

# SUSTAINABILITY REPORT 2021

CREATING SUSTAINABLE IMPACT  
THROUGH TECHNOLOGY



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# MESSAGE FROM THE DIRECTOR MARKETING AND BUSINESS MANAGEMENT

Dear reader,

We are delighted to share this fourth CSR & Sustainability report with you, to document and share our progress, pivots and accomplishments during 2021. Another year of exciting challenges has pushed us at AOC and MMD to evolve even further. The pandemic has challenged us to change the way we work and think: as individuals, teams, a company, and a society as a whole. We are proud and grateful to every single one of our employees who kept our ship moving.

As a display manufacturer, our business was naturally shaped by the ongoing shift to working from home and hybrid working models.

To enable and empower companies and workers in all businesses to stay connected and productive in these times, we regard it as our primary duty to put our minds to creating even better technology. Marrying technological advances with sustainable design processes has again been a main goal in 2021.

Our teams dedicated themselves to putting even more effort into creating more sustainable products, eco-friendlier packaging solutions, more transparent supply chains, and circular thinking during the entire product lifecycle.

We also dedicated more efforts towards our selected UN Sustainable Development Goals (SDGs).

As always, we regard our efforts in CSR and sustainability as a process, and one on which we can continue to build and improve.

This report documents our efforts. As a company, we are excited for the future and how we will be able to shape it. That being said, we are always open for feedback and appreciate constructive criticism and ideas.

Stay safe and creative,

**Stefan Sommer**

Business Development Director  
at TPV (AOC & Philips Monitors,  
IT Accessories)







# FINANCIAL & NON-FINANCIAL HIGHLIGHTS

|                |                                           | 2020                   | 2021                   |
|----------------|-------------------------------------------|------------------------|------------------------|
| FINANCIAL      | Net turnover AOC                          | €309.386.526           | €294,819,651           |
|                | Net turnover MMD                          | €362.904.418           | €394,692,735           |
|                | Sold monitors AOC                         | 2.857.677              | 2,260,858              |
|                | Sold monitors MMD                         | 3.050.699              | 2,462,147              |
|                | Sold displays MMD                         | 85.337                 | 105,700                |
| PRODUCTS       | Total number of ‘Green monitors’          | 3                      | 2                      |
|                | Manufacturing sites                       | 6                      | 7                      |
| MOTHER COMPANY | Ultimate shareholder                      | TPV Technology Limited | TPV Technology Limited |
| PEOPLE         | Total number of employees                 | 124                    | 114                    |
|                | Total number of training hours per person | 11,63                  | 10                     |
|                | Male-female ratio                         | 70/30                  | 73/27                  |
| COMMUNITY      | Partnerships to strengthen communities    | 4                      | 4                      |

Figure 1: Financial & non-financial highlights

# BUSINESS & MARKET DEVELOPMENTS

AOC |  MMD



# 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 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 2: Product market combinations AOC monitors



Figure 3: Product market combinations MMD

# A NEW ERA: AGON BY AOC UNIVERSE

> In recent years, and even more so during the pandemic, the gaming sector has grown tremendously. During lockdowns and continued working from home schemes, (online) gaming quickly became a lifeline for many across the globe.

In 2021, leading manufacturer of gaming monitors and accessories, AOC, repositioned its entire gaming portfolio elevating itself from a gaming hardware producer to the creator of a whole gaming universe – represented by its growing gaming ecosystem and creating a new gaming brand: AGON by AOC, and three sub-brands, AOC Gaming, AGON and AGON PRO under one umbrella.

With AGON by AOC gamers are introduced to an immersive experience no matter their skill levels or the game genres they prefer.

Dedicating itself even more to serving gamers worldwide, AGON by AOC is committed to create the best gaming ecosystem from mice to monitors for MMORPGs, racing games, simulations or FPS games – for curious adventurers, experienced heroes and professional legends.

Stefan Sommer comments: “The gaming industry and the esports sector in particular belong to the fastest growing technology markets – and the most exciting ones for sure. We were very proud to share our new brand concept and vision with this unique community. AGON by AOC surely continues to raise the bar when it comes to gaming ecosystems – and elevates the game of many more players around the world.”

As a part of this new concept, AGON by AOC extended its portfolio significantly, while staying true to its core value of providing value to gamers of every level.



# MONITORING SUSTAINABILITY IN THE IT SECTOR

## > An interview with Stefan van Sabben and Artem Khomenko

In the fast-paced IT sector, sustainability and e-waste are becoming more and more crucial for the development of businesses. As a manufacturer, MMD, understands that the company holds a lot of responsibility and has the vision to tackle this issue holistically. We had a chat with Stefan van Sabben, MMD's Global CSR and Sustainability Senior Manager, and Artem Khomenko, Head of Product Development AOC & MMD, to speak about sustainability, research, and waste reduction.

## Sustainability plays an increasingly important role in modern companies. How does Philips monitors/ MMD approach this topic?

**Stefan van Sabben:** We believe that the whole industry needs to fundamentally rethink product development and business models. The increased concern for sustainability also reflects demands from consumers, who want to invest in products with longer lifespans, are repairable and recyclable, and impact the environment the least amount possible. Most importantly, the driving force for this change should come from the companies and their respective workforces themselves. And that's how we're approaching this subject.

**Stefan van Sabben**  
Senior manager Global  
CSR & Sustainability





TPV's intrinsic motivation to play a key role in this change process is reflected in all our employees, from top management positions to the intern. Therefore, we're taking a holistic approach. We're improving existing portfolios to be more environmentally friendly, from sourcing sustainable materials used to create our products to using less packaging and less plastic to reduce waste. Moreover, we're training our product design teams to create more sustainable products from scratch. By working with partners such as Closing the Loop (CTL), PACT, and ForestNation, we're thinking about the entire product cycle, from the very beginning of the supply chain – the mining of minerals – to what happens to the product after the end of its lifespan, as it turns to e-waste.

### Is enough being done for sustainability in global IT/consumer electronics?

**Stefan van Sabben:** It requires an enormous amount of work and a continuous effort to change the world to be more sustainable, and all players in IT and consumer electronics need to dedicate themselves more to this development.

The fast pace of technology naturally results in new products being developed in the IT/CE sectors much more frequently than any other industry. This both complicates and stimulates the need to produce more sustainable products.

Right now at TPV, we've been increasing our use of recycled plastic in our products instead of using newly-made plastics. Our packaging now includes less plastic and more paper. We're also experimenting with new materials. Further, in order to establish holistic systems, we are now starting at the very base of the product cycle by introducing circular thinking (reduce, reuse, refurbish, repair and recycle) into our design and production processes.

This will generate more comprehensive results, such as reducing the overall energy and material consumption during manufacturing, producing longer lasting or upgradable products, using recycled and recyclable (bio-based) materials and reinventing our business models to add services to match these ambitious goals.



### Electronic waste is a pressing problem. As one of the leading monitor manufacturers, how do you tackle this issue?

**Stefan van Sabben:** Computer monitors contain pretty small circuit-boards and are therefore generally considered hardly worth the effort of recycling. In our pilot project with Closing the Loop (CTL) and TCO Development we aim to support the reduction of reduce monitor waste. This project aims to ensure traceability, shipping, and safe recycling of the collected waste, while a research institute (Öko-Institute e. V.) will focus on environmental and social risks. With this project, a certified recycling process will be established, setting new sustainability standards for the monitor industry.

### How does sustainability influence MMD's portfolio and design processes?

**Artem Khomenko:** It is now common in the CE/IT sector to have a Cradle to Grave (C2G) product lifecycle – all products, once introduced to the market, will ultimately end up as waste. Our goal is to overthrow this one-way lifecycle and transform it to a Cradle to Cradle (C2C) process.

Right now we are introducing circular thinking and sustainable ideas in our entire company strategy, resulting in new products with more sustainable designs, features and packaging.

For instance, by incorporating sustainable ideas into the design processes we created a new bezel design that requires drastically less plastic compared to previous designs.

Beyond this, we focus on aspects that make working more convenient by creating more monitors that feature USB-C technology, which makes many additional cables become obsolete and thus reduces e-waste.



As part of our green goals we are setting up a roadmap to convert all packaging from EPS foam to paper cushion and to further reduce plastic materials in our packaging, such as wires, plastic bags and CD-ROMs.

For B2B monitors, we are switching entirely to brown cardboard boxes with more simple prints, saving valuable resources and paving the way for improved recycling of the used materials.



### Which features of Philips monitors help users to work efficiently and more sustainability?

**Artem Khomenko:** In terms of sustainability, first and foremost our products have been designed with a sustainability perspective before their production. We are also proud to be one of the first display manufacturers on the market with products that received the sustainability certification TCO Certified 9.0. In fact, with 64 monitors carrying this designation, we have one of the largest portfolios of models on the market accredited with TCO Certified 9.0.

The most obvious examples of our commitment are our “greenest” monitors to date, the 24” 242B1G and the 27” 272B1G. These models are equipped with a new LED backlight technology. Thanks to this, they can maintain brightness and colour consistency whilst using significantly less energy, reducing energy consumption, and prolonging the lifetime of the model.

The 24” model only consumes 8.6 W in Eco mode and just 12.8 W typically with the EnergyStar testing method. With the new categorisation of Energy Label classes in the EU starting from 2021, the 242B1G is rated class C, which only a small subset of monitors on the market were able to achieve. Both models are of course full of the green features that we’re already implementing in the rest of our portfolio.

We use zero plastics and no harmful chemicals in the packaging of our green models, and we’re increasingly expanding this “green and sustainable” thinking to our entire portfolio.

For example, the majority of our business models are made from 85% post-consumer recycled plastic and the casing of our monitors is PVC/BFR free. The packaging material we use is also 100% recyclable and, soon, we will transition to packaging with only single colour and ink for all B2B models, which will further reduce costs and allow better recycling.

We equip many of our B2B models with PowerSensor and LightSensor features, which use infrared sensors. The former reduces the brightness when it detects no one is sitting in front of display.

While the LightSensor, in comparison, is a feature that increases the users’ comfort, adapting the brightness of the screen according to the ambient light it senses.

Moreover, many monitors in our portfolio fulfil multiple regulations, including EnergyStar 8.0, EPEAT, TCO Certified Edge and TUV Eye Comfort, and more. Additionally, our monitors are mercury-free and RoHS-compliant. In most of our business models, we also have a physical power switch, so the monitor will draw zero power from the mains when turned off.

Finally, by integrating many features in the monitor itself that are essential to many businesses, such as a webcam, USB hub, KVM switch etc., we reduce further e-waste by eliminating the need for additional dongles, hubs and such products.

# OUR COMMITMENT TO THE ENVIRONMENT

# FUTURE-PROOFING AOC AND PHILIPS MONITORS



> **In a world where natural resources are getting scarcer, and environmental pollution has led to dramatic climate change effects, every company in product development and manufacturing has to review its approach. AOC and Philips monitors are committed to change their approach to realise a more sustainable product life cycle, from product design to manufacturing and after care.**

Being a company in the IT sector, we always need to balance business benefits (customer value) with societal benefits (ecological value). We believe that this is a significant driver for innovation. Therefore, by continuously keeping this trade-off in mind, we can build a healthy and growing business and at the same time making a positive impact on the planet.

As stated before, sustainable thinking has been introduced in all steps of the product development process – from designing new and more eco-friendly packaging solutions to creating designs using less plastic – and of course, choosing components that meet our increased requirements.

In 2021, we implemented this sustainable focus further by introducing low power FHD panels, paper cushioning for 23,8" and 27" screens, using less ink on B2B models' packaging and achieving trustworthy certificates with our products, such as the EPEAT Gold standard.

These steps are just the beginning and will be implemented throughout our entire AOC and Philips monitors product portfolios, learning and improving along the way.

In the end, this mindset change does not only help the planet, but also people by supporting a healthier environment in general, and by creating an attractive, sustainable workplace that is forward-thinking and flexible to react to changing regulations, industries, consumer demands and more.

> **In order to reduce the energy usage  
at our customers we designed the  
eco-friendly Philips monitors  
242B7QGJEB and 272B1G.**

These monitors have a PowerSensor and LightSensor which will can lead to 80% less energy usage. PowerSensor is a built-in 'people sensor' that transmits and receives harmless infrared signals to determine if the user is present, and automatically reduces monitor brightness when the user steps away from the desk, cutting energy costs by up to 80% and prolonging monitor life. LightSensor uses a smart sensor to adjust the picture brightness depending on the light conditions in the room for the perfect picture with minimal power usage. In this calculation we used the AOC 24P2 as monitor without PowerSensor and LightSensor, and the eco-friendly 241B7QGJEB and 272B1G of Philips.



| PILLAR            | SHORT-TERM GOAL (2021)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | MID-TERM GOAL (2023)                                                                                                                                                                                                                                                    |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ENVIRONMENT       | <ul style="list-style-type: none"><li>■ Development of the doggy door compartment that can extract EU power cables for goods shipped to UK and the Swiss market. This will reduce all the unnecessary EU power cables in those two countries which they cannot use.</li><li>■ Implementation of the removal of the plastic bags of cables. Labels will be placed on the accessory cable which was originally attached on the plastic bag.</li><li>■ Removing of installation CD-ROM on selected B2B models.</li><li>■ Introduction of less ink on packaging for AOC B2B models.</li></ul> | <ul style="list-style-type: none"><li>■ Implementation of brown boxes for basic, essential pro, value and pro line.</li><li>■ Brown boxes for B2B and B2C mouse and keyboards.</li><li>■ From polyfoam to cardboard packaging throughout selected B2B models.</li></ul> |
| SOCIAL INVESTMENT | <ul style="list-style-type: none"><li>■ Further development of TPV e-learning system.</li><li>■ Implementation of Activity Based Working concept.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"><li>■ Partnership with at least 4 NGOs with a clear link to our products, material topics and SDGs.</li></ul>                                                                                                                         |
| GOVERNANCE        | <ul style="list-style-type: none"><li>■ Development of Science Based Targets with TPV.</li><li>■ Development of a new business travel policy.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"><li>■ Development and implementation of Human Rights policy, including the UK Modern Slavery Act with TPV.</li></ul>                                                                                                                  |

Key: ■ Done ■ In progress



# SUSTAINABILITY MATRIX PHILIPS MONITORS

In addition to focusing on new approaches and ideas that help us introduce more sustainability to our business and our products, it is also important to keep track of what has already been accomplished.

As a comprehensive overview for our teams, partners, and customers, we created a sustainability matrix, highlighting the most important sustainable features and elements of key products of our Philips monitors portfolio. With consumers making more informed choices in terms of sustainable CE products, this is a valuable tool to support this new kind of decision making.

Please click [here](#) for the full sustainability matrix.

PHILIPS

Monitors

Philips monitors product sustainability overview

Philips monitors invests into the future – by advancing sustainable technology solutions and supporting holistic organisation to promote future-oriented practices in the CE industry.

|         | PRODUCT   | FEATURES                                                                            |                                                                                     |                                                                                     |                                                                                       |                                                                                     |                                                                                       | CERTIFICATIONS                                                                      |                                                                                     |                                                                                       |                                                                                     |                                                                                       |                                                                                     | PACKAGING                                                                           |                                                                                     |                                                                                       |                                                                                       |                                                                                     |  |
|---------|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|         |           | Power Sensor                                                                        | Light Sensor                                                                        | Post-consumer recycled plastic 85%                                                  | PVC/ BFR free housing                                                                 | Halogen Free                                                                        | Mercury free                                                                          | EnergyStar 8.0                                                                      | EPEAT (Silver or Gold)                                                              | RoHS                                                                                  | TCO Certified                                                                       | WEEE                                                                                  | ECMA-370                                                                            | Product Carbon Footprint (PCF)                                                      | Cardboard packaging                                                                 | CD-ROMs removed                                                                       | 100% Recyclable packaging material                                                    | Cables packed without plastic bags                                                  |  |
| B LINE  | 243B9     |  |                                                                                     |  |    |  |    |  |  |    |  |    |  |  |  |    |    |  |  |
|         | 275B1     |  |  |  |    |  |    |  |  |    |  |    |  |  |                                                                                     |    |    |                                                                                     |  |
|         | 345B1C    |  |  |                                                                                     |    |  |    |  |  |    |  |    |  |  |                                                                                     |    |    |                                                                                     |  |
| B TOUCH | 222B1TC   |                                                                                     |                                                                                     |                                                                                     |    |  |    |  |  |    |  |    |  |  |                                                                                     |    |    |                                                                                     |  |
|         | 242B1TFL  |                                                                                     |                                                                                     |                                                                                     |    |  |    |                                                                                     |                                                                                     |    |                                                                                     |    |  |                                                                                     |                                                                                     |    |    |                                                                                     |  |
|         | 172B9TL   |                                                                                     |                                                                                     |                                                                                     |    |                                                                                     |    |  |  |    |  |    |  |  |                                                                                     |    |    |                                                                                     |  |
|         | 242B9TN   |                                                                                     |                                                                                     |                                                                                     |    |                                                                                     |    |  |  |    |  |    |  |  |                                                                                     |    |    |                                                                                     |  |
|         | 222B9T    |                                                                                     |                                                                                     |                                                                                     |    |                                                                                     |    |  |  |    |  |    |  |  |                                                                                     |    |    |                                                                                     |  |
| S LINE  | 243S1     |                                                                                     |                                                                                     |  |    |  |    |  |  |    |  |    |  |  |  |    |    |  |  |
|         | 222S1AE   |                                                                                     |                                                                                     |  |    |  |    |  |  |    |  |    |  |  |  |    |    |  |  |
|         | 221S8LDAB |                                                                                     |                                                                                     | 25%                                                                                 |    |                                                                                     |    |  |  |    |  |    |  |  |                                                                                     |    |    |                                                                                     |  |
| V LINE  | 220V8L5   |                                                                                     |                                                                                     |                                                                                     |   |                                                                                     |   |                                                                                     |                                                                                     |   |                                                                                     |   |                                                                                     |                                                                                     |                                                                                     |   |   |                                                                                     |  |
|         | 241V8LA   |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                     |  |                                                                                     |                                                                                     |                                                                                     |  |  |                                                                                     |  |
|         | 271V8L    |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |  |                                                                                     |                                                                                     |  |                                                                                     |  |                                                                                     |                                                                                     |                                                                                     |  |  |                                                                                     |  |

 Yes

 Pending

 coming in 2nd half of 2022

Support of organisations and sustainable projects

Philips monitors strives not only to continuously optimise the product portfolio in terms of eco-friendly solutions. Philips monitors further supports a number of organisations to change the CE sector - because together we are stronger.



► [Forestation project in Tanzania with ForestNation](#)



► [Closing the loop project to reduce monitor e-waste](#)



► [PACT conflict minerals to sustainably obtain resources](#)

# OUR SOCIAL INVESTMENT

> 17 goals, 169 targets: The Sustainable Development Goals (SDGs) aim to end pressing global issues such as poverty, inequality, and climate change. Further, the SDGs are meant to protect and nurture the planet and the well-being and prosperity of all people by 2030.

In 2020, AOC and MMD decided to focus especially on SDG 3 (Good health and wellbeing), 8 (Decent work and economic growth), 12 (Responsible consumption and production), and 13 (Climate action).

Building on our activities in 2020, we also continued to contribute to various charities and foundations that are closely linked to our SDG selection, our values, and our brands.



## CASE STUDY



# PACT

> At the start of 2021 we announced our partnership with Pact, and the first workstream was to develop a booklet on the revised (2018) DRC mining code and regulations. The aim of this booklet is to ensure that artisanal miners and mining communities understand the revised mining code and regulations, a crucial step in enabling them to exercise their rights and make informed decisions about the legal requirements for engaging in mining. The second workstream contained OHS training and interventions. Please find more about this project in the news article on the website of MMD.

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<https://mmdmonitors.com/pact>



## CASE STUDY

EYE  
CARE  
FOUNDATION

# EYE CARE FOUNDATION

➤ On the 14th of October 2021, we celebrated World Sight Day together with our new CSR-partner Eye Care Foundation. World Sight Day is an annual day of awareness to focus global attention on vision impairment, including blindness. Eye Care Foundation is an international charity organisation founded in Amsterdam and is active in countries in Asia and Africa. Born out of the need to help and establish good and affordable eye care in developing countries, Eye Care Foundation is completely focused on helping those for whom good medical care is inaccessible or unaffordable to prevent and cure avoidable blindness and visual impairment. AOC & MMD supported a training project for community health workers in Vietnam at the end of the year. The overall goal of this project is to increase the access to eye care services and contributing to the reduction of avoidable blindness in Vinh Long province.

<https://eyecarefoundation.eu/>



# ONE SPECIAL DAY



## CASE STUDY

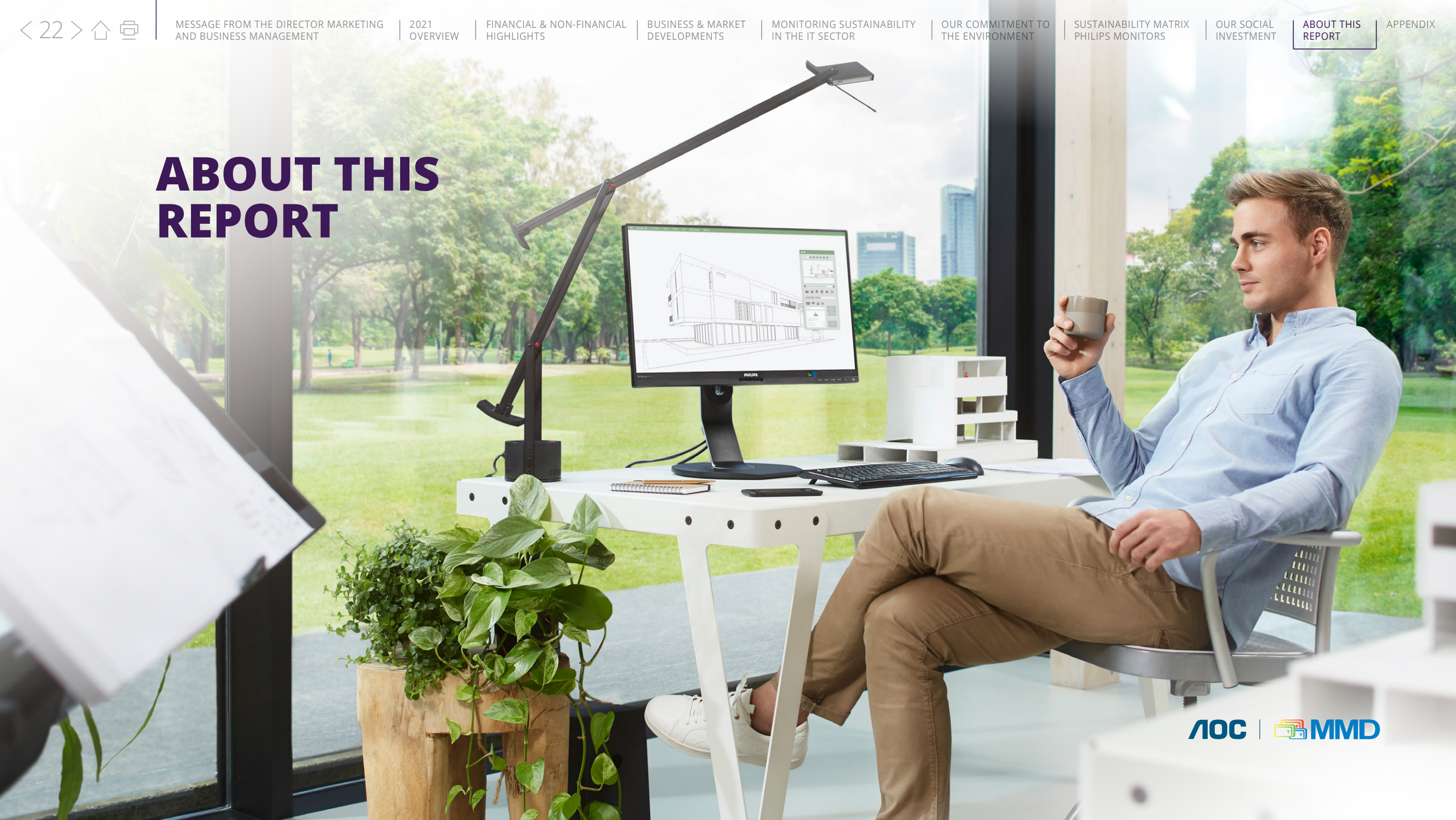
# SPECIAL EFFECT

> SpecialEffect is a charity based in the United Kingdom which helps physically disabled people play video games. The organisation works with developers to create specialised game control devices as well as to make their games more accessible. The ability to play video games, now seen as an almost universal pastime, can help improve the mental health of disabled people who otherwise could not play them. AOC helped to build a fully accessible gaming room with multiple setups and we sponsored several events like One Special Day and GameBlast.

<https://www.specialeffect.org.uk/>



# 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 2021, 1 January 2021 through December 31 2021.

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](mailto:stefan.vansabben@tpv-tech.com)

## SCOPE OF REPORT

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



# 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 CO2E |
|------|-----------|-------------------|----------------------------------|----------------------|---------------------|-------------------|
| 2020 | Tons CO2e | 411               | 855,879                          | 71,415               | 27,157              | 954,862           |
| 2021 | Tons CO2e | 449               | 891,320                          | 82,584               | 33,483              | 1,007,836         |

AOC & MMD has started to cover product carbon footprint, freight carbon footprint from 2020. Comparative 2021 GHG CO2e is a little bit higher than 2020 since in 2021 we have also more EPEAT registered models involving such GHG calculation.

For freight GHG reduction, AOC & MMD will partner with the carrier suppliers to reduce product transportation GHG emissions by 20% by 2030, which we will make efforts as below:

1. To increase slip sheet packaging percentage
2. We select our suppliers not only on price but also on GHG emission intensity
3. To improve product design as promoting more slim and light products
4. We will stimulate our freight suppliers to move from train and airfreight shipment to ocean freight

# 1. 2021 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 CO2E) | Natural Gas Stationary Combustion | 11.07                                  | 6.65                      | 0                       | 0                             | 0                                               | 24.94                        | 42.66   |
|                      | Petrol Mobile Compubstion         | 4.03                                   | 0                         | 0                       | 0                             | 0                                               | 12.8                         | 16.83   |
|                      | Scope 1 Direct Emissions          | 15.1                                   | 6.65                      | 0                       | 0                             | 0                                               | 37.74                        | 59.49   |
| SCOPE 2 (TONES CO2E) | Purchased Electricity             | 2.15                                   | 30.58                     | 38.1                    | 28.4                          | 196.99                                          | 93.75                        | 389.96  |
|                      | Scope 2 Indirect Emissions        | 2.15                                   | 30.58                     | 38.10                   | 28.40                         | 196.99                                          | 93.75                        | 389.96  |
| GHG NET EMISSIONS    |                                   | 17.25                                  | 37.23                     | 38.10                   | 28.40                         | 196.99                                          | 131.49                       | 449.45  |

## 2. 2021 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   | 6,191                                  | -                         | -                       | -                             | -                                               | -                            | 6,191   |
|             | Therm | -                                      | 1,255                     | -                       | -                             | -                                               | -                            | 1,255   |
|             | m³    | 0                                      | -                         | -                       | -                             | -                                               | 11,408                       | 11,408  |
| PETROL      | Liter | 19,778                                 | -                         | -                       | -                             | -                                               | 5,671                        | 25,449  |
| ELECTRICITY | kWh   | 103,812                                | 43,130                    | 75,589                  | 18,443                        | 248,691                                         | 109,171                      | 598,836 |

# 3. 2021 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                        |         |
|                   |      | 219                                    | 85                        | 39                      | 209                           | 620                                             | 547                          | 1719    |

# 4. 2021 CO2 EMISSIONS OF AOC & MMD SUPPLIERS

| AOC, MMD<br>SUPPLIER SITE | UNIT      | TPV ELECTRONICS<br>(FUJIAN) CO., LTD<br>TPV FUJIAN | TPV DISPLAY TECHNOLOGY<br>(WUHAN) CO., LTD<br>TPV WUHAN | TPV DISPLAY TECHNOLOGY<br>(BEIHAI) CO., LTD<br>TPV BEIHAI | L&T DISPLAY TECHNOLOGY<br>(FUJIAN) LTD.<br>L&T | OVERALL |
|---------------------------|-----------|----------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------|---------|
| SCOPE 1                   | Tons CO2e | 4,067                                              | 1,687                                                   | 35                                                        | 585                                            | 6,374   |
| SCOPE 2                   | Tons CO2e | 51,986                                             | 11,305                                                  | 3,996                                                     | 8,923                                          | 76,210  |
| TOTAL                     |           | 56,053                                             | 12,992                                                  | 4,030                                                     | 9,509                                          | 82,584  |

# 5. 2021 GHG ACTIVITY DATA OF AOC & MMD SUPPLIERS

| EMISSION SOURCE         | UNIT | 2021 ACTIVITY DATA |            |            |            | OVERALL    |
|-------------------------|------|--------------------|------------|------------|------------|------------|
|                         |      | TPV FUJIAN         | TPV WUHAN  | TPV BEIHAI | L&T        |            |
| NATURAL GAS             | m³   | 236,955            | 490,250    | 4,290      | -          | 731,495    |
| LIQUEFIED PETROLEUM GAS | Kg   | -                  | -          | 1,070      | -          | 1,070      |
| GASOLINE                | Kg   | 43,668             | 8,082      | 2,249      | 40,674     | 94,673     |
| DIESEL OIL              | Kg   | 19,412             | 2,930      | 4,666      | 4,759      | 31,767     |
| ACETYLENE               | Kg   | 14                 | -          | -          | -          | 14         |
| CO2                     | Kg   | -                  | -          | 72         | -          | 72         |
| R404A OR R23 OR R32     | Kg   | 5                  | 10         | -          | -          | 15         |
| HCFC-123                | Kg   | 540                | 200        | -          | -          | 740        |
| SEPTIC-TANK BOD(CH4)    | Kg   | 113,108            | 41,480     | 8,519      | 33,000     | 196,106    |
| PURCHASED ELECTRICITY   | kWh  | 65,630,815         | 13,165,597 | 4,968,300  | 11,265,510 | 95,030,222 |



# 6. 2021 AOC & MMD SUPPLIERS WATER CONSUMPTION DATA

| SUPPLIER          | UNIT | TPV FUJIAN | TPV WUHAN | TPV BEIHAI | L&T    | OVERALL   |
|-------------------|------|------------|-----------|------------|--------|-----------|
| WATER CONSUMPTION | m³   | 702,592    | 252,376   | 24,037     | 53,595 | 1,032,600 |

**АОС** |  **ММД**