A climate ranking of ten of the largest manufacturers of computer mice and headsets

June 2022

In March 2022, Ethical Consumer collaborated with Putu Ayu Indira Ardiyatna, an MSc student at the University of Glasgow's Earth Futures course, to compile a ranking of carbon management and reporting at ten computer peripheral companies.

In this report, we are investigating companies that sells computer peripherals, such as computer mice, and headsets. The pandemic has changed our lives significantly in the way we work. This has pushed people to invest in better quality computer peripherals to help them work comfortably at home. However, with the latest Conference of Parties or COP that was held in Glasgow in November 2021, people are also becoming increasingly aware of the importance of taking action in mitigating climate change. This includes choosing brands that are responsible and reporting their emissions well to support our sustainable consumption.

The companies investigated in this report are some of the biggest brands in the computer peripheral sector. Most of the brands also produce computers and even other hardware, which of course, affects the amount of sales for each company. Even though they are reviewed with the same metrics in this report, we do acknowledge that they are quite different types of company.

The following are the four criteria that Ethical Consumer are looking for:

1. a. For the company to discuss its areas of climate impact, and to discuss plausible ways it has cut them in the past, and ways that it will cut them in the future.
   b. For the company to have relevant sector-specific policies in place.
   c. For the company to not be involved in any particularly damaging projects like tar sands, oil or aviation, to not be subject to damning secondary criticism regarding it's climate actions, and to have a policy to avoid investing in fossil fuels.
2. For the company to report annually on its scope 1&2 greenhouse gas emissions (direct emissions by the company), and,
3. to go some way towards reporting on its scope 3 emissions (emissions from the supply chain, investments and sold products).
4. For the company to have a target to reduce its greenhouse gas emissions in line with international agreements (counted as the equivalent of at least 2.5% cut per year in

scope 1&2 emissions), and to not count offsetting towards this target.

The rating system goes as follows:

- Meets all criteria: BEST
- Meets criteria 1 and 2: MIDDLE
- Not meeting criteria 1 and 2 or none: WORST

Table 1 below presents the rating result for the respective companies.

Table *1* Companies and their Ethical Consumer rating for Carbon Management and Reporting

Company	Rating	Revenue*	Rank of Sales
Dell	Best	86.670	2
HP	Best	63.500	3
Lenovo	Best	60.742	4
Logitech	Best	5.252	6
MSI	Middle	1.829	7
Toshiba	Worst	480.863	1
Asus	Worst	13.398	5
BenQ	Worst	0.293	10
Razer	Worst	1.215	8
SteelSeries	Worst	0.299	9

**Sales Revenue Year 2020-2021 with exchange rate from the respective currencies used in the report to USD on 16 March 2022*

Detailed analysis of each company's reporting [appears below on pages 7 to 30]

Main findings

There are four companies who manage to get the BEST rating, one company gets the MIDDLE ranking, and there are five companies that get the WORST rating. In this table, the revenue as reported by the companies are also presented in billion US$.

The data from Table 1 does show a slight trend: as the rank of sales gets lower, the rating is also tending to get worse. Companies that received *Best* rating for carbon management and reporting tended to have bigger sales compared to the other companies on the list.

There are two outliers for this Toshiba and ASUS.

Asus ranks number five in terms of sales, but received a *Worst* rating because their report did not meet the second and fourth criteria that we were looking for. Logitech ranks below Asus in terms of sales, however, it got a *Best* rating for its report.

Asus also sells laptops and Logitech focuses on peripherals which may explain the difference in sales. Logitech appears to be performing well for a smaller company. Although Asus did meet the third criteria of reporting Scope 3 emissions, it would have been good if the second criteria could have been achieved by also including the previous years' emissions in its reports to allow people to see progress.

Toshiba was an outlier for a different reason. As the only company in this report currently involved in the oil and gas sector, it automatically received Ethical Consumer's worst rating. Although the company announced plans to exit the coal-fired power plan business in 2020 and later, in 2022, that it would split its infrastructure and electronics businesses, at the time of writing its website still advertised a range of 'oil and gas product offerings' including 'drilling, pumping, production, processing, and storage'.

MSI was the only company to get a *Middle* ranking. It would be good if their supply chain emissions (scope 3) were calculated and published in the future.

SBTi

Science Based Targets initiative (SBTi) is a partnership between several organisations that aims to help companies set emissions reduction targets. They show companies how much and how quickly they need to reduce their greenhouse gas (GHG) to avoid catastrophic damage from climate change.

SBTi's partner organisations are CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF). Together in SBTi, they are calling on companies to create science-based net-zero and 1.5ºC targets based on information contained within the Intergovernmental Panel on Climate Change (IPCC)'s special report.

Of the ten companies in this report, there were five whose targets had been approved by the SBTi. The companies were HP, Toshiba, Logitech, Lenovo, and Dell. These companies have shown commitments such as a plan for the gradual reduction of greenhouse gas emissions from power supply (11.4% in 2022 and 13.6% in 2023), reaching net zero greenhouse gas

emissions across the value chain by 2040, and having a comprehensive life cycle assessment (LCA) for the majority of their product by 2025.

Scope 1 & 2

According to the United States Environmental Protection Agency (EPA), Scope 1 emissions are direct greenhouse gas (GHG) emissions that come from controlled or owned areas by an organisation. These include fuel combustion in their boilers, furnaces, vehicles or anything related to their operations. This is usually called as *direct* emissions. Scope 2 emissions are the *indirect* emissions, associated with the purchase of electricity, steam, heat, or cooling. This is usually occurring at the facilities where they are generated, but it is accounted for in the organisation because they are a result of the organisation's energy use.

If a company annually discloses and report its Scope 1 and 2 emissions, it will be eligible for Ethical Consumer's Middle ranking if it also meets criteria 1.

In this report, it was found that 7 (seven) companies met this criteria. The companies were Toshiba, Dell, Lenovo, HP, Logitech, MSI, and Razer. They are all reporting the Scope 1 and 2 emissions annually, showing data from previous years that allows us to see whether their emissions are decreasing or increasing. This enables the first five companies to achieve Best ranking and gives MSI a Middle ranking. Although Razer met this criteria, it didn't get a middle ranking because it did not meet criteria 1.

Public reporting of Scope 1 and 2 emissions is now becoming required by law for large companies in many countries of the world.

Scope 3

The companies that obtained Best ranking also reported on their scope 3 emissions. These are the remaining indirect emissions that occur in the company's value chain, such as purchased goods and services, business travel, waste disposal, investments, and transportation and distribution. The five companies that reported their scope 3 emissions were Dell, HP, Lenovo, Logitech, and Toshiba. Table 2 presents their revenue in billion US$ and their scope 3 emissions in million tons CO_2e.

Table 2 Company's revenue and scope 3 emissions ranking

Company	Rating	Revenue	Scope 3 Emissions	Rank	
				Sales	Emissions
Dell	Best	86.670	16.19	2	4
HP	Best	63.500	44.72	3	2
Lenovo	Best	60.742	22.02	4	3
Logitech	Best	5.252	1.30	5	5
Toshiba	Worst	480.863	419.08	1	1

From the table above, it can be seen that Toshiba ranks first in terms of revenue and emissions. The amount of Toshiba's Scope 3 emissions was about 900% higher than the company in second place, HP. This will be due to the fact that Toshiba, unlike other companies in this report, also offers energy and industrial systems solutions.

Dell reports US$ 86.670 billion in sales but has 2.75 times less scope 3 emissions than HP whose sales are only marginally lower. The next on the sales ranking is Lenovo, where its revenue is not that far from HP, but apparently emits almost 50% less CO2e.

HP says that it follows the principles outlined in the Greenhouse Gas Protocol. This guideline is also recommended by the Global Reporting Initiative (GRI) framework— which Dell referred to in their report when reporting their emissions. Even though they are both following the same guidelines, there can still be some differences in the practice when obtaining the data, such as setting the boundaries on which activities falls on which category in Scope 3.

It is likely that these discrepancies can be explained by the fact that Scope 3 measurement is still in its infancy. There is a need for international standards here soon.

Carbon Ranking Research Project

This report is part of Ethical Consumer's broader Carbon Ranking Research Project where we are trying to use our bespoke climate rating in a range of reports to drive best practice into consumer facing industries.

As well as the climate change assessments within the broader ethical rankings used in the shopping guides which appear in our www.ethicalconsumer.org website, we also create special stand alone reports where resources permit. They include:

Opticians
Coffee Shops
Computer Peripherals (this report)

To support this project for a specific sector or sectors, please contact Rob Harrison on **consultancy@ethicalconsumer.org**

Asus

Worst Ethical Consumer rating for Carbon Management & Reporting

On 12/02/22, Ethical Consumer viewed Asus 2020 Sustainability Report and website, looking for information on what the company was doing to tackle climate change. Ethical Consumer was looking for the following:

1. For the company to discuss its areas of climate impact, and to discuss plausible ways it has cut them in the past, and ways that it will cut them in the future.
2. For the company to report annually on its scope 1&2 greenhouse gas emissions (direct emissions by the company), and,
3. to go some way towards reporting on its scope 3 emissions (emissions from the supply chain, investments and sold products).
4. For the company to have a target to reduce its greenhouse gas emissions in line with international agreements (counted as the equivalent of at least 2.5% cut per year in scope 1&2 emissions), and to not count offsetting towards this target.

The results are discussed as follows:

1. The report started with listing targets that the company were able to achieve in the year 2020. Some of the aspects are reducing the use of *polyvinylchloride (PVC)* by 10% compared to 2016, reduce emissions in operations by 50% and increase energy efficiency of major products by 50% by 2025, and establishing an environmental footprint roadmap with the data coverage rate reaching 90% of product revenue. This is aimed to understand hot spots of environmental pollution.

   Some strategies that are mentioned by Asus on how they will cut their climate impact in the future are improving recyclability of resources, reduction in packaging volume (with examples on redesigned product packaging), and extending life cycle of some parts due to better disassembling of products.

   They also mentioned that they aim to reduce 50% of carbon emissions from Asus global operation centres by 2030, use 100% renewable energy in Taiwan-based operations centres by 2030, and in global operation centres by 2035. They also have a target for their supply chain where the key suppliers is targeted to achieve a 30% reduction in carbon intensity rates by 2025.

   Therefore, it **meets** the first criteria.

Their report on emissions presented clearly in a pie chart that shows their total carbon emissions in 2020 = 1,221,355 tons CO_2e. It shows that most of their emissions are from supply chain section (70.40%), followed by product (26.1%), transportation and electricity (1.7% each) and their direct emissions are less than 0.01%.

2. Their scope 1&2 emissions are said to only equal to 50.6 tons CO_2e since they don't have an assembly plant. However they do use energy input for electricity in office operations, and the total emission from their offices equals to 20,379 CO_2e. They are only reporting the emission from this year, mentioning that they gradually improve energy efficiency and reduce power consumption at the minimum of 1% annually, but there are no proof or information about this in the report. They only put their greenhouse gas reduction target in percentage from the year 2017 up to 2020, but did not mention the amount of emission itself.

   Therefore, it **does not meet** the second criteria.

3. There is a section about supply chain emission in the report where it stated that the emissions were 862,972 tons CO_2e, where they also stated that this is the major source of greenhouse gas emissions for the company. They also stated the total carbon emission from product use, which equals to 319,852 tons CO_2e for the year 2020. Although they disclose their scope 3 emission in this report, they did not report the previous year.

   Therefore, it **meets** the third criteria.

4. The report started with a section that puts climate action, circular economy, and responsible manufacturing as part of their priority to realise the Sustainable Development Goals of the United Nations. They outline how each aspects corresponds to the goals stated by the UN and what are their strategy towards achieving it. They also mentioned how they supports the goals of Paris Agreement. But, there are no clear mention of how they are going to reduce their emissions annually (that are equivalent of at least 2.5% cut per year in scope 1&2 emissions).

   Therefore, it **does not meet** the fourth criteria.

Conclusion:
The report was presenting a lot of information and example on how they are trying to reduce their carbon impact, showing proof on how they redesigned different types of packaging to reduce the amount of resources use. They also tried to collate information on their total supply chain emission (scope 3), although more information can be given to make consumers understand where the numbers are coming from.

Asus receives **Worst Ethical Consumer rating for Carbon Management & Reporting.**

BenQ
Worst Ethical Consumer rating for Carbon Management & Reporting

On 06/03/22, Ethical Consumer viewed BenQ 2019 CSR Report (the latest one currently available on their website) and website, looking for information on what the company was doing to tackle climate change. Ethical Consumer was looking for the following:

1. a. For the company to discuss its areas of climate impact, and to discuss plausible ways it has cut them in the past, and ways that it will cut them in the future.
   b. For the company to have relevant sector-specific policies in place.
   c. For the company to not be involved in any particularly damaging projects like tar sands, oil or aviation, to not be subject to damning secondary criticism regarding it's climate actions, and to have a policy to avoid investing in fossil fuels.
2. For the company to report annually on its scope 1&2 greenhouse gas emissions (direct emissions by the company), and,
3. to go some way towards reporting on its scope 3 emissions (emissions from the supply chain, investments and sold products).
4. For the company to have a target to reduce its greenhouse gas emissions in line with international agreements (counted as the equivalent of at least 2.5% cut per year in scope 1&2 emissions), and to not count offsetting towards this target.

The results are discussed as follows:

1. a. BenQ based their climate change risk assessment according to the IPCC (Intergovernmental Panel on Climate Change) where they aim to provide responsive strategies for climate change. In relation to GHG emissions, they focus on improving the design of the products. They aim to have better product design that incorporates easy-to-recycle design, energy-saving design, improve their packaging, and to include eco-labelling in their products. They have reported some data about their waste throughout the years and its reduction, as well as the performance of reuse, reduce and recycle. They also presented their emissions amount for the current report year. However, the report fails to mention their solid target for reductions in the future. They mentioned that they are going to reduce and improve their design to lessen impact, but there are no solid mention of the plan on how much reduction they are aiming for in the future.

   b. The report mentions that they have reviews about their annual policy goal, in regards to green product specification and green supply chain management.

c. The company was found not to be involved in any particularly damaging projects.

Therefore, it **does not meet** the first criteria.

2. They only presents their emission for this 2019 year, which are divided into Scope 1 and 2 emissions. Their Scope 1 (direct) emission equals 12.26 tonnes CO_2e and Scope 2 (indirect) emission equals to 588.6 tonnes CO_2e.

   Therefore, it **does not meet** the second criteria.

3. There are no mention of their Scope 3 emissions in the report or website.

   Therefore, it **does not meet** the third criteria.

4. They mentioned that their targets are acknowledging Greenhouse Gas Reduction Act in their domestic law, as well acknowledging the Paris Agreement. They did not mention that their goals are aligned with the targets in the report.

   Therefore, it **does not meet** the fourth criteria.

Conclusion:
Although they have tried to present their targets and emissions in a colourfully with interesting graphics, they do not seem to tackle the technical things that Ethical Consumer are looking for. They can improve more by reporting a more comprehensive section about the greenhouse gas emissions, annually reporting the Scope 1 and 2 emission.
Therefore, BenQ receives **Worst Ethical Consumer rating for Carbon Management & Reporting.**

Dell

Best Ethical Consumer rating for Carbon Management & Reporting

On 26/02/22, Ethical Consumer viewed Dell FY21 ESG Report and website, looking for information on what the company was doing to tackle climate change. Ethical Consumer was looking for the following:

1. a. For the company to discuss its areas of climate impact, and to discuss plausible ways it has cut them in the past, and ways that it will cut them in the future.
   b. For the company to have relevant sector-specific policies in place.
   c. For the company to not be involved in any particularly damaging projects like tar sands, oil or aviation, to not be subject to damning secondary criticism regarding it's climate actions, and to have a policy to avoid investing in fossil fuels.
2. For the company to report annually on its scope 1&2 greenhouse gas emissions (direct emissions by the company), and,
3. to go some way towards reporting on its scope 3 emissions (emissions from the supply chain, investments and sold products).
4. For the company to have a target to reduce its greenhouse gas emissions in line with international agreements (counted as the equivalent of at least 2.5% cut per year in scope 1&2 emissions), and to not count offsetting towards this target.

The results are discussed as follows:

1. a. The company acknowledges its impact where their operations require many energy and produces a lot of emission. They pledge to use 75% renewable source electricity by 2030 and 100% by 2040. They clearly state about how they will focus on eliminating the use of GHG-emitting fuels in their buildings and vehicles. They also focus on accelerating circularity, where they aim to reuse or recycle for every product that was bought from customers by the year 2030. They also stated that half of their product content will be made from recycled or renewable material. They pioneered the use of bioplastics (made by using tall oil) to accelerate circular economy.
   Other activities that they are doing are contact-free retired technology returns where it has shown a 144% increase of customers using this service, helping them with the circular economy goals. They also have set goals in reducing entire greenhouse gas emissions, complete for scope 1, 2, and 3.

   b. They have specific policies in terms of their CSR Procurement Guide in order to ensure products that are procured are in line with their CSR goals. They also support various policies in this sector, such as World Economic Forum's Alliance of CEO

Climate Leaders, We Are Still In (pledge to support Paris Agreement), support The Climate Groups, and joined in Renewable Energy Buyers Alliance.

c. The company was found not to be involved in any particularly damaging projects.

Therefore, it **meets** the first criteria.

2. They presented their report on emissions in the Achieving Net Zero goal section, where they also commit to reach net zero across scopes 1, 2 and 3 by 2050. They provide a comprehensive pie chart that helps to see the emissions that are spread out within their operations, measured in million tonnes CO_2e.

   The report stated scope 1 (direct emissions) and scope 2 (indirect emissions) and comparing it to the amount they emitted last year. For scope 1, year 2020 emitted 58,000 million tonnes CO_2e of emissions, and year 2021 there was a decrease of 13,100 (23%), equalling the emissions to 44,900 million tonnes CO_2e. For scope 2, the emission was 240,500 and only 174,900 for the year 2021 (27% decrease). Each reduction section was also justified with reasoning. The scope 1 reduction was due to reduction in energy consumption in buildings, vehicles, and company aircraft due to COVID-19. For scope 2, the reduction was due to renewable electricity purchases and reduced in energy consumption in buildings due to COVID-19.

   Therefore, it **meets** the second criteria.

3. The company did a good job in reporting their scope 3 emissions, where it is divided into many categories, such as purchased goods and services, upstream fuel and energy-related activities, upstream transportation/distribution, to use of sold product. They compared the emission to each category from the previous year as well.

   Their total emission for Scope 3 from the year 2020 equals to 16,238,000 tonnes CO_2e and their total emission from year 2021 equals to 14,692,600. This shows a 9.52% decrease in Scope 3 emissions.

   Therefore, it **meets** the third criteria.

4. Aligning their goals to the Sustainable Development Goals of the United Nations becomes a big part of this report. They outline how each aspects corresponds to the goals stated by the UN and what are their strategy towards achieving it. They also mentioned how they supports the goals of Paris Agreement in various aspects, such as

becoming one of the first 12 companies to set GHG reduction targets to meet the Paris Agreement Goals.
Their goals which are detailed in point 1a are all approved by the Science Based Target initiatives (SBTi).

Therefore, it **meets** the fourth criteria.

Conclusion:
The company does well in presenting information related on their greenhouse gas emissions, from scope 1, 2 and 3, even complete with the different section and try to report the scope 3 emissions annually. They also presented their methodology on how to reach their targets. Their report is also very enjoyable and easy to read. Since it meets all of them, Dell receives **Best Ethical Consumer rating for Carbon Management & Reporting.**

HP

Best Ethical Consumer rating for Carbon Management & Reporting

On 05/03/22, Ethical Consumer viewed HP 2020 Sustainable Impact Report and website, looking for information on what the company was doing to tackle climate change. Ethical Consumer was looking for the following:

1. a. For the company to discuss its areas of climate impact, and to discuss plausible ways it has cut them in the past, and ways that it will cut them in the future.
   b. For the company to have relevant sector-specific policies in place.
   c. For the company to not be involved in any particularly damaging projects like tar sands, oil or aviation, to not be subject to damning secondary criticism regarding it's climate actions, and to have a policy to avoid investing in fossil fuels.
2. For the company to report annually on its scope 1&2 greenhouse gas emissions (direct emissions by the company), and,
3. to go some way towards reporting on its scope 3 emissions (emissions from the supply chain, investments and sold products).
4. For the company to have a target to reduce its greenhouse gas emissions in line with international agreements (counted as the equivalent of at least 2.5% cut per year in scope 1&2 emissions), and to not count offsetting towards this target.

The results are discussed as follows:

1. a. The company aims to create a Sustainable Impact strategy to achieve in 2030that encompasses three main aspects: Planet (Climate Action), People (Human Rights), and Community (Digital Equity). Within climate action or planet section, they aim to drive toward a net zero carbon, fully regenerative economy, while engineering the industry's most sustainable portfolio of products and solutions.

   Their Climate Action goals are broken down into a further three main aspects: Products and services, Supply Chain, and Operations. Each goals also have an information into what they did in the previous year and a hyperlink that gives further information about the claims in the report. The company has sourced more than 1.7 million pounds (771 tonnes) of ocean-bound plastic for use in their supplies and hardware.

   They also have specific GHG emission reduction goals as follows:

- Achieve net zero GHG emissions across HP value chain by 2040, beginning with our Supplies business achieving carbon neutrality by 2030.
- Reduce HP value chain GHG emissions 50% by 2030.
- Reach carbon neutrality in HP operations by 2025.

b. They include repair, reuse, and recycling as part of their value created in 2020, where they include customers, channel partners, reuse, and recycling vendors as their key stakeholders in delivering this value. They aim to do product take-back, repair, remanufacturing, remarketing, and materials recycling as part of the execution of this value.

c. The company was found not to be involved in any particularly damaging projects.

Therefore, it **meets** the first criteria.

2. Their total carbon footprint the year of 2020 totalled to 44,890,100 tonnes CO_2e or 44.89 million tonnes CO_2e. This is separated into three main sectors where 64% of it comes from their supply chain activities, 1% from their operations, and 35% from their product and solutions. They have a comprehensive table that details out their total GHG emissions by scope. Their Scope 1 and 2 emissions are presented annually, from the year 2016 up to 2020, where it shows a decreasing trend. The Scope 1 and 2 emission is 171,000 tonnes CO_2e, compared to 215,800 tonnes CO_2e in the previous year.

   Therefore, it **meets** the second criteria.

3. The company presents their scope 3 emission in detail and reports it annually from 2016.
   They reported 15 categories of scope 3 emissions in detail. Their scope 3 emission for the year 2020 equals 44,720,000 tonnes CO_2e. It is a decrease from 2019, although from 2018 to 2019, there was an increase in the emission.

   Therefore, it **meets** the third criteria.

4. Their goals are created aligned with the United Nations SDGs, mostly tackling targets number 6, 7, 12, 13, 14, 15. These are all targets related to environmental aspects. Their 2025 Scope 1, 2, and 3 emissions reduction goals have been validated by the Science Based Targets initiative (SBTi), including the classification of their Scope 1 and 2 targets. They also have got many recognition as one of the world's sustainable

companies, such as Energy Start Award 2021, Ecovadis 2020, and listed on the Dow Jones World Index.

Therefore, it **meets** the fourth criteria.

Conclusion:
HP presents their report well with a very detailed section on their emissions data. The company details its roadmap and their progress to achieve their goal well. They also not only presented their scope 1 and 2 emissions annually, but also of their scope 3 emissions. Since it meets all of them, HP receives **Best Ethical Consumer rating for Carbon Management & Reporting.**

Lenovo
Best Ethical Consumer rating for Carbon Management & Reporting

On 04/03/22, Ethical Consumer viewed Lenovo 2020/21 ESG Report and website, looking for information on what the company was doing to tackle climate change. Ethical Consumer was looking for the following:

1. a. For the company to discuss its areas of climate impact, and to discuss plausible ways it has cut them in the past, and ways that it will cut them in the future.
   b. For the company to have relevant sector-specific policies in place.
   c. For the company to not be involved in any particularly damaging projects like tar sands, oil or aviation, to not be subject to damning secondary criticism regarding it's climate actions, and to have a policy to avoid investing in fossil fuels.
2. For the company to report annually on its scope 1&2 greenhouse gas emissions (direct emissions by the company), and,
3. to go some way towards reporting on its scope 3 emissions (emissions from the supply chain, investments and sold products).
4. For the company to have a target to reduce its greenhouse gas emissions in line with international agreements (counted as the equivalent of at least 2.5% cut per year in scope 1&2 emissions), and to not count offsetting towards this target.

The results are discussed as follows:

1. a. The company claims to annually identifies and evaluates the aspects of its operations that significantly impacts the environment. These findings are used to help set their future targets to reduce their climate impact. They break down their emission reduction target by the year 2029/30 as follows:
   - Reduce absolute scope 1 and 2 GHG emissions to 50%, where they aim to achieve it through utilizing energy efficiency, on-site renewable energy generation and commodities. As of 2020/21, there has been a 10% reduction from the year 2018/19.
   - Reduce scope 3 GHG emissions from use sold products 25% per comparable product (for notebooks, desktops, and servers). They aim to achieve this by reducing the emissions from products, increasing its efficiency by 50% for desktops and servers and 30% for notebooks. As of 2020/21, there has been a 2.88% reduction from the year 2018/19.
   - Reduce scope 3 GHG emissions from purchased goods and services 25% per million US$ procurement spend. They will do this by evaluating climate change progress in their KPI and increasing engagement & incentivization of climate change performance. As of 2020/21, there has been a 12.78% reduction from the

year 2018/19. Even though it is already half the progress, the company should aim to reduce more if possible when target is met before the 2029/30 year.

- Reduce scope 3 GHG emissions from upstream transportation and distribution 25% per tonne-km of transported product. The company aims to shift to "greener" modes of transport, optimization of transport planning, increase vehicle utilization and its fuel efficiency. However, there is a 1.63% increase from 2018/19 usage.

Other than those targets, they also aim to achieve 30MW of owned or leased renewable energy generation globally where they evaluate energy installations in Brazil and Mexico, as well as purchasing renewable commodities that supported 100% renewable energy projects in Brazil, China, India, Mexico, Europe and the United States.

b. The company has also established, implemented, and maintained an Environmental Affairs Policy which was created in 2006. This is further revised and improved in 2021. The main points are considering compliance, environmental protection, product environmental attributes, supply chain, and continual improvement. These are the requirements that must be met by Lenovo organization, where each manager and employee, as well as any contractor performing work on behalf of Lenovo, shall bear a personal responsibility for the objectives established in this document.

c. The company was found not to be involved in any particularly damaging projects.

Therefore, it **meets** the first criteria.

2. The emissions are presented in a separate section to the goals of environmental targets in the Consolidated Metrics section. It presents the GHG emissions in metric tonnes CO_2 equivalent or MT CO_2e. They put comparison from 2016/17 up to 2020/21, reporting the amount of emissions annually. For the year of this report, 2020/21, it is reported that Scope 1 emission equals to 7,269 MT CO_2e, and Scope 2 emissions equals to 177,678 MT CO_2e. This totals to 184,947 MT CO_2e, which is classified as location-based emission. There are also a market-based emission*, which is equals to 21,519 MT CO_2e. (Market-based emissions reflects emissions from electricity that companies have purposefully chosen).

   Therefore, it **meets** the second criteria.

3. The company presents their scope 3 emission in detailed and reporting it annually from 2016/17. For this year, the total scope 3 emission is equals to 19,976,020. This is an increase from the previous year of 17,531,179.

Therefore, it **meets** the third criteria.

4. The company's sites in the Environmental Management System (EMS) scope are ISO 14001:2015 certified. The company has also established science-based emissions reduction targets which were validated by the Science-Based Targets initiative (SBTi). Their targets have a base year of FY 2018/19 and a target year of FY 2029/30. The targets are broken down into details in point 1a. These targets are consistent with limiting warming to 1.5C to meet the most ambitious goals of the Paris Agreement.

   Therefore, it **meets** the fourth criteria.

Conclusion:
The company details its roadmap and their progress to achieve their goal well. They also not only presented their scope 1 and 2 emissions annually, but also of their scope 3 emissions. They also present the data from 2016/17, which allows us to see the trend from the previous years. Since it meets all of them, Lenovo receives **Best Ethical Consumer rating for Carbon Management & Reporting.**

Logitech

Best Ethical Consumer rating for Carbon Management & Reporting

On 05/02/22, Ethical Consumer viewed Logitech's 2015 and 2021 Sustainability Report and website, looking for information on what the company was doing to tackle climate change. Ethical Consumer was looking for the following:

1. a. For the company to discuss its areas of climate impact, and to discuss plausible ways it has cut them in the past, and ways that it will cut them in the future.
   b. For the company to have relevant sector-specific policies in place.
   c. For the company to not be involved in any particularly damaging projects like tar sands, oil or aviation, to not be subject to damning secondary criticism regarding it's climate actions, and to have a policy to avoid investing in fossil fuels.
2. For the company to report annually on its scope 1&2 greenhouse gas emissions (direct emissions by the company), and,
3. to go some way towards reporting on its scope 3 emissions (emissions from the supply chain, investments and sold products).
4. For the company to have a target to reduce its greenhouse gas emissions in line with international agreements (counted as the equivalent of at least 2.5% cut per year in scope 1&2 emissions), and to not count offsetting towards this target.

The results are discussed as follows:

1. a. Logitech presented this section in the beginning of their report, highlighting their commitments and its relevancy to the Sustainable Development Goals (SDGs). It presents their journey from the year 2019, which focused on being committed to Paris Agreement, to the current goal of 2021, aiming to neutralise all three scope emissions by designing for sustainability, using renewable energy, and investing in high-quality, certified projects to offset and address the residual carbon impact.

   With the strategy to *reduce, renew,* and *restore*, many aspects from climate action are tackled by Logitech. Design for Sustainability in *reduce* aims to reduce carbon footprints in products, operations and supply chain. Renewable energy usage or *renew* in the operations and the supply chains have helped to saved 41,871 tCO_2e of emissions. Restoration projects in Brazil, Vietnam, China, Indonesia are part of their *restore* strategy to adopt a climate positive approach, in which they hope to reach by 2030.

Their targets for the future are also clear, with some of them are 100% renewable electricity by 2030, 68% reduction of emissions by 2025, from a 2019 baseline, as well as 100% of their major product line having a Life-Cycle Assessment (LCA) study by the year 2025.

b. Their 'Design for Sustainability (Dfs)' Principle that includes eco-design, circular design, and social design is established as their commitment to achieve a more sustainable production process. They also have policies in Carbon Clarity—where they put carbon impact labels on their products.

c. The company was found not to be involved in any particularly damaging projects.

Therefore, it **meets** the first criteria.

2. Their net emission in 2021 is slightly above one million tCO_2e, which is about similar amount of emission avoided and offset with their carbon removal projects. It is also mentioned this was a 94% reduction in the scope 1&2 emissions since 2015—where it was 14,682 $MTCO_2e$ in 2015, as reported in their 2015 Sustainability report. There were no mention of each sectors (emission from electricity usage, etc) in the report, only the total net emission. However, Logitech starts to set out their Carbon Clarity labels on some of their computer gaming mouse that shows the total carbon for each product usage for two years.

   One of the examples is the Logitech G Pro Wireless Gaming Mouse, which has 7.84 kg CO_2e emission in the span of two years, with 78% of it comes from the sourcing and manufacturing activity.

   Their report features a section where they show their carbon footprint and projection to achieve their target of Net Zero in 2030. They did not clearly mention the exact amount of emission of the current year in the goal section. However, they presented it in another section as appendix, showing the trend of their carbon footprint from the year 2015 to 2020. From there, it was shown that the total Scope 1 & 2 emission for 2020 is equal to 1,889 tCO_2e. The previous years in 2018 and 2019 was 5,355 and 2,848 tCO_2e respectively.

   Therefore, it **meets** the second criteria.

3. Their scope 3 emissions are presented in 15 different categories, showing how they have started their estimation for scope 3 carbon footprint in 2019 and continuing the

effort to this year. Their emission for scope 3 this reporting year is equals to 1,299,592 tCO_2e.

Therefore, it **meets** the third criteria.

4. They mentioned their targets and the SDGs values that are relevant in their targets, where there are nine points addressed in the target. They aim to only operate with 100% renewable energy by 2030. This is also the 'end' year of the United Nations SDGs. They also aim to implement 100% renewable electricity at their major suppliers (suppliers that account for 80% of direct spend) by 2030.

   Having a life cycle assessment study or LCA by 2025 for 100% of their major product lines is also one of their goals to lessen their impact. With these targets and their strategy, they hope to go beyond the requirements of Science-Based Targets initiative (SBTi). As seen from Figure 1, Logitech aims to reach net zero in the year of 2030 with a balance in their net emission and carbon removal projects. In 2021, the amount of carbon avoidance offsets are still main approach to reduce their emissions.

   Therefore, it **meets** the fourth criteria.

Conclusion:
Logitech has done efforts to meet the first and fourth criteria, discussing its areas of climate impact and how they have cut and will cut them in the future, as well as creating targets to in line with international agreements. They also presented all emissions for scope 1, 2 and 3. They also have good initiative in carbon labelling, to allow consumers understand their carbon impact from the product that they buy. Logitech receives **Best Ethical Consumer rating for Carbon Management & Reporting.**

MSI (Micro-Star International)
Middle Ethical Consumer rating for Carbon Management & Reporting
On 07/03/22, Ethical Consumer viewed MSI 2020 CSR report and website, looking for information on what the company was doing to tackle climate change. Ethical Consumer was looking for the following:

1. a. For the company to discuss its areas of climate impact, and to discuss plausible ways it has cut them in the past, and ways that it will cut them in the future.
   b. For the company to have relevant sector-specific policies in place.
   c. For the company to not be involved in any particularly damaging projects like tar sands, oil or aviation, to not be subject to damning secondary criticism regarding it's climate actions, and to have a policy to avoid investing in fossil fuels.
2. For the company to report annually on its scope 1&2 greenhouse gas emissions (direct emissions by the company), and,
3. to go some way towards reporting on its scope 3 emissions (emissions from the supply chain, investments and sold products).
4. For the company to have a target to reduce its greenhouse gas emissions in line with international agreements (counted as the equivalent of at least 2.5% cut per year in scope 1&2 emissions), and to not count offsetting towards this target.

The results are discussed as follows:

1. a. The report has a dedicated Environmental Value section which outlines their environmental management goals and system, climate change management, greenhouse gas management, and water management. They reported that they have the goal to reduce greenhouse gas emission for an average of 4% annually, where they aim to achieve 50% reduction in 2025 from the 2007 baseline year. They also have the target to improve energy consumption efficiency through circuit design and improving their energy consumption requirements of products in all countries. Not only regarding energy and greenhouse gas emissions, they also aim to have 1% reduction of total water consumption and total waste compared to the previous reporting year.

   b. The report mentions that they have a MSI Standard for Environmentally Friendly Products, but there are no mention of specific policies regarding climate change mitigation.

c. The company was found not to be involved in any particularly damaging projects.

Therefore, it **meets** the first criteria.

2. They reported their total emission for this year which is equal to 59,091.7* tonnes CO_2e. (written in the report to be 5,9091.7). This is from their Scope 1 (1,814.96) and Scope 2 (57,276.74) emissions. They also reported their Scope 1 and 2 emissions annually, giving the information on emissions of the year 2007 (base year for their targets) and 2017 and 2018 as comparison to this year's emission. The trend shows a reduction in emissions.

   Therefore, it **meets** the second criteria.

3. There are no mention of their Scope 3 emissions in the report or website.

   Therefore, it **does not meet** the third criteria.

4. Their main goals or objective in the future to achieve 50% reduction in 2025 are a reflection of their support to the UNFCCC and the Paris Agreement, where they adjust their goals so that it allow ecosystems to adapt naturally to climate change. They reported that they have the goal to reduce greenhouse gas emission for an average of 4% annually. This is above the target of 2.5% per year, however it was not mentioned whether or not the targets have been agreed by the SBTi.

   Therefore, it **meets** the fourth criteria.

Conclusion:
The company has reported their Scope 1 and 2 emissions annually, however there were not mentions of Scope 3 emissions. Their targets for climate actions are set to achieve 50% reduction of emissions by 2025 from a base year of 2007. They do have an ambitious target to cut 4% emissions per year. The targets are nearly borderline for the first point, it would be good if they talk about the manufacturing part in the first section.

Therefore, MSI receives **Middle Ethical Consumer rating for Carbon Management & Reporting.**

Razer
Worst Ethical Consumer rating for Carbon Management & Reporting
On 13/02/22, Ethical Consumer viewed Razer 2020 Sustainability Report and website, looking for information on what the company was doing to tackle climate change. Ethical Consumer was looking for the following:

1. a. For the company to discuss its areas of climate impact, and to discuss plausible ways it has cut them in the past, and ways that it will cut them in the future.
   b. For the company to have relevant sector-specific policies in place.
   c. For the company to not be involved in any particularly damaging projects like tar sands, oil or aviation, to not be subject to damning secondary criticism regarding it's climate actions, and to have a policy to avoid investing in fossil fuels.
2. For the company to report annually on its scope 1&2 greenhouse gas emissions (direct emissions by the company), and,
3. to go some way towards reporting on its scope 3 emissions (emissions from the supply chain, investments and sold products).
4. For the company to have a target to reduce its greenhouse gas emissions in line with international agreements (counted as the equivalent of at least 2.5% cut per year in scope 1&2 emissions), and to not count offsetting towards this target.

The results are discussed as follows:

1. a. They stated in their report that they *recognise* the use of electricity contributes to the emission of carbon and other greenhouse gases but did not mention the type of electricity used in their production (renewable or not). They also listed their waste in terms of hazardous and non-hazardous waste, mentioning that it is handled by a government-authorised disposal company but did not specify the treatment.

   #GoGreenWithRazer by 2030 manifesto was established in October 2020 that includes a sustainability roadmap. This covers commitment to reduce greenhouse gas emission from reducing single-use plastics across global offices, but mentioned how if it is not feasible, they will neutralize impacts from investments in various environmental projects. This wording is a little bit *unconvincing* because they should be committing in reducing their impact. They also mentioned about transfer to 100% renewable energy and to be 100% carbon neutral but did not mention how much process has been using renewable energy until today.

b. The company does not seem to have any specific policies regarding climate change mitigations.

c. The company was found not to be involved in any particularly damaging projects.

Therefore, it **does not meet** the first criteria.

2. The report presents their total electricity consumption for the year 2020 and 2019, as well as its carbon dioxide emission equivalent for both years, where it all comes from their corporate offices globally and for five locations contract manufacturers peripherals. Other energy consumption were reported, water and electricity consumption. However, it does not show a trend of greenhouse gas emissions from previous years up to today.

   Therefore, it **meets** the second criteria.

5. There are no mention of any scope 3 emissions.

   Therefore, it **does not meet** the third criteria.

6. They mentioned their commitment in reducing greenhouse gas emissions, although there are no mention of aligning it with international agreements or setting a specific target per year. They only mention to reach 100% carbon neutral for their product portfolio and operations by 2030, but no clear information on today's situation.

   Therefore, it **does not meet** the fourth criteria.

Conclusion:
The information provided in the reports are very minimal and was not tackling all four points or criteria that Ethical Consumer is looking for. Although they do present a good and quite thorough information about their electricity consumption in various branch around the world, water consumption, and their emission in carbon dioxide equivalence, they did not specify scope 1&2 and 3 emissions well.

Razer receives **Worst Ethical Consumer rating for Carbon Management & Reporting.**

SteelSeries
Worst Ethical Consumer rating for Carbon Management & Reporting
On 28/02/22, Ethical Consumer viewed SteelSeries' latest Sustainability Report (2020) and website, looking for information on what the company was doing to tackle climate change. Ethical Consumer was looking for the following:

1. a. For the company to discuss its areas of climate impact, and to discuss plausible ways it has cut them in the past, and ways that it will cut them in the future.
   b. For the company to have relevant sector-specific policies in place.
   c. For the company to not be involved in any particularly damaging projects like tar sands, oil or aviation, to not be subject to damning secondary criticism regarding it's climate actions, and to have a policy to avoid investing in fossil fuels.
2. For the company to report annually on its scope 1&2 greenhouse gas emissions (direct emissions by the company), and,
3. to go some way towards reporting on its scope 3 emissions (emissions from the supply chain, investments and sold products).
4. For the company to have a target to reduce its greenhouse gas emissions in line with international agreements (counted as the equivalent of at least 2.5% cut per year in scope 1&2 emissions), and to not count offsetting towards this target.

The results are discussed as follows:

1. a. They mention in their report that they recognize that their business activities can have both a positive and negative societal impacts, aims to create high quality and innovative products while minimizing environmental footprint. They still generally explain how they want to reduce emissions and material use. They have not set a specific target in percentage of reduction in their production. They published fast facts in their website, stating that they have used 100% recycled paper in their inner packaging structures and that 100% of their printing inks are plant based.
   b. They do not have specific policies regarding climate change related issues, but this year, they became a signatory of the UN Global Compact – where their operations are governed by the Ten Principles of the UN Global Compact that is related to human rights, labour rights, the environment, and the prevention of corruption.
   c. The company was found not to be involved in any particularly damaging projects.

   Therefore, it **does not meet** the second criteria.

2. They have no comparison of emissions reduction from previous year, but they presented their Scope 1 and 2 emissions in CO_2e. Their direct emissions equals to 22 tonnes CO_2e and indirect emissions are equals to 171 tonnes CO_2e.

   Therefore, it **does not meet** the second criteria.

3. There was no mention of Scope 3 emissions.

   Therefore, it **does not meet** the third criteria.

4. Although they did try to align some goals to the Sustainable Development Goals, they made no mention in future target that aligns with international agreements. There were no mention of cutting at least 2.5% per year of their scope 1 and 2 emissions. They also have no mention of targets agreed by the Science Based Targets initiative (SBTi).

   Therefore, it **does not meet** the fourth criteria.

Conclusion:
The report was quite short and does not present enough information to see their goals and targets in reducing their impact. They also did not present their emissions annually. However, Ethical Consumer noticed that they are acquired by Axcel, which encourages investing companies to meet the Paris Agreement goals, but there are no mention of the Paris Agreement goals in SteelSeries' report. SteelSeries receives **Worst Ethical Consumer rating for Carbon Management & Reporting.**

Toshiba

Worst Ethical Consumer rating for Carbon Management & Reporting

On 27/02/22, Ethical Consumer viewed Toshiba 2021 Sustainability Report and website, containing report on their 2020 achievements, looking for information on what the company was doing to tackle climate change. Ethical Consumer was looking for the following:

1. a. For the company to discuss its areas of climate impact, and to discuss plausible ways it has cut them in the past, and ways that it will cut them in the future.
   b. For the company to have relevant sector-specific policies in place.
   c. For the company to not be involved in any particularly damaging projects like tar sands, oil or aviation, to not be subject to damning secondary criticism regarding it's climate actions, and to have a policy to avoid investing in fossil fuels.
2. For the company to report annually on its scope 1&2 greenhouse gas emissions (direct emissions by the company), and,
3. to go some way towards reporting on its scope 3 emissions (emissions from the supply chain, investments and sold products).
4. For the company to have a target to reduce its greenhouse gas emissions in line with international agreements (counted as the equivalent of at least 2.5% cut per year in scope 1&2 emissions), and to not count offsetting towards this target.

The results are discussed as follows:

1. a. They have a dedicated section showing their plans as a response to Climate Change where they aim to achieve carbon neutrality by FY2050 and to have 70% reduction of GHG emissions by 2030. They stated that they have done many efforts prior to this such as introducing energy-saving processes and equipment, and reducing electricity consumption in the use of products. Now, they are creating a plan that was revised and finalized in November 2021, stating their Environmental Future Vision 2050. They aim to become a resource circulating society, decarbonized society, and a society that is in harmony with nature.
   The following are their GHG emissions reduction target in order to achieve those goals:
   By 2030, they aim to:
   - have their scope 1 and 2 to have 28% reduction compared to 2019.
   - have their scope 3 related to "products and services associated with power supply" to have 50% reduction and "products and services associated with power consumption" to have 14% reduction.

They also have more specific Environmental Action Plan in terms of Business and Management. Each business activities have a yearly target, from 2021 to 2023, with clear numbers and percentage of emission reduction to reach by 2023. For example, they aim to have reduction of GHG emission from power supply with 9.1% reduction target in 2021, 11.4% in 2022, and 13.6% in 2023. They also not only focus on reduction impacts, but also considering environmental risk compliance.

b. They clearly state that they have a basic policy for the environment with the following key points:
-Promoting environmental management harmonized with business operations
-Reducing environmental impacts through business activities and offering environmentally conscious products and services
-Working together with stakeholders

c. Although the company announced plans to exit the coal-fired power plan business in 2020 and later, in 2022, that it would split its infratructure and electrinics businesses, at the time or writing its website still advertised a range of 'oil and gas product offerings' including 'drilling, pumping, production, processing, and storage'. The company was found therefore found to be involved particularly damaging projects.

Therefore, it **does not meet** the first criteria.

2. They listed their 2019 and 2020 emissions and comparing them in every category. For scope 1 and 2, they have a total of 1.14 million tonnes in 2019 and 1.05 million tonnes in 2020. They report annually and comparing it to their previous year.

   Therefore, it **meets** the second criteria.

3. The company splits the report regarding their Scope 3 emission, to downstream and upstream emissions, and also reporting the details in each aspects of the stream. It was reported that they have 622.53 million tonnes in 2019 and 424.08 million tonnes in 2020. They report annually and compared it to the previous year.

   Therefore, it **meets** the third criteria.

4. Their 2030 target that has clear percentage reduction (mentioned and detailed in point 1a) was approved by the Science Based Targets initiative (SBTi) and they have aligned their goals with the Sustainable Development Goals. They also have special project for improvements in regards to the environment that are aligned with the SDGs. One example is their Inverter instalment project to reduce water and cut energy usage, which is aligned with SDG point 7 (Affordable and clean energy), point 11 (Sustainable cities and communities), point 13 (Climate action).

   Therefore, it **meets** the fourth criteria.

Conclusion:
The company does well in presenting information related on their greenhouse gas emissions, from scope 1, 2 and 3, even complete with the different section and try to report the scope 3 emissions annually. They also presented their methodology on how to reach their targets. However its continued operation in oil and gas markets means that it receives the **Worst Ethical Consumer rating for Carbon Management & Reporting.** This may change should the planned split take place.