

CALENDERYEAR 2021

Climate Audit



In collaboration with:

TRICORONA
CLIMATE PARTNER

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Metod

GHG Protocol

Tricorona's calculations and reporting are carried out in accordance with the guidelines of the GHG (Greenhouse Gas Protocol). The GHG Protocol is the most widely used international accounting standard for carbon calculations, and it is used by governments, companies and organizations as a tool to understand, quantify and manage greenhouse gas emissions. A company's or an organization's operational boundaries are set by three scopes within the GHG protocol standard. Calculations are carried out in accordance with Tricorona's standard calculation method, which follows the GHG Protocol guidelines for reporting and covers the following principles:

- Relevance: Reporting should reflect the company's or organization's emissions in an adequate manner so that it can support decision making for users both internally and externally.
- Completeness: Reporting should cover all emissions within the specified system boundary. Any exceptions should be described and explained.
- Consistency: The method of calculation should be consistent so that comparisons can be made over time. Changes in the data, system boundaries, methods or similar, should be documented.
- Transparency: All activity data, methods, sources and assumptions should be documented.
- Accuracy: The calculated emissions should be as close as possible to the actual emissions.

The organizational boundaries, which determine the sources of emissions included in this climate audit, are based on PAF's organizational control. The greenhouse gas emissions from PAF's operations, including direct and indirect emissions are divided into three scopes according to the GHG Protocol: scope 1, direct emissions; scope 2, indirect emissions from purchased energy; and scope 3, indirect emissions.

According to the GHG protocol, in climate audits the seven greenhouse gases (IPCC 5th assessment report) must be reported both separately and as CO₂e. Reporting the gases separately is currently not possible as the available emission factors from authorities and institutes etc. only are reported as CO₂e.

Scope

The GHG protocol divides greenhouse gas emissions into three so-called scopes, namely:

Scope 1, which includes direct emissions. These are emissions that the business has direct control over, such as emissions from company vehicles.

Scope 2, which includes indirect emissions from purchased energy, such as electricity and district heating.

Scope 3, which includes other indirect emissions. This includes emissions from all other activities, such as production, logistics, air travel, etc.

In cases where activities within scope 1 and 2 have a climate impact that arises in the life cycle but are not directly dependent on the activity, this also falls within scope 3. Examples of such cases are production and transport of the fuels burned in the company's company cars or production and maintenance of power plants that supply energy.

Consolidation Approach

The GHG protocol allows two different consolidation approaches: financial control and operational control. The consolidation approach used for PAF's climate reporting is operational control, which means that the inclusion of emissions attributed to the reporting company is based on its operative possibilities of the respective business activities.

Base Year

PAF has not decided a fixed base year, results are compared with the previous year and the first year of reporting. The company should consider deciding a base year and setting up targets for reduction of emissions. According to the GHG protocol, the base year needs to be recounted for certain types of changes in the scope or method of the calculation if this is regarded as significant. As standard, Tricorona Climate Partner has a threshold for recalculating the base year if the result shows a difference equal to or greater than 5 % of the total emissions.

Recalculation takes place if:

- Significant change in the organization's structure (e.g. addition of companies, in / out source changes)
- Significant change in calculation methodology (e.g. improved emission factors, improved activity data)
- Expansion of system boundaries that provide significant change in terms of total
- Detection of significant errors or minor errors that together are significant

Recalculation of the base year does not occur with organic growth.

Method Scope 2

For scope 2, greenhouse gas emissions from electricity must be reported in two ways according to the GHG protocol.

Location-based method, where greenhouse gas emissions are calculated based on an average value for the electricity grid's electricity in the region / country.

Market-based method, where greenhouse gas emissions are calculated based on electricity from a specific electricity agreement that has been actively purchased by the company. The market-based method is used in this report to present total results and key figures unless otherwise stated.

System Boundaries

The calculation of climate impact includes energy consumption, business travels and purchased goods. The report also includes the climate impact from purchased services and product usage. The emission sources that are included in each scope within the framework of PAF's system boundaries are reported below.

Scope 1

- Company owned/leased vehicles

Scope 2

- Electricity
- Heating
- Cooling

Scope 3

- Business travel with other means than company own/leased vehicles e.g. air travel
- Purchased goods (phones and laptops)
- Purchased services (hosting of servers)
- Use of slot machines on ferries and on land
- The indirect life cycle emissions related to the respective emission source are also reported as scope 3 emissions.

Assumptions

The values used in the climate calculation are stated by PAF. Tricorona has in turn developed emission factors that are used in the climate calculation. In some calculations, the data base has been supplemented with the necessary assumptions and average values. The assumptions that have had the greatest impact on the result are regarding the slot machines, which are assumed to be used 24h a day all year around. Furthermore, some of the offices heating and cooling usage had to be estimated. See the confidentiality analysis at the end of the report for an exact distribution of the reliability of the calculation values. The enumeration factor that Tricorona used to consider high altitude effects when flying is 1.9.

Results

Summary

PAF's operations during 2021 resulted in emissions of 1 529 tonnes CO₂e, seen in Figure 1 and Table 1 (market based method, see Table 2 for location based results). The biggest climate impact comes from the category product usage which stands for 78% of the company's emissions followed by facilities accounting for 9% of total emissions. Business Travel caused 6% of the emissions, purchased services corresponding to 4% and purchased goods to 2%.

Emissions per category (ton CO₂e)

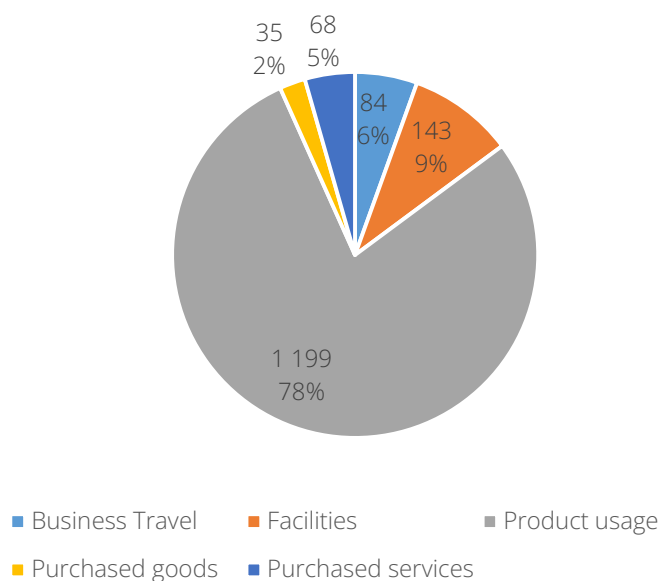


Figure 1. Emissions (tonnes CO₂e) per category 2021.

Table 1. Emissions (tonnes CO₂e) per category during 2016 - 2021. Change since previous year is shown in both tonnes CO₂e and %.

GHG emissions (tonnes CO ₂ e)	2016	2017	2018	2019	2020	2021	% of total 2021	Change 2020 - 2021	Change % 2020 - 2021
Business Travel	82	1 586	1 776	1 306	262	84	6%	- 177	-68%
Facilities	184	117	126	114	109	143	9%	34	31%
Product usage						1 199	78%	1 199	
Purchased goods						35	2%	35	
Purchased services						68	4%	68	
Total	266	1 702	1 902	1 420	370	1 529	100%	1 159	313%

Figure 2 shows the change during the analysed years. The result since last year has increased by 313%. The large increase is due to the climate impact of PAF's slot machines (product usage) being included for the first time this year. Table 2 shows the results with the location based method.

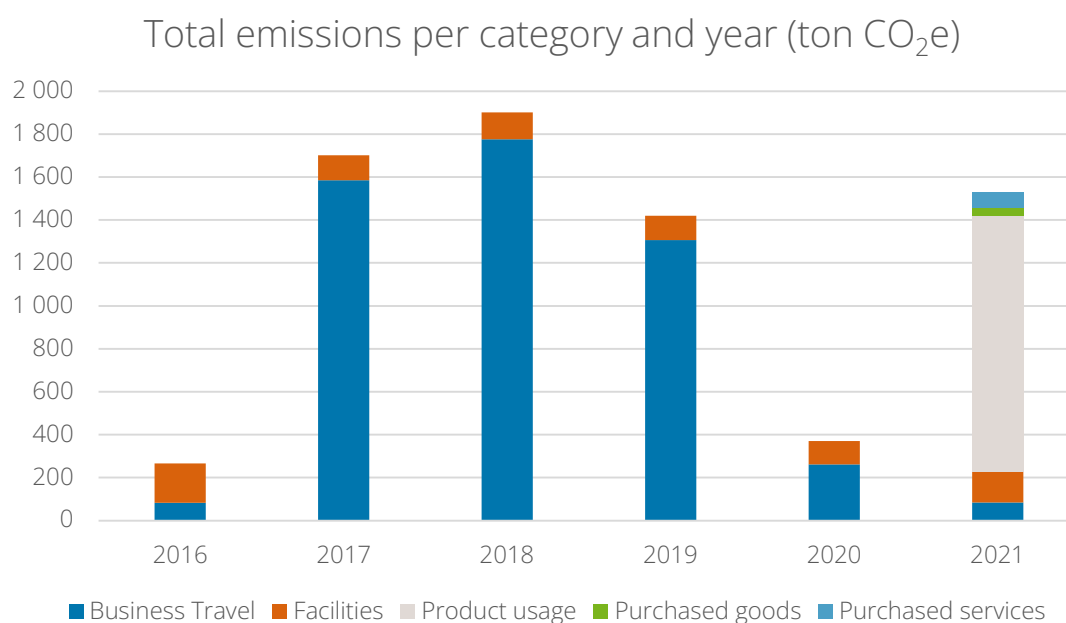


Figure 2. Total emissions (tonnes CO₂e) per year.

Table 2. Total climate impact (tonnes CO₂e) with market based and location based method during the last two years.

GHG emissions (tonnes CO ₂ e)	Market based	Location based
Total 2021	1 529	1 761

Emissions per Scope

Figure 3 shows the climate impact (tonnes CO₂e) for 2021 divided into scope 1, 2 and 3. The majority of PAF's climate impact is within scope 3 which is mainly due to the climate impact from the slot machines (product usage). Scope 2 is the energy used by the company and consists of heating, cooling and electricity. Table 3 and Figure 4 show the greenhouse gas emissions divided into scope 1, 2 and 3 during 2016 - 2021.

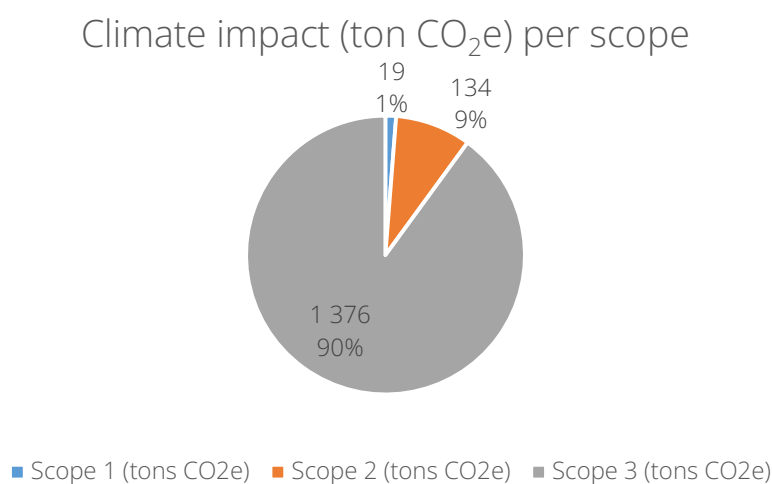


Figure 3. Total emissions (tonnes CO₂e) per scope year 2021.

Table 3. Total emissions (tonnes CO₂e) per scope during 2016 - 2021. Change since previous year is shown in both tonnes CO₂e and %.

Scope	2016	2017	2018	2019	2020	2021	% of total 2021	Change 2020 - 2021	Change % 2020 - 2021
Scope 1	82	61	25	38	24	19	1%	- 5	-20%
Scope 2	184	117	125	98	96	134	9%	38	39%
Scope 3	1	1 524	1 752	1 283	250	1 376	90%	1 125	450%
Total (ton CO₂e)	266	1 702	1 902	1 420	370	1 529	100%	1 159	313%

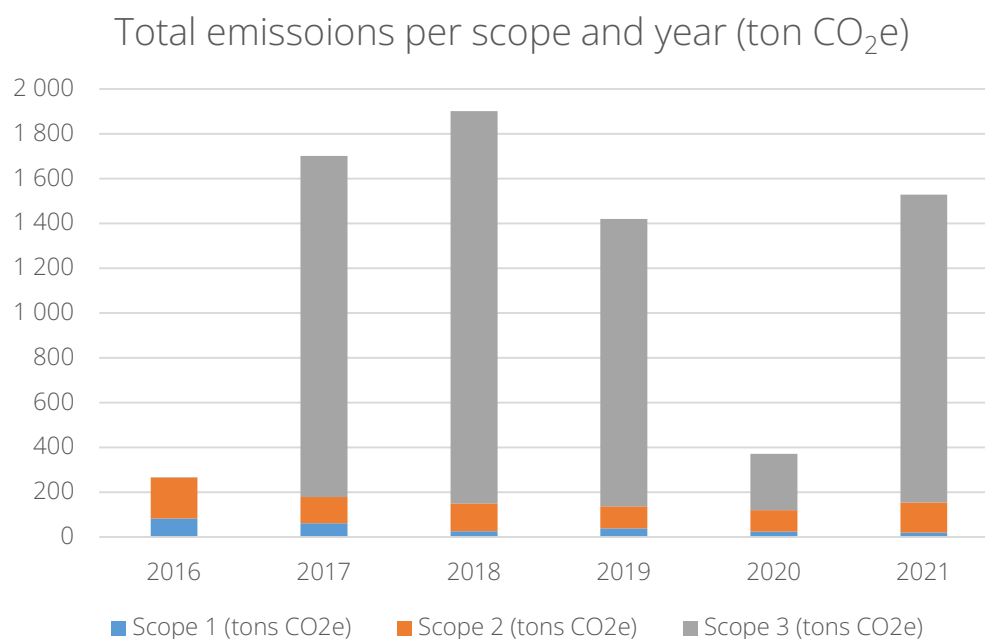


Figure 4. Total emissions (tonnes CO₂e) per scope per year.

KPIs

Table 4. KPIs emissions per turnover and emissions per employee 2016 - 2021. Change since previous year is shown in both tonnes CO₂e and %.

KPI	2016	2017	2018	2019	2020	2021	Change 2020 - 2021	Change % 2020 - 2021	Unit
GHG emissions per FTE	0,71	4,48	2,44	1,97	0,49	4,93	4,44	90%	t CO ₂ e / FTE
GHG emissions per MEUR	2,35		8,57	5,87	1,53	13,50	11,97	89%	t CO ₂ e / MSEK

Product usage and business travel are the areas that have the greatest climate impact and Tricorona therefore recommends that management is focused in these areas. For more information on specific actions, see the "Product Usage" and "Business Travel" sections.

Facilities

PAF's climate impact from energy comes from electricity use, cooling and heating in offices in Sweden, Finland, Malta, Spain, Estonia, Norway and Latvia. Emissions from facilities 2021 accounts to 143 tonnes CO₂e, corresponding to 9% of PAF's total emissions. See Figure 5 below for the climate impact for facilities during 2021.

Climate impact from facilities (tonnes CO₂e)

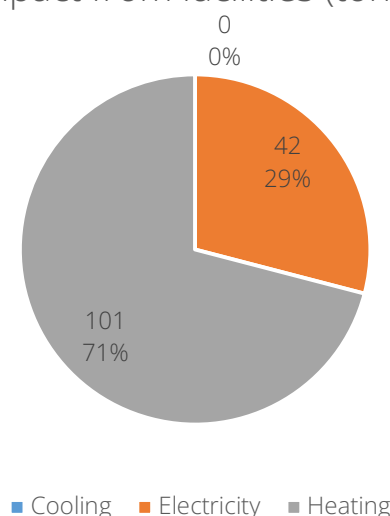


Figure 5. Climate impact (tonnes CO₂e) facilities 2021.

Table 5 shows the greenhouse gas emissions (tonnes CO₂e) related to the facilities for 2021 and previous years. Results for market based electricity are presented in Table 5 and location based electricity in Table 6. In the location based method the country's average climate impact for electricity is used. The marked based takes green energy certificates into account.

Table 5. Climate impact (tonnes CO₂e) for respective energy type 2016-2021 calculated with market based method. Change since previous year is shown in both tonnes CO₂e and %.

GHG emissions (tonnes CO ₂ e)	2016	2017	2018	2019	2020	2021	% of total 2021	Change 2020 - 2021	Change % 2020 - 2021
Cooling	19	4	5	5	5	0	0%	- 5	-100%
Electricity									
Market based	73	17	35	23	28	42	29%	14	51%
Heating	92	96	86	85	76	101	71%	25	33%
Total	184	117	126	114	109	143	100%	34	32%

Table 6. Climate impact (tonnes CO₂e) for respective energy type 2019-2021 calculated with location based method. Change since previous year is shown in both tonnes CO₂e and %.

GHG emissions (tonnes CO ₂ e)	2016	2017	2018	2019	2020	2021	% of total 2021	change 2020 - 2021	Change % 2020 - 2021
Cooling	19	4	5	5	5	0	0%	- 5	-100%
Electricity									
Location based						161	61%	161	
Heating	92	96	86	85	76	101	39%	25	33%
Total	111	117	91	91	81	262	100%	181	224%

In Figure 6 the climate impact from facilities for previous years is showed, since last year the climate impact has changed with 32%. The climate impact for both the heating and the electricity have increased. The climate impact from cooling has decreased, this is mainly due to emissions factors for district cooling has decreased.

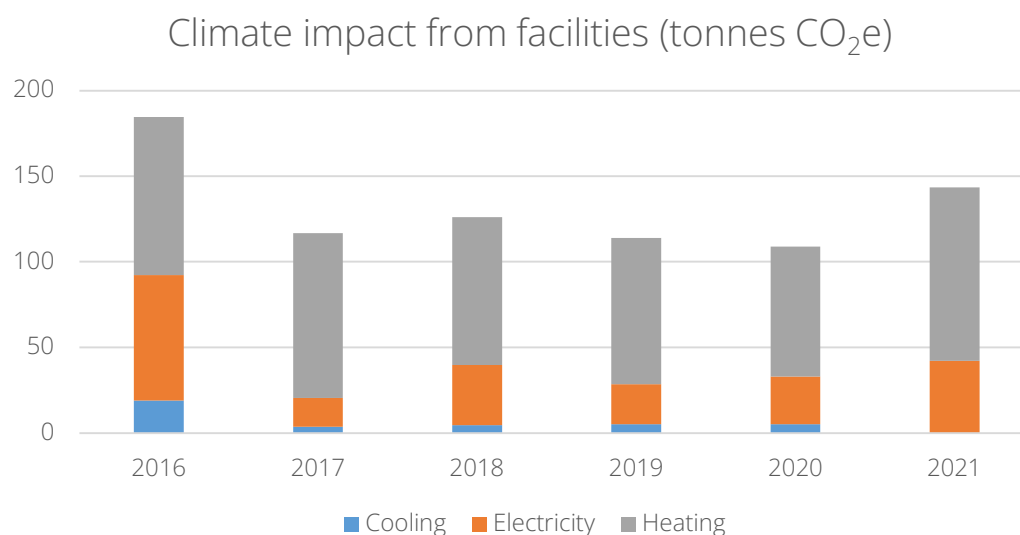


Figure 6. Climate impact (tonnes CO₂e) facilities per year.

In Table 7 the energy consumption per office and PAF's total consumption 2021 is showed. Data for some offices was not provided, thus estimations had to be made by Tricorona. The electricity consumption for the offices in Oslo and Malta was calculated by an average of the electricity consumption per square meter for PAF's other offices that had reported the electricity usage. The heating consumption for the offices in Katajanokka Skatudden and Oslo was calculated with an average of district heating usage (kWh/m²) of the reported offices. District cooling usage for the office in Katajanokka Skatudden was calculated with an average of reported offices district cooling usage.

No data for electricity, heating or cooling was reported for the Malta office why certain assumptions were needed. Currently, only electricity is included with no extra kWh added for heating or cooling due to lack of information about the heating and cooling systems. Considering the Malta office being the third biggest office, accurate data could increase the accuracy of the climate impact considerably. Tricorona recommends asking the landlord regarding the cooling system since if refrigerants are used in the cooling system, these can have a further significant climate impact. Generally, cooling is used to a large extent in Malta due to high outdoor temperatures.

Table 7. Energy consumption (kWh) per energy type 2021.

Energy (kWh)	Katajanokka Skatudden	Madrid	Malta	Mariehamn	Mikonkatu	Norrköping	Oslo	Riga	Stockholm	Tallinn	Total
Cooling	2 850		0		53 990	0			13 186	3 873	73 899
Electricity	11 656	1 215	21 658	452 218	36 836	13 085	922	372	17 161	17 951	573 073
Heating	10 384		0	552 000	353 475	49 476	1 967	2 500	38 936	24 500	1 033 238
Total	24 890	1 215	21 658	1 004 218	444 301	62 561	2 889	2 872	69 283	46 324	1 680 210

Climate impact factor for district heating in Tallinn has been estimated with a factor for district heating in United Kingdom due to lack of data for Estonia. Attempts have been made to contact the local utility company but without any success. Table 8 show PAF's energy usage over the years.

Table 8. Energy consumption (kWh) per respective energy type over the years.

Energy (kWh)	2016	2017	2018	2019	2020	2021	% of total 2021	Change 2020 - 2021	Change % 2020 - 2021
Cooling	81 798	79 387	110 030	101 180	96 181	73 899	4%	- 22 282	-23%
Electricity	1 279 199	981 342	1 085 084	1 056 395	675 721	573 073	34%	- 102 648	-15%
Heating	1 140 052	945 031	992 734	1 043 384	824 140	1 033 238	61%	209 098	25%
Total	2 501 049	2 005 760	2 187 848	2 200 959	1 596 042	1 680 210	100%	84 169	5%

KPIs, Energy

Table 9. KPIs emissions per turnover and emissions per employee 2016 - 2021.

KPI Facilities	2016	2017	2018	2019	2020	2021	Change 2020 - 2021	Change % 2020 - 2021	Unit
GHG emissions per FTE	0,49	0,31	0,16	0,16	0,14	0,43	0,28	66%	t CO ₂ e / FTE
GHG emissions per MEUR	1,62	1,00	0,57	0,47	0,45	1,17	0,72	62%	t CO ₂ e / MSEK

Business Travel

Business travel amounts to 84 tonnes or 5% of PAF's total greenhouse gas emissions 2021. PAF's climate impact from business travel comes from hotel nights, road travel including cars, vans, trucks, bus and taxis as well as air travel and travel with train and boats. Business travel by airplane stands for the biggest part of the emissions as can be seen in Figure 7 and Table 10.

Climate impact from business travel (tonnes CO₂e)

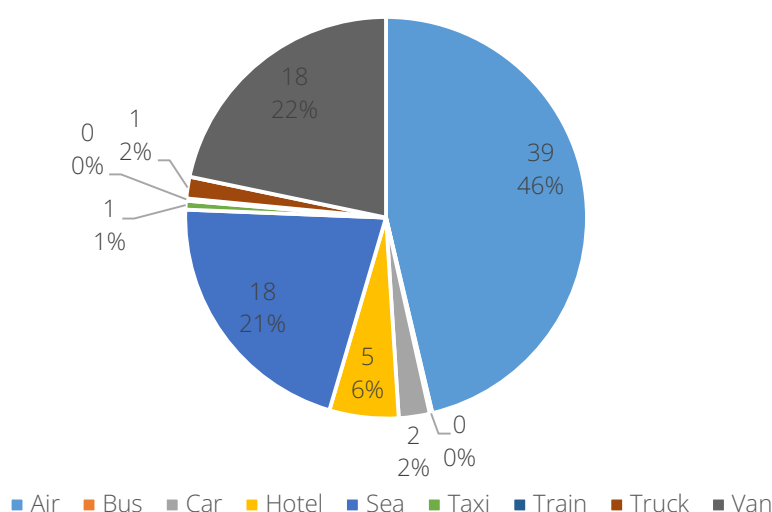


Figure 7. Climate impact (tonnes CO₂e) business travel 2021.

Table 10. Climate impact (tonnes CO₂e) from business travel 2016 - 2021. Change since previous year is shown in both tonnes CO₂e and %.

GHG emissions (tonnes CO ₂ e)	2016	2017	2018	2019	2020	2021	% of total 2021	Change 2020 - 2021	Change % 2020 - 2021
Air		1 373	1 516	1 061	208	39	46%	- 169	-81%
Bus					11	0	0%	- 11	-98%
Car	16	34	3	17	2	2	3%	0	26%
Hotel		80	151	123	11	5	6%	- 6	-56%
Sea		72	84	63	4	18	21%	13	317%
Taxi		0	0	0		1	1%	1	
Train		0	0	0	0	0	0%	0	98%
Truck	8	6	5	19	5	1	2%	- 3	-70%
Van	36	21	18	23	20	18	22%	- 2	-11%
Total	60	1 586	1 776	1 306	262	84	100%	- 177	-68%

In Figure 8 the climate impact from business travel during previous years is showed, since last year the climate impact has changed by -23%. The decrease is mainly due to less air travel compared to previous year.

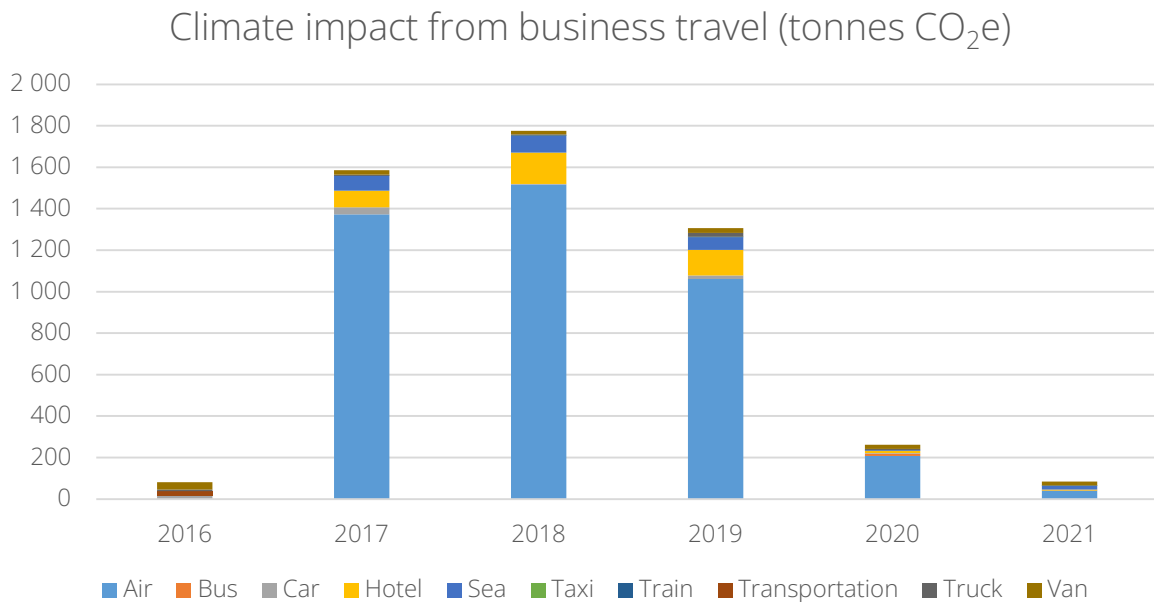


Figure 8. Climate impact (tonnes CO₂e) business travel per year.

Air Travel

In Table 11 the climate impact from air travel is showed, it accounted for 39 tonnes CO₂e.

Table 11. Most common routes 2021.

Route	No. flights	% of all flights	Emission/ Flight (kg)	Total emissions (kg)	% of total emissions	Total distance (pkm)	% of total distance
ARN-MHQ	118	42,1%	57	6 687	17,1%	14 223	8,3%
HEL-MHQ	61	21,8%	84	5 117	13,1%	17 176	10,1%
ARN-VIE	28	10,0%	254	7 120	18,2%	36 048	21,2%
ARN-MLA	14	5,0%	489	6 841	17,5%	37 235	21,8%
ARN-HEL	10	3,6%	104	1 036	2,7%	3 980	2,3%
ARN-OSL	8	2,9%	104	828	2,1%	3 182	1,9%
MHQ-TLL	8	2,9%	85	678	1,7%	2 295	1,3%
ARN-ZRH	6	2,1%	289	1 731	4,4%	8 929	5,2%
ARN-TLL	6	2,1%	102	612	1,6%	2 333	1,4%
ARN-MAD	6	2,1%	479	2 873	7,4%	15 611	9,2%
Other	15	5,4%	370	5 544	14,2%	29 404	17,3%
Total	280	100,0%	140	39 067	100,0%	170 415	100,0%

The most common route was between Stockholm-Mariehamn and Helsinki-Mariehamn.

A large reduction of the climate impact from air travel has been made since previous years, probably due to the COVID 19 pandemic. However, further big climate gains can be made by cutting short flights and replacing them with trains or digital meetings. The focus is therefore on reducing air travel.

KPIs, Business Travel

Table 12. KPIs emissions per turnover and emissions per employee 2016 - 2021. Change since previous year is shown in both tonnes CO₂e and %.

KPI Business travel	2016	2017	2018	2019	2020	2021	Change 2020 - 2021	Change % 2020 - 2021	Unit
GHG emissions per FTE	0,22	4,17	2,28	1,81	0,35	0,25	- 0,09	-38%	t CO ₂ e / FTE
GHG emissions per MEUR	0,72	13,67	8,00	5,40	1,08	0,69	- 0,39	-57%	t CO ₂ e / MSEK

Product Usage

PAF has different types of slot machines placed on ferries and in Mariehamn. The climate impact from usage of these products accounts for 1 199 tonnes CO₂e, corresponding to 78% of the total emissions. The contribution of the climate impact from usage of slot machines on land and on ferries is shown in Figure 9 and Table 13. It is new for this year to include the climate impact from the use of these slot machines. This is the category with the largest climate impact, mostly due to the boats running on fossil fuels. However, the ability to reduce the climate impact from the emissions from the boats is limited.

The climate impact from the boat's electricity production that is required to operate the slot machines is allocated to scope 3. This due to the operational control for PAF that is limited to installation and maintenance, PAF cannot decide when the machines are used nor where they are placed on the boats and cafés. Additionally, PAF cannot affect the electricity agreement or the fuel type on the boats.

Climate impact from product usage (tonnes CO₂e)

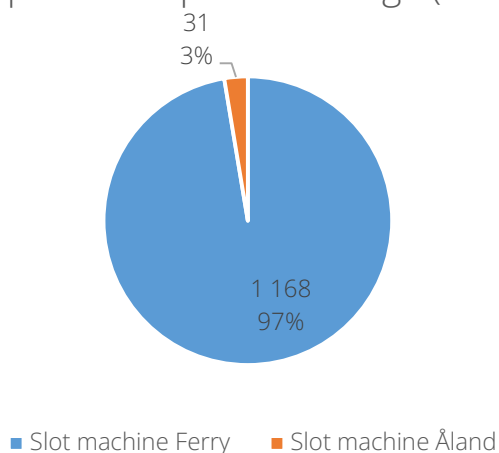


Figure 9. Climate impact (tonnes CO₂e) from product usage during reporting year.

Table 13. Climate impact (tonnes CO₂e) from product usage.

GHG emissions (tonnes CO ₂ e)	2021	% of total 2021	Change 2020 - 2021
Slot machine			
Ferry	1 168	97%	1 168
Åland	31	3%	31
Total	1 199	100%	1 199

Purchased Goods

The climate impact from purchased goods amounts to 35 tonnes CO₂e which corresponds to 2% of the total climate impact. Figure 10 and Table 14 show PAF's climate impact from purchased goods. The largest impact comes from laptops. This year is the first year PAF is reporting purchased goods, PAF reported buying 95 laptops and 85 smartphones.

Climate impact from purchased goods (tonnes CO₂e)

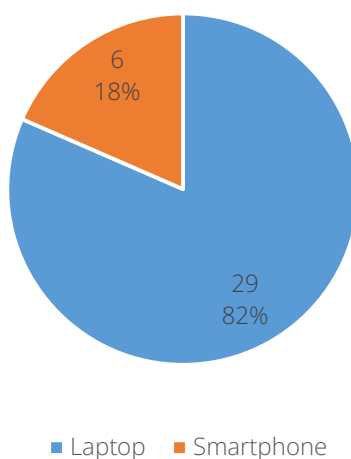


Figure 10. Climate impact (tonnes CO₂e) from purchased goods 2021.

Table 14. Climate impact (tonnes CO₂e) from purchased goods 2021.

GHG emissions (tonnes CO ₂ e)	2021	% of total 2021	Change 2020 - 2021
Laptops	29	82%	29
Smartphones	6	18%	6
Total	35	100%	35

PAF can reduce the climate impact from purchased goods by buying less new electronics, keep the current product for a longer time, repair broken ones and lease products are options to reduce the climate impact.

Purchased Services

PAF has servers hosted in Ireland and Finland which are included in Purchased Services. The servers in Finland are reported to use 100% renewable energy and the servers in Ireland using 60% of renewable energy. The climate impact from this category accounts for 68 tonnes CO₂e corresponding to 4% of the total emissions. Figure 11 and Table 15 show PAFs climate impact from purchased services. This year is the first year PAF is reporting purchased services.

Climate impact from purchased services

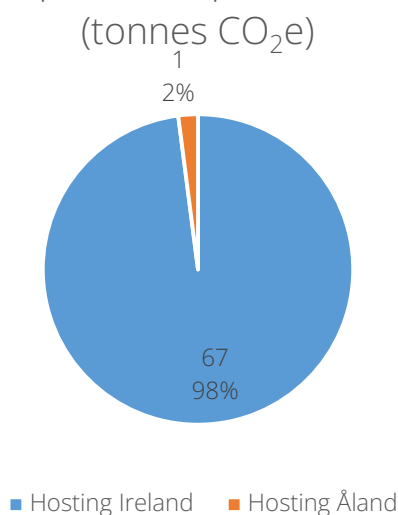


Figure 11. Climate impact (tonnes CO₂e) from services 2021.

Table 15. Climate impact (tonnes CO₂e) from services 2021.

GHG emissions (tonnes CO ₂ e)	2021	% of total 2021	Change 2020 - 2021
Hosting			
Ireland	67	98%	67
Åland	1	2%	1
Total	68	100%	68

Reliability Analysis

The reliability analysis classifies the result into two categories (measured and estimated) based on the reliability of the data. The purpose is to evaluate the data and show whether the data collection can be improved. The analysis is based on whether the data is measured or estimated by the company. Generalizations and average values for emission factors are not evaluated because the business does not have the opportunity to influence these.

Data that are estimated can with advantage try to be measured to give a higher reliability in the result. The distribution of measured and estimated values is shown in Figure 12 below.

Level of confidence

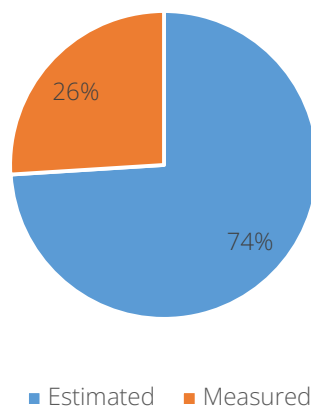


Figure 12. Reliability analysis of data for climate audit per year.

PAF is urged to primarily review the following items more thoroughly for next year: Electricity, heating and cooling for the office in Malta. District cooling and district heating for Katajanokka Skatudden.