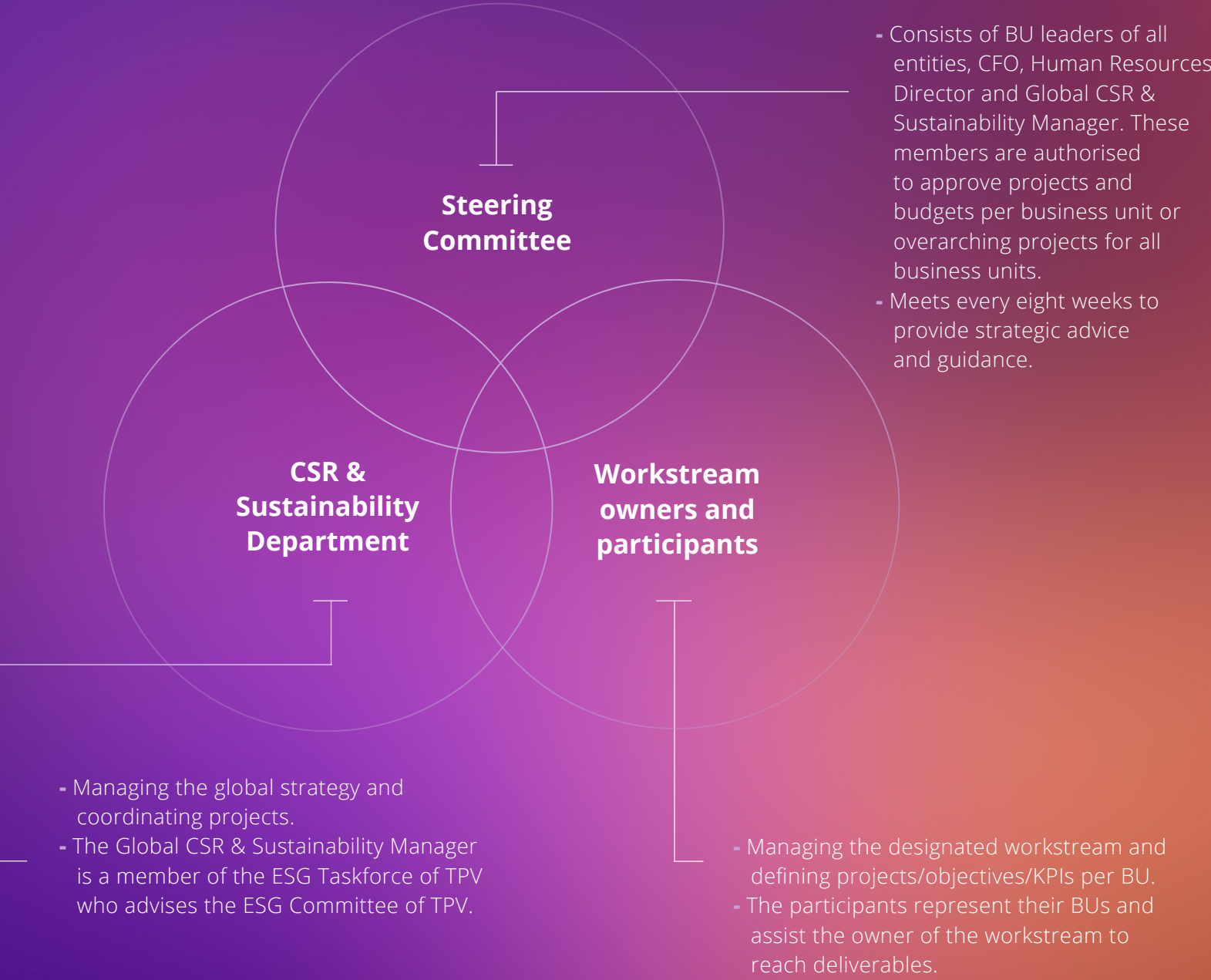
Our Anti-Corruption and Bribery Policy, fully compliant with national and international laws, and our commitment to data privacy, which embeds ‘Privacy by Design’ and is conveyed in regular training, contribute to these ethical business practices, ensuring transparency, accountability, and fairness in our operations. They combine with other important TP Vision policies to form a set of principles that guide the overall conduct of our business, and that of our partners. TP Vision has formulated ESG policies including a Code of Conduct for both employees and suppliers, a Human Rights Policy, an Environment Protection Policy, a Modern Slavery Statement, and a Conflict Minerals Report.



ESG GOVERNANCE

➤ For CSR and sustainability to result in significant change, it's necessary to have support at all levels in our organisation. Our Sustainability Steering Committee is represented by every part of our organisation and across each of the TPV business units.

Members of the Steering Committee are selected by their management team to represent their business unit. Together with workstream owners they discuss new projects and initiatives every eight weeks.



ANTI-CORRUPTION AND BRIBERY

> **AOC & MMD and its supply chain conducts its business in strict compliance with applicable laws and regulations, including national and international anti-bribery laws, and we expect the same from our business partners. Bribes are illegal payments or other types of compensation made to influence and gain profit from an individual, company or government official.**

AOC & MMD and its employees shall not, and shall not attempt to, influence government policy or obtain or retain business or an advantage in the conduct of our business by offering or accepting illegal payments, bribes, kickbacks or other illegal methods.

Anti-bribery laws including national laws adopted pursuant to the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, the US Foreign Corrupt Practices Act and the UK Bribery Act 2010 prohibit, in general, the payment, offer or authorised gift of anything of value, either directly or through a third party to other persons or to government officials, political parties, politicians, or political candidates, public officers in state-owned enterprises, officials of a public international organisation or holders of a legislative, administrative or judicial position of any kind with the intent to obtain or retain business, direct business to any person, obtain an improper business advantage or influence an official act or decision of such other person or government official.

These anti-bribery provisions apply not only to companies but also to individuals, such as employees. If an employee has actual knowledge of bribery, or if bribery is suspected, it is mandatory to report such information to AOC & MMD's independent compliance officer. The number of cases and reports regarding anti-corruption and bribery was zero in 2023.

DATA PRIVACY

> **Data privacy is an important consideration in the workplace and when conducting a business. We respect customers' data privacy and their rights to the personal information gathered via our products and services. Data and privacy protection procedures are in place and communicated to our employees through regular trainings. All collected personal data is accessible only by authorised personnel and the data is handled in a confidential manner.**

During the development of our products we use 'privacy by design' to limit the amount of personal data that is needed and to inform our customers about how their personal information is used. In May 2018, the General Data Protection Regulation (GDPR) was implemented in the EU. This is applicable for all companies that control and process personal information, and is subject to several requirements. These include having the right policies in place and entering data processing agreements with other organisations that process personal data on our behalf.

ABOUT THIS REPORT

ABOUT THIS REPORT

➤ Thank you for reading AOC & MMD's CSR & Sustainability Report. The report covers key activities and accomplishments during the fiscal year 2023, 1 January 2022 through December 31 2023.

We report annually on our efforts, and this year by means of an update report. In case of any questions regarding this annual report, please send an email to; stefan.vansabben@tpv-tech.com

SCOPE OF REPORT

1. AOC International (Europe) B.V.
2. MMD-Monitors & Displays Nederland B.V.

Keep up-to-date with AOC & MMD.
Visit www.aoc.com and
www.mmdmonitors.com.

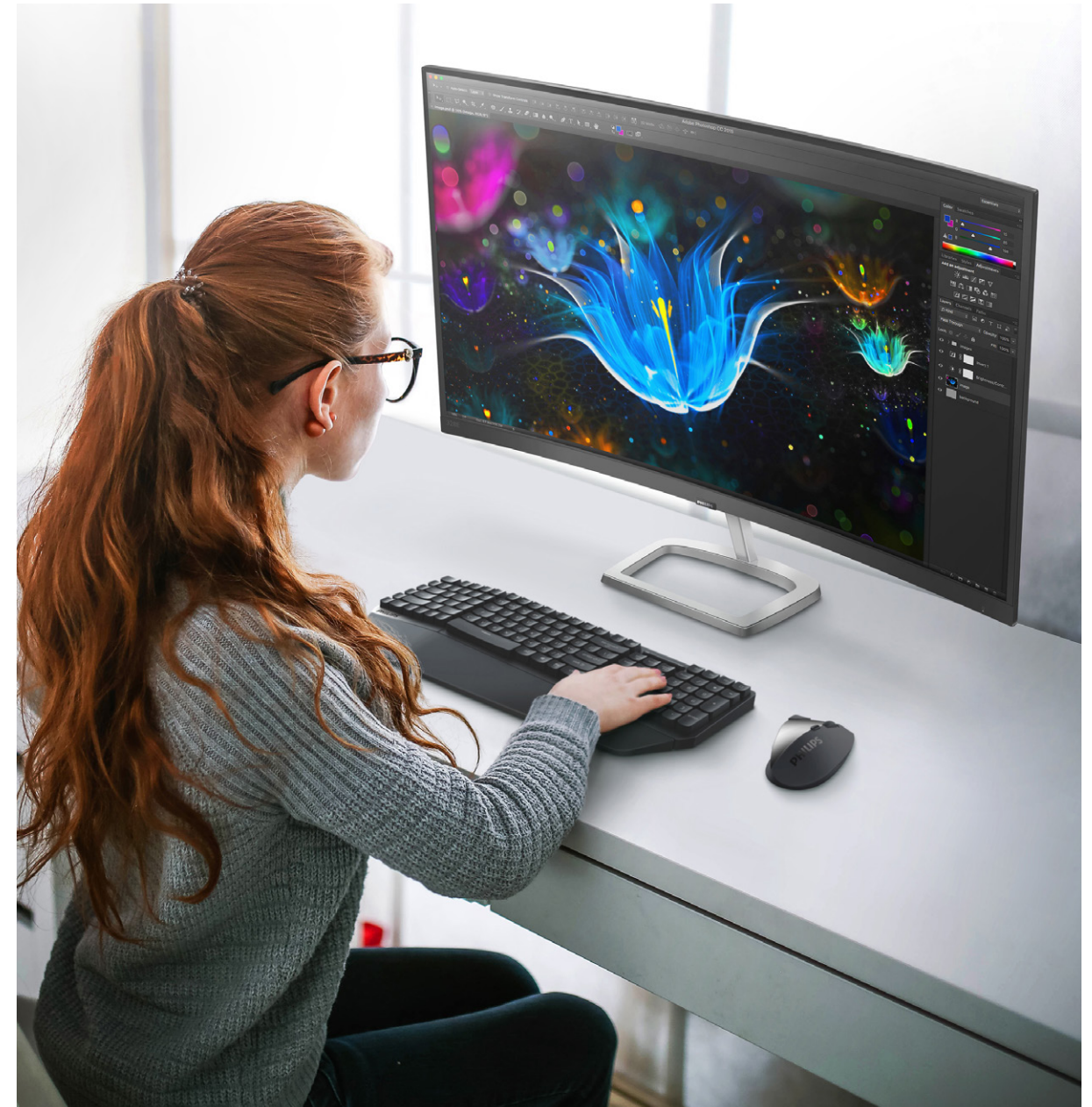
FEEDBACK AND CONTACT

We are keen to improve the value of our reporting and therefore welcome comments on this document, and our sustainability information on the website. Please contact our Global CSR & Sustainability Manager Stefan van Sabben, stefan.vansabben@tpv-tech.com

OTHER ESG POLICIES

- Code of Conduct
- Human Rights Policy
- CSR Supplier Code of Conduct
- Modern Slavery Statement
- Environment Protection Policy
- Conflict Minerals Report

You can access these policies [here](#).





APPENDIX

AOC & MMD OVERALL CO₂E DATA AND PRODUCT TRANSPORTATION GHG EMISSION TARGET

	UNIT	SCOPE 1 + SCOPE 2	SCOPE 3 PRODUCT CARBON FOOTPRINT	SCOPE 3 SUPPLIER GHG	SCOPE 3 FREIGHT GHG	TOTAL TONNES CO ₂ E
2020	Tons CO ₂ e	411.00	855,879.00	71,415.00	27,157.00	954,862.00
2021	Tons CO ₂ e	449.00	891,320.00	82,584.00	33,483.00	1,007,836.00
2022	Tons CO ₂ e	633.19	970,985.91	49,032.68	21,655.66	1,042,307.44
2023	Tons CO ₂ e	704.90	863,910.34	51,188.70	210,695.41	1,126,499.35

AOC & MMD has started to cover product carbon footprint, freight carbon footprint since 2020. The 2022 GHG CO₂e is slightly higher than 2021, because 2022 has more involved EPEAT registered models.

For freight GHG reduction, AOC & MMD will partner with the carrier suppliers to reduce product transportation GHG emissions by 15% by 2030, with the following measurements;

1. To increase slip sheet packaging percentage;
2. In priority to use carriers which performs better for IMO2020;
3. To improve product design as promoting more slim and light products;
4. To decrease train and airfreight shipment.

1. 2023 CO₂ EMISSION OF AOC & MMD ENTITIES

ACTIVITY		MMD MONITORS & DISPLAYS NEDERLAND B.V.						
		AOC INTERNATIONAL (EUROPE) B.V.	ENVISION PERIPHERALS, INC.	MMD SINGAPORE PTE. LTD.	TPV TECHNOLOGY INDIA PVT. LTD.	MMD (SHANGHAI) ELECTRONICS TECHNOLOGY CO., LTD.	WUHAN ADMIRAL TECHNOLOGY LTD.	OVERALL
		NETHERLAND	USA	SINGAPORE	INDIA	SHANGHAI	WUHAN	
SCOPE 1 (TONES CO ₂ E)	Natural Gas Stationary Combustion	11.13	15.62	0	0	0	38.89	65.64
	Petrol Mobile Compubstion	61.75	0	0	0	0	132.58	194.33
	Scope 1 Direct Emissions	72.88	15.62	0	0	0	171.47	259.97
SCOPE 2 (TONES CO ₂ E)	Purchased Electricity	12.32	50.08	43.16	169.29	116.34	53.74	444.93
	Scope 2 Indirect Emissions (Location-Based Method)	12.32	50.08	43.16	169.29	116.34	53.74	444.93
	Scope 2 Indirect Emissions (Market-Based Method)	12.32	50.08	43.16	169.29	0.13	53.74	328.72

2. 2023 AOC & MMD ENTITIES RELATED ACTIVITY

ACTIVITY		MMD MONITORS & DISPLAYS NEDERLAND B.V.						
		AOC INTERNATIONAL (EUROPE) B.V.	ENVISION PERIPHERALS, INC	MMD SINGAPORE PTE. LTD.	TPV TECHNOLOGY INDIA PVT. LTD	MMD (SHANGHAI) ELECTRONICS TECHNOLOGY CO., LTD.	WUHAN ADMIRAL TECHNOLOGY LTD	OVERALL
CONSUMPTION	UNIT	NETHERLAND	USA	SINGAPORE	INDIA	SHANGHAI	WUHAN	
NATURAL GAS	Nm3	6,243	-	-	-	-	-	6,243
	Therm	-	2,947	-	-	-	-	2,947
	m³	-	-	-	-	-	17,788	17,788
PETROL	Liter	25,582	-	-	-	-	57,802	83,384
ELECTRICITY	kWh	145,183	70,636	85,470	115,160	206,232	150,350	773,031

3. 2023 AOC & MMD ENTITIES WATER CONSUMPTION

ACTIVITY		MMD MONITORS & DISPLAYS NEDERLAND B.V.						OVERALL
WATER CONSUMPTION	UNIT	AOC INTERNATIONAL (EUROPE) B.V.	ENVISION PERIPHERALS, INC	MMD SINGAPORE PTE. LTD.	TPV TECHNOLOGY INDIA PVT. LTD	MMD (SHANGHAI) ELECTRONICS TECHNOLOGY CO., LTD.	WUHAN ADMIRAL TECHNOLOGY LTD	
	m³	NETHERLAND	USA	SINGAPORE	INDIA	SHANGHAI	WUHAN	
		95	16	65	209	357	630	1372

4. 2023 CO2 EMISSIONS OF AOC & MMD SUPPLIERS

ACTIVITY	UNIT	TPV ELECTRONICS (FUJIAN) CO., LTD	TPV DISPLAY TECHNOLOGY (WUHAN) CO., LTD.	L&T DISPLAY TECHNOLOGY (FUJIAN) LTD.	ENVISION IND. DE PRODUTOS ELETRÔNICOS LTD.	OVERALL
		TPV FUJIAN	TPV WUHAN	L&T	(TPV BRAZIL)	
SCOPE 1	Tons CO ₂ e	3,135.73	1,455.28	371.54	257.64	5,220.19
SCOPE 2	Tons CO ₂ e	32,754.02	8,069.70	4,785.61	359.18	45,968.51
TOTAL		35,889.75	9,524.98	5,157.15	616.82	51,188.70

5. 2023 GHG ACTIVITY DATA OF AOC & MMD SUPPLIERS

EMISSION SOURCE	UNIT	2023 ACTIVITY DATA				OVERALL
		TPV FUJIAN	TPV WUHAN	L&T	BRAZIL	
NATURAL GAS	m³	225,463.00	450,219.50			675,682.50
LIQUEFIED PETROLEUM GAS	Kg	-	-	-	-	100.00
GASOLINE	Kg	42,436.38	6,995.76	8,840.00	8,840.00	58,272.14
DIESEL OIL	Kg	43,227.75	80.00	11,281.40	11,281.40	63,589.15
ACETYLENE	Kg	13.60	-	-	-	52.60
CO2	Kg	-	306.00			306.00
R22	Kg	289.00	30.00	-	-	319.00
R123	Kg	-	-			0.00
R404A	Kg	10.00	-	-	-	10.00
R23 OR R32 OR R134A OR R407C	Kg	-	-	22.70	22.70	22.70
HCFC-123	Kg	-	-	-	-	0.00
HCFC-227EA	Kg	140.00	-	-	-	140.00
SEPTIC-TANK BOD(CH4)	Kg	97,572.70	33,501.90	21,900.00	21,900.00	152,974.60
SOLVENTES	L					23,591.00
PURCHASED ELECTRICITY	kWh	57,432,961.00	14,149,928.96	8,391,397.83	8,391,397.83	80,007,017.79

6. 2023 AOC & MMD SUPPLIERS WATER CONSUMPTION DATA

ACTIVITY	UNIT	TPV FUJIAN	TPV WUHAN	L&T	BRAZIL	OVERALL
WATER CONSUMPTION	m³	194,370	250,051	44,539	54	489,014

АОС |  **ММД**