

CARBON FOOTPRINT

2021 REPORT

Planning Unit - Strategic Planning Department May 2023





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1. INTRODUCTION, OBJECTIVES AND METHODOLOGY

Since 2016,Doctors of the World has been carrying out diagnoses on the carbon footprint resulting from the operation and activities carried out on an annual basis, except in 2018. In 2020, in addition to the data from our work in Spain, information regarding greenhouse gases emitted from our representations in the countries of the South was included.

This report corresponds to the diagnosis of our carbon footprint resulting from the greenhouse gases emitted by our activity and carried out with data related to 2021, a year marked by the gradual exit of the restrictions due to the Covid19 pandemic. This year was a relative change compared to 2020 in terms of returning to regular activity, as had been done prior to the pandemic. On this occasion, data and analysis related to the activity carried out both in Spain and in the rest of the countries where we work are also included.

This report takes into account the data from both the year of analysis, 2021, and the previous ones, so that an analysis of the evolution and trends observed in these years is included, in the last section, including the influence of the pandemic on the results obtained in this regard.

The same tool that was used to make the diagnoses of previous years has been used, so that we can ensure that the measurement has maintained equal parameters and criteria for the calculation and analysis of temporal trends.

The data collection has been carried out during the last quarter of 2022 and there have been primary sources of information collection, through the self-administered calculation tool from the countries, regional headquarters and departments of the Central Headquarters of the organization. In the case of English- and French-speaking countries of intervention, the calculation tool has been provided translated into both languages.

The data have been provided by the departments of the Headquarters; by 1 1 of the 1 5 Autonomous Seats: Andalusia, Valencian Community, Castila La Mancha, Aragon, Navarre, Madrid, Balearic Islands, Melilla, Galicia, Extremadura and Basque Country; and by 13 of the 16 countries of intervention: Palestine, El Salvador, Guatemala, Honduras, Mozambique, Venezuela, Bolivia, Senegal, Haiti, Mauritania, Ukraine, South Sudan and Sierra Leone.



2. SUMMARY OF EMISSIONS

First, we will present a first table in which the data obtained for 2021 appear, then we explain what the different elements or "scopes" that make up the carbon footprint analysis consist of and, finally, we explain the different results in a global way.

The following table summarizes the **tons of C02 equivalent emissions** (tCO2e) by type of *scope* corresponding to 2021 data for both Spain (regional headquarters and headquarters) and for the rest of the countries.

ESPAÑA Y TERRENOS - TOTALES 2021 (1CO2e)						
		ESPAÑA	TERRENOS	TOTAL 2021		
		2021	2021	TOTAL 2021		
Aleance 1	Combustibles fósiles	22	150	172		
Alectice 1	Fluorados	0	0	0		
	TOTAL	22	150	172		
		ESPAÑA	TERRENOS	TOTAL 2021		
		2021	2021	TOTAL 2021		
Alcance 2	Electricidad	0	139	139		
	TOTAL	0	139	139		
		ESPAÑA	TERRENOS	TOTAL 2021		
		2021	2021	TOTAL 2021		
	Papel	2	4	6		
Alcance 3	Viajes in itinere	159	324	483		
	Viajes de negocios	234	68	302		
	TOTAL	395	396	791		
		ESPAÑA	TERRENOS	TOTAL 2021		
		2021	2021	TOTAL 2021		
	Alcance 1 + 2	22	289	311		



What are the Scopes that we deal with here to calculate our Carbon Footprint? It is the way by which the international standards of HC measurement define and distinguish the different sources of emission of Greenhouse Gases (GHG) that result in our HC and that produce a warming of the atmosphere, these being the fundamental cause of the current climate crisis that, directly and indirectly, affects the health of people, especially the most vulnerable.

Scope 1: Direct greenhouse gas (GHG) emissions from sources owned or controlled by the organization.
Scope 2: indirect GHG emissions associated with the generation of electricity acquired and consumed by the organization.
Scope 3: includes other indirect GHG emissions, resulting from the activities of the organization, but occurring from sources that are not owned or controlled by the organization.

Next, we will specify a little more some of the elements that constitute these scopes, to improve the understanding of the data obtained.

- Emissions from electricity consumption. Electricity emissions in Spain are considered a zero footprint when renewable energy is contracted through the contract with *Iberdrola Renovables* currently in force. This is not completely real, since in Spain the supply system is common and does not allow us to distinguish what type of energy we are consuming, but by contracting renewable energy we guarantee that an amount equivalent to what we consume is purchased from renewable energy producers.
- **Business** trips. Business trips include, in the case of Spain, most international flights, at least all those contracted via travel agency. Some domestic, continental or country-based flights are included in international business trips.
- Travel in itinere. Travel in itinere is travel by people from home to their place of work.
- Fluorinated gases. Fluorinated gases, although highly polluting where they are present, have not yet been included in the overall calculation because of the difficulty of obtaining the corresponding information. These gases are present, above all, in the air conditioning equipment that is installed in our buildings and work offices, both in Spain and in the rest of the countries where we work. It is not easy to obtain information on the types of gases included in this equipment because many of them were installed before carrying out these carbon footprint diagnoses and/or there is no information from the installation companies. However, with pedagogical character, we will include this item in the measurements of the next annual reports to, at least, start collecting this information from those teams of which information is available or those of new installation.



The data shown above in the table on our HC for 2021 only gain analytical relevance if we can compare them with data from previous years and, thus, be able to observe if there is any type of positive or negative trend in GHG emissions by our organization. Later we will focus on observing where and in what aspects we have advanced or regressed in our emission levels.

The following table shows a comparison with the calculations made since these Carbon Footprint diagnoses were launched. It should be remembered that from 2016, the year of the beginning of these diagnoses, until 2020, they were carried out in Spain exclusively (Autonomous Headquarters and Headquarters) and, from 2020, the diagnoses are also included from the countries where we work:

ESPAÑA					TERREN	DS						
Año	os de cálculo	2016	2017	2019	2020	2021	Años de cálculo		Años de cálculo		2020	2021
Neanco 1	Combustibles fósiles	37	40	40	22	22	Aleaneo 1	Combustibles fósiles	294	150		
AIGGING I	Fluorados	0	0	0	0	0	Alcance I	Fluorados	0	0		
	TOTAL	37	40	40	22	22		TOTAL	294	150		
Alcance 2	Electricidad	51	46	0	0	0	Alcance 2	Electricidad	104	139		
	TOTAL	51	46	0	0	0		TOTAL	104	139		
	Papel	2	2	2	2	2		Papel	11	4		
Alcance 3	Viajes in itinere	141	141	152	80	159	Alcance 3	Viajes in itinere	356	324		
	Viajes de negocios	273	238	453	125	234		Viajes de negocios	18	68		
	TOTAL	416	381	607	207	395	395 TOTAL 385		396			
	Alcance 1 + 2	88	86	40	22	22	2 Alcance 1 + 2		398	289		
	Alcance 1 + 2 + 3	504	467	647	229	417		Alcance 1 + 2 + 3	783	685		

The measurement of the carbon footprint of each of the scopes is carried out in tons of CO2 equivalent (*tCO2e*), which is used in an internationally standardized way to measure and compare the level of greenhouse gas emissions (GHG: which is not only CO2) according to its equivalent in tons of CO2.¹

In a visual way, the data and the evolution of our Carbon Footprint during these 6 years that appear in the previous table are reflected in the graph that we present below:

¹ <u>https://medicoplus.com/ciencia/gases-efecto-invernadero</u>





It is evident the disruption observed in this series that supposes, in 2020 and possibly part of 2021 (last of this series), the Covid19 pandemic in terms of reduction of human mobility and its result in the reduction of GHG emissions from our vehicles and trips, which are the main sources of GHG emissions of our organization. Thisdisruption in the series collected is noteworthy mainly in terms of data for Spain. For the rest of the countries it is not evident since this is the first year of data collection. It will be necessary to pay attention to the results of the measurement carried out with the data of 2022 and subsequent ones, to verify if there is a really decreasing trend in our emissions, as reflected in the columns corresponding to 2021, with respect to years prior to the pandemic.

Next, and as a correlate of the above, we present a table where we can observe the proportion of variation, either increasing or decreasing, of the values of our HC year by year.



VARIACIÓN SOBRE EL AÑO ANTERIOR								
	ESPAÑA	Variación	INTERNACIONAL	Variación				
2016	504							
2017	467	-8%						
2019	647	39%						
2020	229	-65%	783					
2021	417	82%	685	-12%				
Variación 20	16-2021	-17%						

tCO2and emitted since 2016: comparison of variation with respect to the previous year.

There is an evolution in sawteeth corresponding to different calculations made from 2016 to date. The explanation of these can be found in the previous annual reports made since 2016. In the case of the last year analyzed, 2021, we can observe a lower level of GHG emissions compared to the first year of measurement, 2016, in a **reduction of 17**% for **Spain, and 12% for countries.** As noted above, it will be necessary to observe the data for 2022 in order to establish some type of decreasing trend or its opposite, taking into account that part of 2021 was conditioned by restrictions on human mobility as a result of measures to prevent contagion by Covid19.

Next, a detailed analysis is carried out on the type of GHG emissions in 2021 both in Spain and in the rest of the countries where we work.





As we can see in this graph, the main sources of GHG emissions fromWorld Medicines in Spain have been those corresponding to *business trips* and *commuting trips*, constituting a total of **94% of emissions**.



At the international level, emissions due to business travel do not acquire² as much relative relevance as in the case of Spain and two other additional determining factors are incorporated *into itinere trips*, which are, on the one hand, emissions from the *electricity* consumption in our facilities and, on the other, the fuel consumption of *the vehicles* we use in our trips to the places of intervention. These three factors together, commuting trips, electricity consumption and the fuel of our vehicles , account for a total of almost **90% of our emissions in the field**.

 $^{^2}$ El Carbon footprint calculation of international travel of the entire organization is done for Headquarters because the management of ticket purchase is centralized in General Services, with which the calculation of emissions is assumes by la Headquarters.



3. SCOPE 1 AND 2. INDICATORS AND COMPARISONS BETWEEN HEADQUARTERS AND FIELDS

This section presents the analysis of data and comparative measures between sites and between terrains related to Scopes 1 and 2.

It should be remembered that these scopes refer mainly, in the case of scope 1, to the consumption of fuels from non-renewable fossil sources for the own vehicles necessary for travel to the places of intervention and to air condition our workplaces (heating and air conditioning); in the case of **scope 2** it refers to the consumption of electricity produced. through non-renewable sourcess.



In the case of our offices in Spain, in the graph above, the figures for **scopes 1 and 2** have been divided by the number of people employed in each office. The venues with the highest number of emissions coincide with the venues where more kilometres are made to carry out activities, through mobile units or other types of vehicles. Specifically, the headquarters in Andalusia has four offices and four mobile units. In general, those venues whose geographical scope is wider, such as those of Andalusia, Castilla La Mancha or Extremadura are the ones with the highest GHG emissions due to what we have already commented previously: fuel expenditure, travel in itinere and business trips are the main factors.





This graph shows how the level of GHG emissions has been reduced from 2016 to 2021. Although some specific data is missing from some Autonomous Headquarters of 2021, in general taking into account the **average** emissions, there is a significant reduction in emissions compared to 2016 **of approximately one third (from 0.6** in 2016 **to less than 0.2 tCOe in** 2021). However, as we have previously insisted, it will be necessary to observe subsequent measurements that attenuate the distortion caused by the outbreak of the Covid19 pandemic, to verify this trend towards the reduction of our carbon footprint.

Below are the results obtained for 2021 in our offices in the countries where we operate.





This graph presents a general data quite similar to each other between countries and that are clearly distorted by the high level of GHG emissions from our offices in **Venezuela and Ukraine**. The main cause, as can be seen in the graph, is, in the case of Venezuela, in **scope 2**, that is, in a high consumption of **electricity** from non-renewable energy sources compared to the rest of our field offices. In the case of Ukraine, on the other hand, it is in **scope 1**, corresponding mainly to the consumption of fossil fuels due to the use of **own vehicles** to travel to the places of intervention.



As can be seen in the graph above, in which we have eliminated Venezuela in order to analyze the comparative relative data between countries without the distortion produced by its extraordinary data, we find that, in general, in our countries, emissions from scope **1** (trips to intervention sites with their own vehicles) are greater than **scope 2**, corresponding to the consumption of electrical energy.

If we analyze these same emissions, but the number of employees factor is included, we can see, as in the previous graph, the distortion that Venezuela represents with respect to the rest. In this case, deeper with respect to Ukraine in relative terms.





If we eliminate from the equation the distortion that Venezuela supposes due to its special characteristics, we can observe the following:



Taking into account the relative data of the number of employees with respect to the activity generated in the countries and, consequently, their levels of GHG emissions, a **greater homogenization** is observed. However, with respect to data from previous years, the absence of information from our projects in **Syria** does not allow us to assess in quantitative terms what



our global impact has turned out to be, since the interventions carried out in this country have been among those that have contributed the most to our carbon footprint in the international arena.



4. SCOPE 3

The analysis of the emission factors included in Scope 3 is a special section, since they constitute, according to the evidence, together with the electricity consumption analysed in Scope 2, the bulk as main contributors to our impact on our carbon footprint.

It should be remembered here that the factors that have been included in the measurement of Scope 3 are the **consumption of paper**, which although less and less, constitutes one of the raw materials most present in daily work; travel **in itinere**, those trips necessary to get from homes to work centers and vice versa; and **business trips**, which are those trips made at a greater or lesser distance to participate, organize, assist ... to work meetings.

The data, measured in tonnes of CO2 equivalent, obtained for 2021 on the factors included in scope 3 for both Spain and the rest of the countries are as follows:

		ESPAÑA	TERRENOS	TOTAL 2021
		2021	2021	TOTAL 2021
	Papel	2	4	6
Alcance 3	Viajes in itínere	159	324	483
	Viajes de negocios	234	68	302
	TOTAL	395	396	791

ALCANCE 3 - 2021: ESPAÑA E INTERNACIONAL

This is the situation observed for 2021 in terms of the different conditioning factors of the level of GHG emissions included in Scope 3, firstly for the case of Spain and, secondly, for the rest of the



countries:

Emisiones por viajes in itínere (España)						
Tipo de vehículo	Dato de actividad (km recorridos por pasajero)	Emisiones CO ₂ (kg CO ₂)	Emisiones CH₄ (kg CO₂e)	Emisiones N₂O (Kg CO₂e)	Emisiones GEI (kg CO ₂ e)	
Motocicleta	23.811	2.337	50	14	2.402	
Coche	804.922	135.470	46	1.271	139.187	
Metro	54.468				1.525	
Autobús	120.805	14.313	2	121	14.436	
Cercanías	46.371				1.632	
	Total emisiones in itinere	152.120	99	1.406	159.181	

In Spain, the two most widely used means of transport for travelling to and from the workplaces are the **private car** powered by fossil energy sources (**87%**), followed very far by the **bus (9%)** as the secondaverage.

Emisiones por viajes de negocios (Espana)							
Dato de actividad Emisiones CO2 Emisiones CH4 Emisiones N2O Emisiones GEI Tipo de vehículo (km recorridos por pasajero) (kg CO2) (kg CO2e) (Kg CO2e) </th							
Vuelo nacional	603.519	77.178	66	730	77.975		
Vuelo internacional	1.925.218	192.406	19	1.829	148.762		
Tren	243.895				7.179		
	Total emisiones viajes negocio	269.584	86	2.559	233.915		

Also in Spain, **international flights** made by staff working in Spain, either at the Headquarters or at the Autonomous Headquarters, account for the main part of GHG emissions in terms of business trips **(63%).** Then we find domestic flights **(33%)**, for obvious reasons and, finally, the train **(3%)** as the second means of locomotion, but to a lesser extent, after the plane.

Emisiones por viajes in itlnere (Internacional)								
Dato de actividad Emisiones CO2 Emisiones CH4 Emisiones N2O Emisiones GEI Tipo de vehículo (km recorridos por pasajero) (kg CO2) (kg CO2e) (Kg CO2e) </th								
Motocicleta	141.272	13.867	297	85	14.249			
Coche	1.130.674	200.932	217	1.049	202.197			
Metro	132.703				3.714			
Autobús	870.658	103.156	17	871	104.044			
Cercanías	0				0			
	Total emisiones in itinere	317.955	532	2.005	324.204			

With regard to the countries in which we intervene, the highest proportion of greenhouse gases emitted come from the use of private **vehicles** (62%), followed in this case by far, by buses **(32%)**.



Emisiones por viajes de negocios (Internacional)							
Dato de actividad Tipo de vehículo Dato de actividad (km recorridos por pasajero) Emisiones CO2 (kg CO2) Emisiones CH4 Emisiones N2O Emisiones GEI							
Vuelo nacional	320.669	41.007	35	388	41.430		
Vuelo internacional	242.786	24.264	2	231	24.497		
Tren	22.400				659		
Tota	al emisiones viajes negocio	67.021	38	635	68.353		

With respect to Spain, in absolute terms, the emission into the atmosphere of kilograms of CO2 equivalent from both national and international flights from the ground is apparently **much lower** and, in addition, maintains an opposite proportion: **international** flights account for **36%** Of the total, **domestic** flights account for **60%**, while the **train** remains the least used means of locomotion with **0.9%** of the total. To understand this situation, it must be taken into consideration that the calculation of the carbon footprint of international travel of the entire organization is carried out at the Central Headquarters because the management of the purchase of tickets is centralized in General Services, so that the calculation of emissions is assumed by the Central Headquarters and not by the countries.



5. DEVELOPMENTS AND TRENDS



As we have already mentioned, despite the influence of the consequences of the Covid19 pandemic, a trend towards the reduction of our carbon footprint could be observed considering that this reduction has even more relative weight due to the fact that the organization in recent years has suffered substantial growth.

However, it should be remembered that these calculations and the analyses we carry out from now on include the absence of data from four Autonomous Headquarters and three countries. In some cases they are Autonomous Headquarters or countries with considerably high relative weight in terms of number of personnel and volume of activity that include, with certainty, a high level of displacement and mobility through transport that consumes fossil fuels, both cars, airplanes, etc. That is, future analyses of the possible downward trend in our emissions would have to be mitigated if we included data from all the missing workplaces.

Next, we will deepen the analysis according to the different factors in each of the geographical areas where we develop our work.



5.1. Spain



If we look at the trend specifically in Spain, we see that differences appear in terms of the different scopes analyzed.

In the case of the sum of **scopes 1 and 2**, there is clearly a decreasing trend including the influence of the pandemic on 2020 and, probably, part of 2021. As we have already pointed out, it will be necessary to review subsequent measurements to check if this trend is confirmed, in addition to observing what degree of influence measures and plans to reduce our carbon footprint that can be implemented from this moment could have.

In the case of the **sum of the three scopes**, however, a difference is observed with respect to the previous calculation: the influence of GHG emissions from business trips and commuting trips is substantial and constitutes the differentiating element for not presenting a decreasing trend but, again, increasing with respect to 2020. However, this growth in emissions with respect to 2020 does not reach pre-pandemic levels, of 2016, 2017 or 2019, which may mean, if this trend continues, that it can be said that there is a negative trend, in addition, as we indicated previously taking into account the growth of the organization's activity in the last three years.





Regarding **scope 1** in Spain, taking into account the growth experienced, we observe an evident decrease in the consumption of fossil fuels due to the organization's own assets and facilities.



On the other hand, in **scope 2**, the decision to contract the electricity supply for our facilities with Iberdrola Renovables from 2019, thus guaranteeing the renewable origin of the sources of



electricity production we consume, means, de facto, being able to boast practically zero emissions in this regard.



Aswe indicated above, it is **scope 3** that has meant a substantial and evident increase compared to 2020, as is obvious. However, it should be noted that this growth has occurred especially in the factor of **business** travel, maintaining travel in itinere a similar proportion to previous years except for the exception of 2020 and, as we have already repeated, taking into account the growth experienced by the organization precisely in these last three years.



5.2. International

At the international level, we lack data to be able to establish clear trends, also taking into account that the reference value that we take as a starting point is located in data for 2020, an exceptional year as already outlined above.



Despite the lack of data, it is worth noting that despite the exception of 2020, there is a **reduction of more than half** in GHG emissions in scope 1 compared to 2020, a fact not negligible also taking into account the growth in activity of the organization.





In the case of **scope 2**, there is a growth in electricity consumption compared to 2020, taking into account the exceptional data provided by Venezuela.





Contrary to what happens in Spain, as we saw in previous sections, the proportion of factors corresponding to scope 3 is reversed and, in this case, we observe a **higher level of GHG emission in commuting trips** than in business trips. However, **in this last factor there is an increase** compared to 2020, which would be clearly explained by the return to normal living parameters after the restrictions maintained during the pandemic. On the other hand, unlike with commuting travel, **emissions due to business travel have decreased** compared to 2020, suggesting that measures to reduce face-to-face meetings may be implemented in favour of greater use of information and communication technologies that allow virtual meetings to take place, with the savings in costs and energy consumption that this entails, among other possible factors.



6. CONCLUSIONS

CARBON FOOTPRINT MEASUREMENT

- We focusin terms of **reducing our carbon footprint** on three of the factors analyzed.
 - In Scope 1: both in Spain and in the rest of the countries, the reduction of our consumption of fossil fuels for mobility through our vehicles: the reduction as far as possible of the trips in our own vehicles to carry out our interventions, in the first place of priority and, secondly , the introduction of vehicles that consume fuels from renewable energy sources.
 - **In Scope 2**: in the rest of the countries, implement measures to reduce the consumption of electricity from non-renewable energy sources.
 - **In Scope 3**: both business travel (domestic and international) and commuting travel make up the bulk of our greenhouse gas emissions in this scope. The carbon footprint reduction measures that are put in place will have to address proposals to reduce this type of factors.
- However, it should not be ruled out to make efforts to reduce our carbon footprint in other **factors** included in the three scopes analyzed other than those highlighted here that, although less relevant in relative terms, also contribute negatively to emitting greenhouse gases harmful to the health of people and the planet.

METHODOLOGY

- The calculations and analyses carried out in this report include the lack of data from 4 Autonomous Headquarters (almost 25% of the total) and **3 countries (almost 20% of the total)**. This represents a distortion in the analyses carried out in the sense that the reduction of our carbon footprint observed with the available data would be much smaller, which will have to be taken into account when measuring the intensity in the application of carbon footprint reduction measures and, at the same time, Improve the scope of **data collection** and approach the total number of work centers throughout the organization to obtain the necessary information.
- Take into account the recommendations received from the consultancy carried out in 2021 on the process of preparing the carbon footprint diagnoses carried out to date, on the one hand, and on the other, the proposals for calculation tools prepared by other international NGOs, in order to carry out a review process **of the calculation tool**, adapt it to the evolution of this type of tools with those already existing at the international level and incorporate improvements in both the measurement criteria and the data collection process.
- Taking into consideration the results, analyses, diagnoses and consultancies carried out to date, the preparation of the next Diagnosis corresponding to the 2022 data will have a new **updated and improved calculation tool** that will be accompanied by a proposal for a



Carbon Footprint Reduction Plan. specific and detailed, with proposals for achieving goals and measurement and monitoring instruments for the entire organization from 2023 to 2025, years corresponding to the current Strategic Plan of the Organization.