THE CARBON FOOTPRINT OF **ESET**

2019 - 2020

ESET® Digital Security
Progress. Protected.

CONTENTS

INTRODUCTION

About the organization

ESET is an IT digital security company established in Slovakia in 1992. The official headquarters of ESET is located in Bratislava (Aupark Tower and Digital Park), with local branches in Žilina and Košice. Its main business activity include the development and sale of security software to protect computers, networks and other devices against malware and other malicious code. ESET ranks among the global leaders in IT security. The company operates in more than 200 countries worldwide and is perceived as an innovative Slovak business and champion of social change, both locally and internationally.

Initial benchmark and summary

We chose the year 2019 as the initial benchmark as this was the last year during which the company operated under normal conditions. While the pandemic had a significant impact on the company carbon footprint in 2020 (though this was not a planned change), we will consider 2020 to be the benchmark to strive for in the future under normal operating conditions.

In 2020, we completed an environmental sustainability and circularity assessment (in terms of quality and quantity) at ESET and the results were compared to 2019. 2020 was a period marked by a lack of management activities in terms of voluntary sustainable solutions aimed at reducing the carbon footprint. This was mainly due to the necessary systemic changes in the company due to the ongoing COVID-19 pandemic. Despite the pandemic, ESET continued to implement its educational activities and support its employees in terms of sustainable development.

Steps taken and project timeline

- The 2019 analysis focused on mapping the waste management situation at the office premises of the company
- Creation of a qualitative and quantitative questionnaire to assess the project objectives

- Creation of a carbon footprint calculation tool
- Calculation of the 2019 and 2020 carbon footprints

The project consists of several stages:

1st STAGE – mapping the daily and annual operations of ESET, understanding how it works and the selection of 3 basic areas to monitor as part of the GREEN WORLD programme.

2nd STAGE 2020-2021 – setup of performance measurement in the 3 identified areas – selection of the measurement method, measurement of the zero/benchmark point (using the CO_2 – calculator, amount of waste produced), creation of proposals to reduce the environmental impact in the given areas and their gradual implementation

3rd STAGE 2021 – Repeated measurement and preparation of a report to assess the impact of the individual changes measures on the monitored areas.

Project timeline

The individual collaboration steps were implemented and monitored within the period of one calendar year.
Start of project: January 2019
End of project: April 2021

DESCRIPTION OF OBJECTIVES

The objective of the project is to assess the environmental impact of ESET's activities using the qualitative and quantitative measurement (carbon footprint) of selected indicators during the monitored period of time and to determine elementary measures to reduce the future carbon footprint of the company.

Another objective was to initiate a discussion within the company about the responsibility of individuals for creating waste. Each individual produces a non-negligible amount of waste and creates their own carbon footprint through their direct and indirect activities.

Why is it important to measure the carbon footprint?

Measuring the carbon footprint is the elementary building block of every sustainability strategy. It allows us to quantify the environmental impact of the implemented measures.

Carbon footprint represents the output of greenhouse gas (GHG) emissions. Emissions inventory is an integral part of the low-carbon strategy. It gives us a clear idea on the position of the company with regard to production of CO_2 emissions.

Using the carbon footprint calculation, the company can identify the best strategic approach to reducing emissions and setting **specific goals to help us become more sustainable.**

QUALITATIVE ASSESSMENT

The main objective of the qualitative assessment of the company in the form of a questionnaire was to gain an understanding of the activities and general direction of ESET in terms of circular economy and environmental sustainability.

The questions were formulated in such a way so as to allow us to assess the current position of the company, what actions it has taken in the given area, and what actions are planned in the future.

The survey monitored the period of 2019 and 2020. We have been mapping the situation in the company with regard to the impact of its activities on its overall carbon footprint and sustainability strategies for the upcoming years.

ESET is dealing with environmental issues as part of its CSR activities defined in its 2018 report[1]. The report serves as the starting point for setting sustainable objectives and their monitoring.

Evaluation of the questionnaire

In 2018, ESET chose three elementary areas of focus for the upcoming years:

- Energy efficiency
- Waste management and recycling
- Employee environmental awareness

Over the following years, the company launched the "Green World" project and set its own goals. The goals can be found below:

2019

- Preparation of measurement of the environmental impact of our activities (measurement of CO_2 emissions, energy consumption, and waste produced)

2020

- Launch of measurement of the environmental impact of our activities and introduction of measures to mitigate the negative environmental impact

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1   https://www.eset.com/fileadmin/ESET/SK/Docs/ESET-CSR-Report-2018.pdf

2021

- Gradual reduction of the amount of waste produced, of CO_2 emissions, and of energy consumption
- New ESET headquarters building meeting the industry-leading environmental standards

Most important information obtained from the 2019 and 2020 questionnaires:

ESET is motivated to invest in sustainable development and circular economy because of the following reasons:

1.

- To boost the reputation of the company
- To increase brand value
- It is part of the corporate social responsibility of the organization
- Pressure from customers / change of preferences
- Reaction to the goals set by EU environmental policies
- Long-term cost savings / profit growth
- Competitive advantage and improved market position
- Creation of an environmentally aware corporate culture

2.

- Pressure from business partners

3.

- Part of the marketing of our organizatio

Sustainability related activities implemented by ESET in the last 4 years:

Internal activities
Sustainability related educational activities have been conducted in the company since 2017. In the same year a group of volunteers

– eco-ambassadors was set-up, which members are involved in different ecological activities. The eco-team currently comprises of 18 members from different departments at the Bratislava headquarters of ESET Slovakia.

The eco-ambassadors' main activities include:

- Organization of educational activities helping to raise awareness of the need for environmental protection.
- Encouraging other employees to actively participate in building a more eco-friendly corporate culture.
- Writing the ECO BLOG.

The achievements of the eco-ambassadors involve mainly prevention of waste generation, reduction of packaging waste, and resource conservation. Specific actions:

- Reduction of the amount of plastic waste in the company kitchenettes (single packets of sugar and honey have been replaced by large glass containers).
- Use of own lunch containers instead of single-use ones.
- Purchase of honey from a local supplier.
- Double-sided monochrome printing and the use of ecological paper.

External activities
Between 2017 and 2020 ESET launched a collaboration with INCIEN and Živica to educate its employees on the topics of waste minimization and prevention.

In 2019, ESET used the following circular economy principles:

- Repair and refurbishing of products – the company re-uses components from discarded defective equipment, such as laptops.
- Re-use of products – various kinds of electronic equipment, such as hardware is being reused.
- Shared services – the company uses shared laptops
- Digitalization – the company is making most processes electronic. These include wages and HR work, signing contracts, electronic archiving of accounting records and electronic communication with auditors or sending invoices in electronic form.

Conclusion of the qualitative assessment:

When it comes to corporate social responsibility ESET relies on 4 basic pillars: Ethics at the Core of Business, Safer Technologies, Satisfied Employees, and A Better Slovakia.

Since 2018, ESET has been involved in environmental protection and its main objective is to reduce its environmental impact. This process involves regular monitoring of energy consumption and waste produced.

In 2020, the company laid down several specific actions to reduce its environmental impact, and began implementing them from 2021. In 2021, the company also set the goal for its new headquarters to meet the industry-leading environmental standards.

The company also determined that in order to achieve correct implementation of the environmental sustainability and circular economy principles it is necessary to define them correctly and it took the following steps in this area:

Ecological innovations

Product packaging:

- removal of unnecessary plastic parts of product packaging and replacing them with paper packaging
- elimination of lamination of the surface of boxes to improve the efficiency of their recycling

Reducing resource consumption

- partial reduction of energy consumption (heating and cooling) in the office premises when nobody is in

Shared services

- use of 3 company cars for business trips

Recycling

Municipal waste:

- sorting of municipal waste at the company into plastic, glass, paper and mixed waste

These activities need to be analysed in more detail to assess their actual impact and scalability.

The reasons why the company chose to invest in implementing the circular economy principles are as follows:

- Competitiveness of the company
- Sustainable economic growth
- Sustainable environmental impact
- Sustainable social growth

The company learned its first information about the circular economy (CE) from the Institute for the Circular Economy (INCIEN). Even though at present there is no specific path for transition to CE (with a time schedule) the company still considers this to be a priority and plans to use more selected circular activities in the future.

ESET considers the biggest barriers to implementation of environmentally sustainable development projects and CE to be the lack of technical and technological know-how and the lack of an implementation project.

ESET believes that properly established corporate environmental responsibility based on measurable objectives and the available resources of the company can improve the company's competitiveness, its sustainable economic growth and have a positive environmental and social impact.

At present, however, there are no specific actions or measurable objectives to facilitate the systematic implementation of sustainable development and circular economy principles. There was no substantial shift in 2020 towards the environmentally sustainable development of the company, on contrary, the development was similar to 2019 which was mainly due to the pandemic.

QUANTITATIVE ASSESSMENT

Based on the performed survey we can say that at ESET there is unused potential to quantify the environmental and climate impact, in particular through measurement of the carbon footprint. That is why we decided to measure it.

„If something can be measured, it can be changed."

Methodology of the carbon footprint calculation

The methodology of the carbon footprint

calculation was prepared on the basis of the international GHG Protocol standard[2], which is currently the most commonly used tool to measure the production of greenhouse gas emissions in businesses and organizations.

Calculation of the carbon footprint

We obtained the input data for calculation of

the carbon footprint from the questionnaires focusing on selected activities and sources of measurable emissions. These activities were selected on the basis of available measurable values and classified into 3 basic categories according to the GHG Protocol.

Classification of emissions

The GHG Corporate Standard classifies direct

and indirect emissions into three Scope categories, whereby Scope 1 and Scope 2 emission sources are mandatory to report. Scope 3 emissions are voluntary to report and classified into 15 different categories according to the GHG Protocol methodology (Technical Guidance for Calculating Scope 3 Emissions, ver. 1.0, 2013), which encourages organizations to only report the relevant categories. The Scope 3 emissions, however, frequently represent the greatest source of emissions of a company, and the greatest opportunity to reduce production of greenhouse gases and meet the related objectives.

Direct emissions

SCOPE 1 – direct emissions originating from

the activities carried out by the company (e.g. emissions from company cars, boilers or industrial processes or waste disposed within the company)

Indirect emissions

SCOPE 2 – indirect emissions from

purchased energy, not generated directly at the company, but resulting from its activities (e.g. purchase of electricity, heat, steam, etc.)

SCOPE 3 – other indirect emissions, generated by company activities, but not classified as Scope 2 (e.g. business trips by plane, waste management, purchase of paper)

The correct classification of an emission source in to the Scope is important in order to reduce the risk of the so-called double counting of emissions that would produce an incorrect result. That means, no two companies can be responsible for the same emissions in the same Scope. This also helps clarify who is responsible for the given carbon emission.

In table 1 we have classified individual activities as Scope 3 – indirect emissions. Including indirect emissions in the overall carbon footprint of the company means taking the responsibility and understanding the impact the company's choice of suppliers, products and services can have. Individual suppliers then classify such activities as their direct emissions. In this manner there is no double counting of emissions.

Table 1: Scope 3 emissions of the ESET – Classification

Source of scope 3 emissions	Assessment	Note
Purchased goods and services	Relevant included	Office paper and stationery, IT equipment and electric appliances, consumed water, promotional items
Assets	Irrelevant	
Other energy consumption (not included in Scope 1 and 2)	Relevant included	Energy consumption – external data cent
Upstream transport and distribution (transport to our company)	Relevant not included	E.g. emissions from transportation of goods or raw materials to the company (transportation must be provided by a third party)
Waste production	Relevant included	Municipal waste, sorting and recycling of waste
Business trips	Relevant not included	Business trips by plane, train and bus
Commuting	Relevant not included	
Upstream leased assets	Irrelevant	E.g. leased company cars or machinery the emissions of which are not included in Scope 1 and 2.
Downstream transport and distribution (transport from the company)	Irrelevant	E.g. emissions from transportation of products to the customer (transportation must be provided by a third party)
Processing of sold goods	Irrelevant	Relevant for production facilities only
Use of sold goods	Irrelevant	
Final processing of sold goods	Irrelevant	
Downstream leased assets	Irrelevant	Only pertains to leasing companies and emissions related to the use of assets they sold to other companies
Franchises	Irrelevant	
Investments	Irrelevant	

Formula for calculating the carbon footprint of the company:

- $AD_{ix} \times EF_{ix} \times GWP_x = CF\ CO_2e$
- AD_{ix} – active data for item i and greenhouse gas x
- EF_{ix} – emission factor for item i and greenhouse gas x
- GWP_x – contribution of greenhouse gas x to climate change
- $CF\ CO_2e$ – carbon footprint (greenhouse gas emissions) specified in carbon dioxide equivalents.

The conversion factors are created using the most recent statistics from the European Environment Agency for Slovakia, using the Slovak technical standards and specific emission factors at the national level. The active input data is multiplied by the respective conversion factors for greenhouse gas emissions. If necessary, the input data is converted to the required unit. Output data is specified in kg/year for the so-called carbon dioxide equivalent CO_2e. This parameter represents the resulting carbon footprint unit of the company.

Limits of the used methodology

The first step to determine the carbon footprint of an organization is to determine the analysis boundary. In other words, one determines the scope of business and sources of greenhouse gas emissions related to the operation of the organization as well as the reporting methodology and categorization of greenhouse gas emissions into direct and indirect emissions. There are several internationally recognized standards for the calculation of the carbon footprint of an organization, the most widely used being the GHG Protocol (Greenhouse Gas Protocol) and ISO 14064.

When setting the analysis boundaries, several approaches can be used. The equity share approach uses the ownership interest to determine activities on which emissions will be reported. The second widely used approach is the direct control approach, where the analysis only includes activities under direct financial or organizational control of the organization. Direct control means that the organization is authorized to introduce and implement operating changes for the given activity in the monitored year, therefore this approach is more suitable for measuring and managing the environmental performance (as explicitly specified in the existing guidance documents, e.g. in ISO 14064 and the GHG Protocol). Important criteria for determining the analysis boundaries are availability of data, the precision and consistency of data, as well as the transparency of sustainability-related data.

The carbon footprint of ESET was calculated in compliance with the international GHG Protocol (GreenHouse Gas Protocol, http://www.ghgprotocol.org), most widely used tool to measure production of greenhouse gas emissions by companies and organizations.

CARBON FOOTPRINT CALCULATION

The carbon footprint analysis of ESET includes all sources of emissions in Scope 1 and Scope 2 and selected significant sources in Scope 3 having an impact on the overall emissions in compliance with the GHG Protocol (the only significant item that was not included in the monitored year is purchased electric equipment and appliances due to the lack of data).

Scope 1 (direct emissions)

- petrol and diesel, natural gas (production of heat for office premises), refrigerants

Scope 2 (indirect emissions from consumed energy)

- electricity consumed in the office premises

Scope 3 (other indirect emissions)

- electricity consumed in external data centres, waste, water consumption and paper consumed

To determine the analysis boundaries, we have used the direct control approach. The calculation covers 2 administrative buildings used by the company. In our effort to constantly improve the environmental impact performance of ESET, in the following years, we will expand the scope of the emission report, in particular when it comes to Scope 3 – emissions voluntary to report.

Comparison of 2019 and 2020

Emissions awareness is an integral part of the low-carbon strategy. It gives us a clear idea about the position of the company with regard to production of CO_2 emissions.
We assessed the production of CO_2 emissions by ESET in 2019 and 2020 and compared the two values.
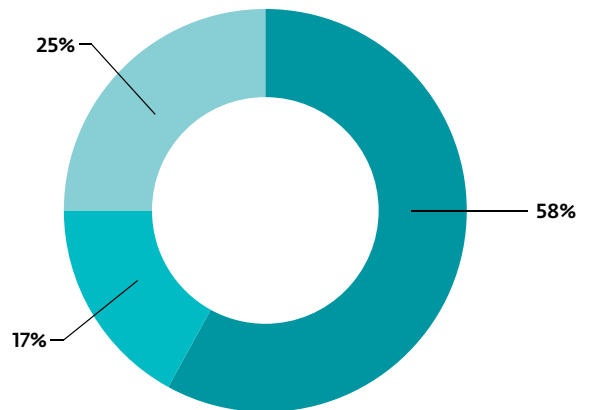
The overall CO_2 emissions of ESET spol. s r.o.
in 2019: 1,338.3 t CO_2e
The overall CO_2 emissions of ESET spol. s r.o.
in 2020: 801.9 t CO_2e

Chart 1 **2019**

- 25%
- 58%
- 17%

Scope 1 - Direct emissions

Scope 2 - Indirect emissions from consumed energy

Scope 3 - Other indirect emissions

Chart 2 **2020**

- 34%
- 44%
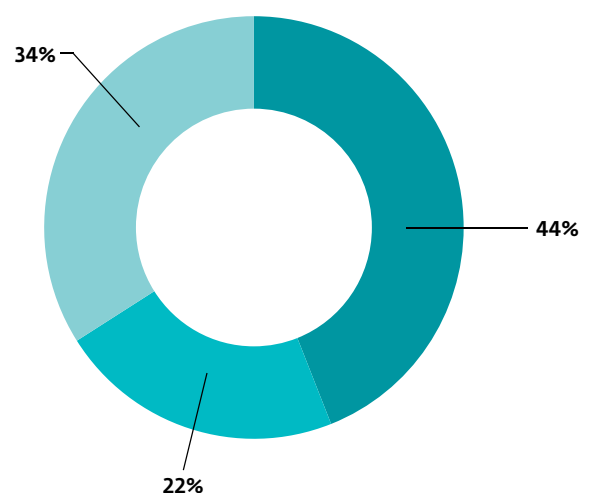- 22%

Scope 1 - Direct emissions

Scope 2 - Indirect emissions from consumed energy

Scope 3 - Other indirect emissions

Table 2 2019 and 2020 carbon footprint emissions

Indicator (t CO₂e)		2019	2020	2020 vs 2019
	Overall carbon footprint (mandatory and voluntary emissions in Scope 1, Scope 2, and Scope 3)	1338,3	801,9	-40,1%
	Carbon footprint (only mandatory emissions in Scope 1 and Scope 2)	1002,8	529,3	-47,2%
	Carbon footprint per employee (overall emissions including voluntary)	1,61	0,85	-47,3%
	Carbon footprint per employee (mandatory emissions only)	1,21	0,56	-53,7%

Chart 3 Items with the greatest impact on the company carbon footprint (in tons)

Refrigerants — 14 (2020), 390 (2019)
Car transport — 45 (2020), 108 (2019)
Paper — 47 (2020), 109 (2019)
Energy consumed in offices — 178 (2020), 226 (2019)
Indirect energy consumption in data centres — 201 (2020), 166 (2019)
Municipal waste — 14 (2020), 35 (2019)
Heat consumption — 293 (2020), 278 (2019)

● 2019   ● 2020   tonnes of CO₂e
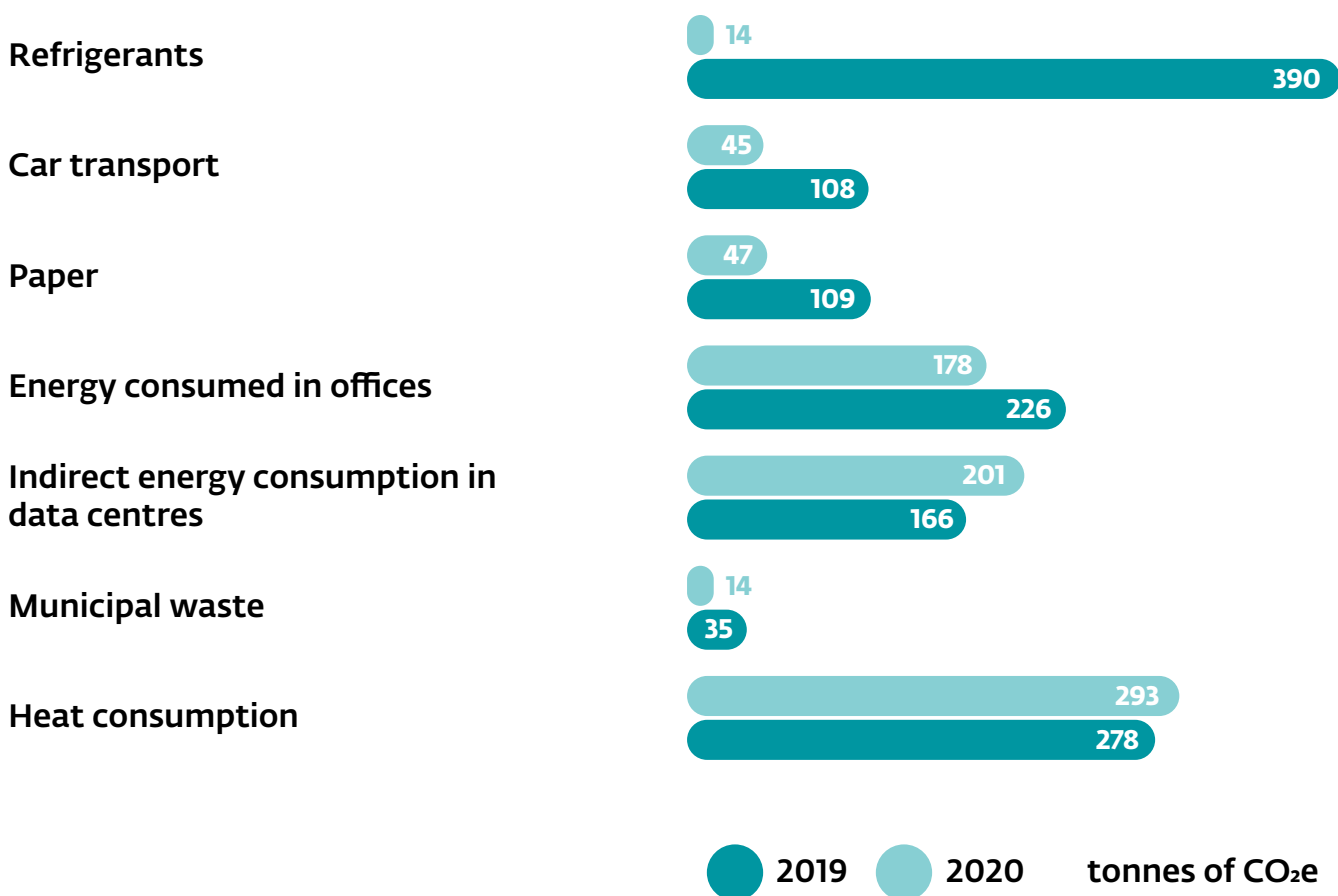
Chart 4 2019 and 2020 carbon footprint for selected areas (share in %)

Legend:
- Car transport
- Energy consumption (direct – office premises)
- Energy consumption (indirect – data centres)
- Heat consumption (natural gas in the building boilers)
- Refrigerants
- Municipal waste
- Separated waste
- Paper
- Water
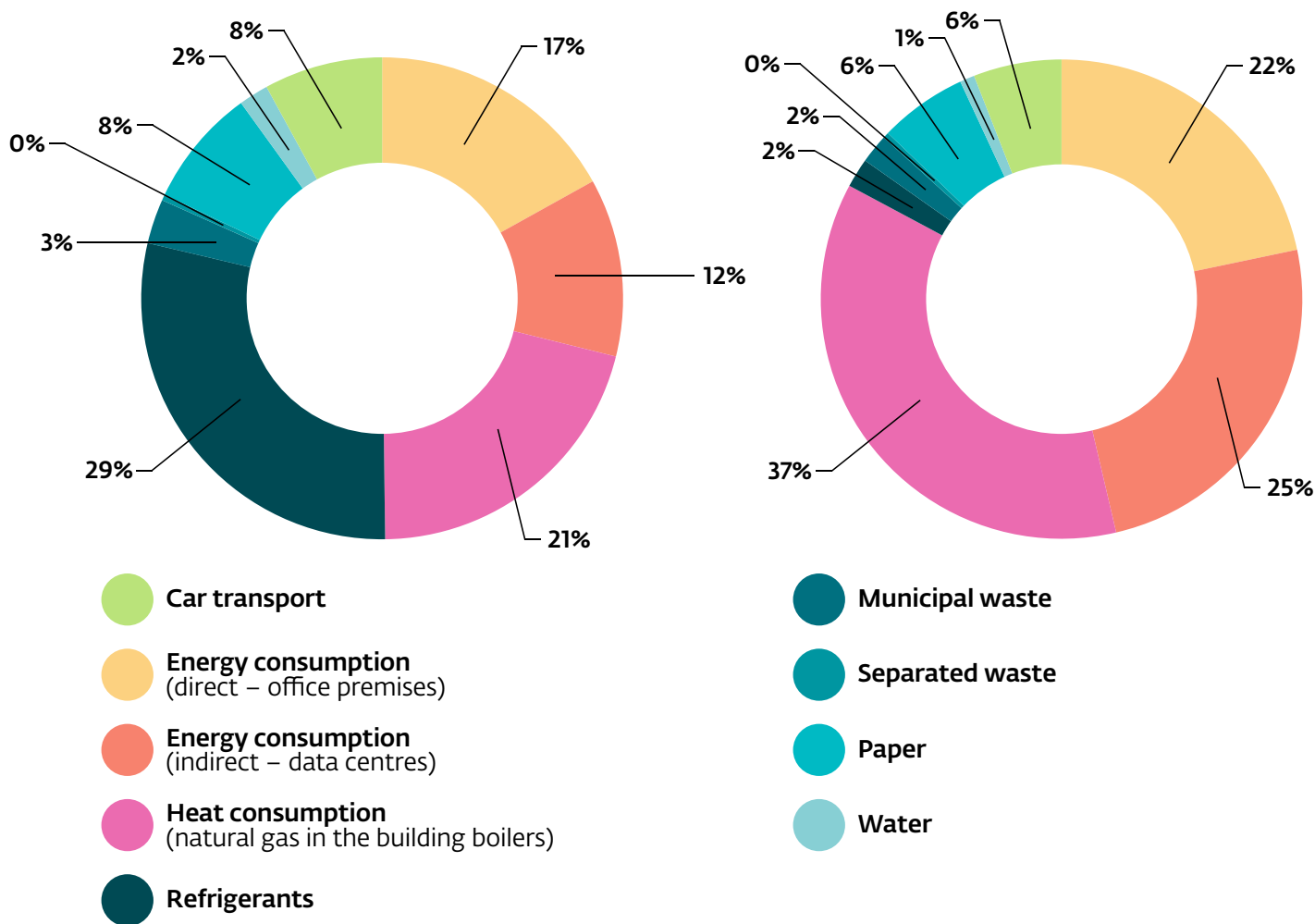
Table 3 Production of CO_2 emissions in 2019 and 2020 and the year-on-year difference

Scope	Selected item	2019	2020	2020 vs 2019
Scope 1	Car transport	108	45	-58,3%
	Heat consumption	278	293	+5,4%
	Refrigerants	390	14	-96,4%
Scope 2	Energy consumed in offices	226	178	-21,2%
Scope 3	Energy consumed in data centres	166	201	+20,9%
	Municipal waste	35	14	-60,1%
	Separated waste	3	4	+5,8%
	Paper	109	47	-56,9%
	Water consumption	21	7	-68,1%

Carbon footprint of activities directly related to the building vs. other

The carbon footprint of activities closely related to the building in 2019 was 936,950 kg CO_2 and in 2020 it dropped to 503,328 kg CO_2. In 2019, these emissions represented 69.9% of the overall carbon footprint. In 2020, these emissions represented 62.6% of the overall carbon footprint (the share dropped by only 7.3%).

Activities closely related to the building: heat, energy consumed in the office premises, refrigerants, waste, water consumption.

Other: car transport, energy consumed in data centres, paper consumption and consumption of bottled water and drinks.

Water consumption related carbon footprint

CO_2 emissions for tap water and bottled water are significantly different. While in the first case one litre of water coming from your tap produces some 0.62 g of CO_2, with water sold in plastic bottles it can be UP TO 350 g CO_2 per litre (drinks sold in metal cans have a similar carbon footprint). Even though the water (from the tap and in bottles) consumption related emissions and carbon footprint dropped from 25,442 kg CO_2 in 2019 to 8,605 kg CO_2 in 2020, the proportion of tap water to bottled water remains roughly the same as follows:

2019: tap water **14.4%** bottled water and drinks **85.6%**

2020: tap water **13.5%** bottled water and drinks **86.4%**

Water consumption related carbon footprint
(in kg CO_2 per year)

2020
- Bottled water and drinks: 7436
- Tap water: 1169

2019
- Bottled water and drinks: 211776
- Tap water: 3666

● Bottled water and drinks   ● Tap water
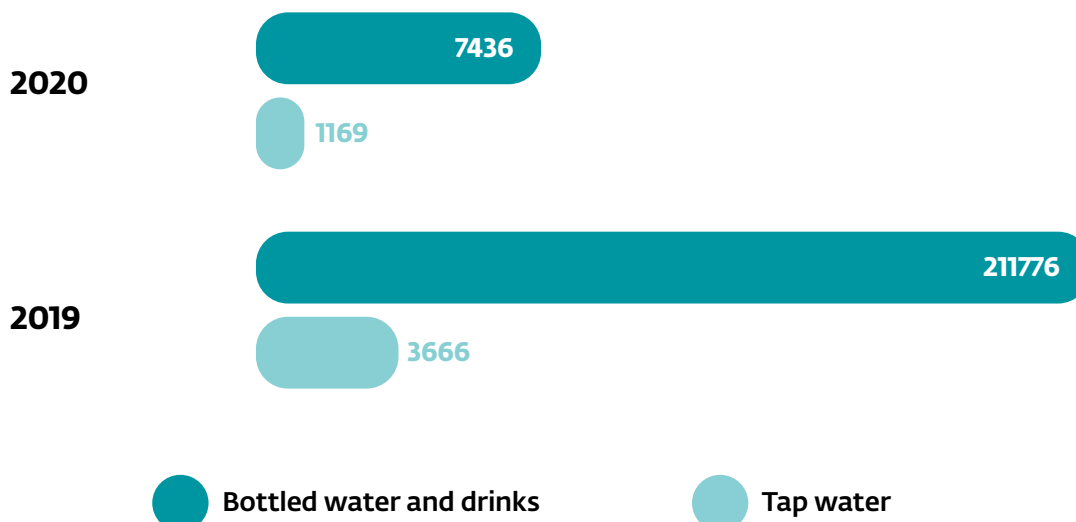
Contribution to climate change (GWP)

Table 4: Contribution to climate change (GWP)

Greenhouse gas	GWP	Reference
Carbon dioxide CO_2	1	Panel on Climate Change (IPCC) Fifth Assessment Report (AR5 – 100 years)
Methane CH4	25	IPPC Fourth Assessment Report (AR4 – 100 years)
Methane (N2O)	298	IPCC Third Assessment Report (TAR – 100 years)
HFC	14 800	IPCC Third Assessment Report (TAR – 100 years)
SF6	22 200	IPCC Third Assessment Report (TAR – 100 years)
NF3	10 800	IPCC Third Assessment Report (TAR – 100 years)

When standard emission factors following the IPCC principles are used, one only has to report CO_2 emissions, because the significance of the other greenhouse gases is small.

Calculation of the change- DVD packaging redesign

As part of the analysis we did a calculation of CO_2 emissions related to a redesign of a packaging. In the questionnaire, the company stated that the change was due to a transition to a more sustainable version with a lower environmental impact. We were interested in quantifying the change in terms of saved CO_2 emissions.

Therefore, we have determined the change in CO_2 production for the original packaging consisting of two types of material (plastic and paper). The new version is made entirely of paper.

Based on the provided data and performed analysis we have come to the following conclusions:

In 2020 the plastic components of the original packaging were removed which represents a saving of 980 kg CO_2 per year (1 ton of plastic). Unfortunately, we were not been able to determine the total weight of the plastic saved.

In calculating the impact we used the emission factor for plastic commonly used in production of DVD packaging. We took into account the product life-cycle from production to liquidation in landfills. Out of the overall carbon footprint of the company this represents roughly 0.1 % which is an equivalent of 107 trees (one grown tree can absorb roughly 9.12 kg CO_2 from the air per year).

We also discovered that paper consumption in the company is rising (from 4 to 24 A5 pages), which converted to the carbon footprint represents as much as 2.7 tons of CO_2 emissions (2,732 kg CO_2). Assuming the use of new paper with a weight of 70 g/m2, which is the commonly used type, we have taken into consideration the carbon footprint all the way from paper manufacture to its liquidation in landfills. (When a lower weight paper is used the CO_2 emissions will be lower).

All changes need to be reported in advance so we can obtain consistent data that can be further processed.

In this particular case the following information was missing:
Paper weight – packaging, brochure
Dimensions

If we had all the necessary data, the change in CO_2 production could have been measured more precisely.

CONCLUSION

The commitment of ESET to measure and manage its carbon footprint is in line with its environmental and social policies.

By understanding its carbon footprint, the company can identify and implement measures to reduce emissions and monitor its performance against the set objectives.

First of all, we need to state that ESET in collaboration with INCIEN decided to assess the changes in two consecutive years – 2019 and 2020. 2020 was significantly impacted by the worldwide pandemic, in particular limited use of the common and administrative premises of the company by its employees, including a full home-office regime. All these measures had a significant positive impact on CO_2 production in the buildings subjected to assessment. However, we need to realize that the result was achieved based on unplanned changes and under significantly altered conditions. 2020 was specific in that most activities of the company and its employees shifted to the employees' homes.

Basic outcome of the quantitative analysis of 2020 in comparison to 2019:

- In 2020, the monitored emissions dropped by 40.1%.

- The biggest share in production of emissions is attributable to the buildings, which in 2020 produced 63% of all emissions. In comparison to 2019 this was a decrease of roughly 7%.

- Heat consumption in the buildings increased by 5% despite low occupancy, which suggests that we need to improve the energy management of the buildings.

- Energy consumption in data centres equally increased by 20%, in particular due to increased data usage.

- Paper use decreased by 57%, which is a natural consequence of the absence of employees in offices and the lack of use of printers.

- The amount of separated waste increased and the amount of municipal waste decreased.

PROPOSED CHANGES

What needs to be done

2019 needs to be perceived as a benchmark, as that was the last year of operation under standard conditions. In compliance with the requirements of the GHG Protocol we recommend preparing a plan for reduction of greenhouse gas emissions based on the performed analysis, including specific measures and deadlines. The greenhouse gas emissions reduction plan should contain the target carbon footprint values and the dates when those values are to be achieved and should be approved by the company management.

2020 was a year that shows where we should be heading (while fully using the company premises, just like before the pandemic). By collecting the data and calculating its carbon footprint the company helps make its activities more transparent.

At present, not all activities of the company producing CO_2 have been included.
The following actions need to be taken:

1. Prepare a strategy of carbon footprint reduction until 2025

- Obtain more input data (information regarding foreign data centres, business trips, use of electric equipment)

2. Prepare a roadmap representing individual steps and their implementation with a focus on the main sources of emissions, such as:

    A) Refrigerants
    B) Heat consumption
    C) Energy consumed in offices
    D) Municipal waste

3. Implement quick changes having an impact on next year's carbon footprint:

- Paper – use of recycled paper and reduction of paper use
- Bottled water – reduction of use

4. Create a global code of ethics for suppliers – objective for 2021

Areas

Energy and heat

The use of heat and heating of buildings should correspond to population of the buildings and energy saving measures should be adopted

Setup:
- Active lighting control systems
- Management and optimization of heating, ventilation and air-conditioning
- Real-time consumption regulation reacting to demand fluctuations

Light

- Use of energy efficient light sources, such as LEDs and compact fluorescent lamps, if required, the ECO-halogen sources can be used
- When purchasing new light fixtures, choose ones with a replaceable light source, not ones with a fixed, non-replaceable light source.
- Always turn off the light when leaving the room.
- Always turn off all unnecessary lights.
- Use motion sensors and daylight sensors.
- Whenever possible, use table lamps instead of ceiling lights.
- Work during daylight, if possible.

Heating and ventilation

- Adjust the heating and reduce temperature when leaving work.

- Turn off the heating on weekends and during extended periods of absence.

- Install a programmable thermostat to automatically reduce temperature during the night or to turn off air-conditioning.

- Use fans instead of air-conditioning.

- Leave the doors and windows closed when the outside temperature is high, to avoid the hot air entering the rooms.

- Air-conditioning should be turned on only if the room temperature exceeds 26°C.

- Outside temperature permitting, turn off fans and open windows.

- Keep the windows and doors closed when heating or air-conditioning is on.

- If possible, don't use fan heaters or exterior heaters. If this cannot be avoided, don't forget to turn them off before leaving.

Data centers

Data centre emissions relate to electricity consumption in external data centres. Data centre emissions are classified as indirect emissions under Scope 3; while ESET does not own or operate them, they store data related to the company activities. We recommend continuing to include them in the overall carbon footprint of the company.

Refrigerants

The R410A refrigerant which ESET plans to use until 2025 must be replaced by a more suitable alternative. This type of refrigerant has too high a GWP of 2090 (substance contributing to global warming).
At present, there are manufacturers offering newer refrigerants with a lower GWP value (ammonia, CO_2, hydrocarbons such as butane, propane and propylene).

Waste

The composition of the municipal waste needs to be analysed.

Before introducing any changes, we need to determine exactly how much waste is being produced and what is its composition. Based on the results, individual actions can be proposed. We need to determine which type of waste makes up the largest percentage of municipal waste and introduce measures to prevent its production. Waste prevention should be the main focus of the company.

- Impact analysis

- Create an infrastructure allowing correct and convenient separation of waste.

Note: Due to pandemic-related measures these analyses could not be performed. The company premises are undergoing refurbishment this year and should be fully occupied in 2022. Therefore, we recommend adjusting waste management measures in 2022.

Paper

Always prefer electronic communication and limit the use of paper. If possible, purchase paper and stationery made in Slovakia. If we consider the transport related pollution caused by transporting paper from the manufacturing plant through the distribution network all the way to the office, recycled paper made in Slovakia ordered in bulk is the most environmentally sound solution. However, there are currently no Slovak manufacturers producing recycled office paper. Therefore, you should prefer the purchase of recycled paper manufactured in neighbouring countries.

Prefer paper, which is:

- recycled and contains at least 30% recycled components

- chlorine free (e.g. TCF, ECF, …)

- certified (e.g. FDC, PEFC)

We recommend adopting paper consumption reducing measures, including removal of all local deskjet printers and the introduction of the "follow-me" type printing allowing users to print in a common print queue/device where the tasks are automatically deleted if not printed within 8 hours

Welcome activities, which encourage collective accountability and a sustainable image for the company along with active employee engagement: Raising awareness and efficiency of separating new selected types of waste:

CURAPROX box

Installation of CURAPROX boxes to collect used CURAPROX toothbrushes. Collection supports recycling of currently unrecycled toothbrushes.

CURAPROX recycles their own toothbrushes. They use the handles to manufacture waste bins for separated waste and they distribute them to kindergartens and schools to further raise awareness.

Electronic waste box

- A box for electric and electronic waste that is beyond repair

Electromobility

In comparison to other electric equipment commonly used in the building, EV charging consumes a lot of energy which necessitates a significantly higher reserved electricity capacity. When electromobility becomes more common and EV chargers will need to be built, a different type of connection needs to be considered.

When using chargers with no output management and no monitoring of the reserved capacity, a lot of new transformer stations would have to be included in the power grid which both costs a lot of money and creates an environmental burden as the power plants would need to increase their output. We therefore propose to look

for a smart way of managing the charger output using a centralized system within the building, possibly also within the power grid nodes, which don't necessitate an increase in the reserved capacity and only allow the system to deliver power to the electric chargers which is available at the given moment.

Petrol/fuels

- Rental of hybrid vehicles.
- Use of bicycle messengers.
- Encourage employees to commute on bikes, scooters, on foot, by tram or by mass public transport.
- Those who need to drive, should not drive alone
- Use carpooling, e.g. Blablacar, to travel outside Bratislava.

Green/circular procurement

We need to take advantage of tools to use ecological consumables and services. Green procurement should be the main tool. Products for which green procurement can be used:

- consumable paper
- eco-detergents and cleaning services
- printers, computers, etc.
- mobility

Increased use of green procurement will stimulate introduction of green innovations. Slovakia will use green procurement in 70% of its public procurement tenders. Green procurement will be mandatory for all central state administration bodies, regional governments and municipalities. At the beginning, this will only pertain to selected product groups. The product portfolio will be gradually expanded to achieve the set goal in 2030. Electronic public procurement will enable simple and transparent placement of orders and monitoring of the green public procurement.

Certified products

When purchasing new products, we recommend preferring certified products.

The overview of the most commonly used eco-labels and certificates can be found at the following website: http://www.ecolabelindex.com/ecolabels/.

Certificates most frequently used in Slovakia:

EU Ecolabel – voluntary EU certification scheme for environmentally friendly products (the list of issued certificates can be found here: http://ec.europa.eu/ecat/).

Environmentally friendly product – a voluntary certification scheme in Slovakia for environmentally friendly products.

ESV – Ecologically friendly product – this designation is used in the Czech Republic as part of the national environmental label programme. The label gives the consumer the opportunity to purchase products manufactured with environmental protection and sustainable development in mind.

PEFC – Programme for the Endorsement of Forest Certification.
FSC– Forest Stewardship Council

Seedling – this label indicates that the given product is compostable in an industrial compost production facility.

Global organic textile standards (GOTS) – certification of upholding standards for organic textiles.

Oeko-Tex Standard 100 – global testing and certification scheme for textile properties. As an example, they test textiles for the presence of harmful substances.

Bio-Siegel - this certificate can be issued for products containing materials (at least 95%) manufactured in accordance with the EU organic production guidelines.

EU Organic product label – this eco-label can be issued for products originating from the EU produced in a sustainable manner and containing at least 95% organic ingredients.

Blue Angel – certification initiated by the German government issued to products which in their respective categories are more environmentally friendly than others.

BREEAM - a global environmental assessment method for buildings.

Energy Star – a label helping consumers select products with the highest energy efficiency in the given category.

OK Home Compost – this label can be found on products which, under suitable conditions, should be compostable at home.

OK Compost – this label can be found on products, which should be compostable in industrial compost production facilities.

EMAS – this certificate is granted to companies which implement environmental measures that go beyond what is required by the environmental legislation.

Fairtrade – a certification system for products which are ethical in relation to the people involved in their production or growing. The award of this certificate is a guarantee that the farmers and workers in developing countries have better working conditions. This label can be found for example on chocolate or coffee.

Rainforest Alliance Certified – this seal is a guarantee that products originating from farms or forests meet the complex environmental protection standards and standards for protection of human rights of the workers their families and communities. It is most commonly used with tea, coffee, bananas and other types of fruit, and with products made of paper.

UTZ Certified – companies with this certification guarantee that their farming activities are sustainable. Most of them grow coffee, tea, nuts or cocoa. This programme is part of the abovementioned Rainforest Alliance scheme.

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