



GREENHOUSE GAS (GHG) EMISSIONS REPORT

**EUROPA MUNDO
VACACIONES 2020**





CIDEN – SOLIDARITY TOURISM FROM KOMANG TO KAMANDU

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Madrid, February 2021

EXECUTIVE SUMMARY.

No war, no recession, no other pandemic has had such a tragic impact on reducing CO2 emissions, over the last century, as that achieved by COVID-19 from March to December 2020.

There are fewer planes in the skies and fewer cars on the streets. Power consumption has dropped. NASA has detected the decrease of polluting gases on the atmosphere from space. Seismologists have noticed that the planet has been vibrating even less. Images of waters that look more crystalline and animals that now stroll happily through cities without humans around circulate on social networks. And we even gaze at the weather, the seasons, spring, summer, autumn and winter of 2020 seem like the ones of old times, from 30 or 40 years ago. The COVID -19 pandemic has left millions of infected and hundreds of thousands deceased, in addition of keeping most of the world's population confined, but it has also considerably reduced daily CO2 emissions, -17%, according to a report published by the journal *Nature Climate Change*.

If we make a short balance of CO2 emissions generated by Europamundo, 86.22% of 3,768.36 tons have been reduced to 542.62 tons of CO2e. But there has not been a reduction in environmental actions in the company but due to the dramatic situation caused by COVID-19.

This positive balance in emissions reduction is due to the total paralysis of the tourism sector which, according to the UNWTO, has decreased the number of international arrivals by -74% and according to Exceltur, a fall in Spain's income of -106.000 million, passing the GDP of tourism from 12,4% to 4.3% and in terms of employment the impact has been even more dramatic to the point that 728,000 professionals have been affected: 435,000 are in Lay Off (ERTE) and 293,000 have lost their jobs.

In our company the consequences have been a drop in sales of **-94%** compared to 2019, going from €163.48 million to €10.16 million, and from 142,776 passengers in 2019 to 11,217 in 2020 and in terms of employment we have gone from having 412 employees to 218.

Despite this, the company has continued to support a sustainability policy at all levels, and to sensitize its stakeholders.

The reduction of emissions has occurred in the 3 major areas:

- **Routes of our buses.** We have gone from covering 8.9 million kms to only 1.2, passing emissions from 2,638 tons of CO2 to 354.
- **Paper consumption.** In 2020, some brochures have been printed for the Department of the Spanish Market, Brochure of European and Monographic Tours, no more brochures, guides, nor magazines, nor the Foundation's activity reports, nor Sustainability Report have been printed. We have reduced paper consumption from 381 tons to 54.5, from 363 CO2e to 50.36.
- **Professional travels by plane.** There has been a reduction of 4.7 million kms to 0.87, with a reduction in CO2 emissions from 737 tons of CO2e to 50.36.

“Everyone talks about leaving a better planet for our children, why doesn't anyone try to leave better children for the planet?”

1. INTRODUCTION

For the last 5 years the CO2 emissions report has been prepared by Ecodes, an entity specialized in the subject, but given the situation caused by the COVID-19 Pandemic, and the paralysis in the tourism sector, our company has been forced to reduce costs to a minimum, fundamentally those essential to the activity of the company. For this reason, this report has been prepared by the Social Corporate Responsibility Department with the contribution of data by 6 other departments of Europamundo.

This introduction has two very different parts, on one hand, what is climate change and how it is affecting our planet, and the other part is to talk about how the pandemic has affected our sector, tourism, and our company.

1.1.- CLIMATE CHANGE

The Intergovernmental Panel on Climate Change (IPCC) is a scientific entity created in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP). It was established to provide objective, clear, balanced and neutral information on the current state of knowledge on climate change to governments responsible and other interested parties.

As part of the decision to adopt the Paris Agreement, the IPCC was invited to produce a special report on the 1.5°C warming on the pre-industrial level and related emission pathways. The IPCC accepted the invitation, further adding that this study would be carried out in the context of strengthening the global response to climate change, sustainable development and efforts to eradicate poverty. The IPCC has approved at its 48th plenary meeting (Incheon, Republic of Korea, October, 6 2018) the IPCC Special Report on the impacts of global warming of 1.5°C and related emission paths within the Sixth Report Cycle Evaluation (AR6) of the IPCC.

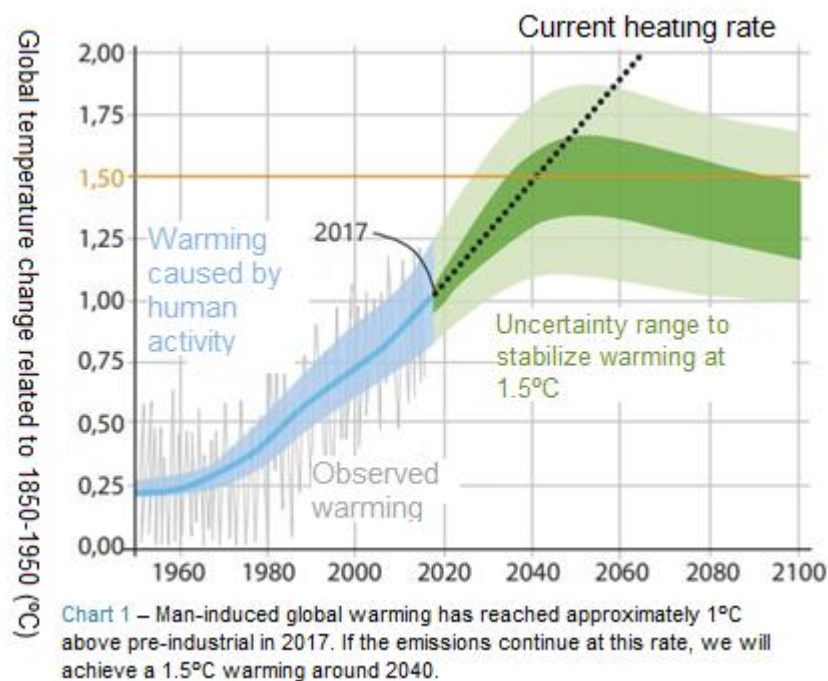
For this report, the IPCC uses the relevant literature for the three working groups in which the IPCC is structured (physical bases, impacts and adaptation, mitigation) and a calibrated language is systematically applied to express the degree of certainty of the main conclusions. This degree of certainty is based on evaluations of the scientific understanding underlying the conclusions and is expressed as a qualitative confidence level and when possible, quantitatively in a probabilistic way.

Where are we currently?

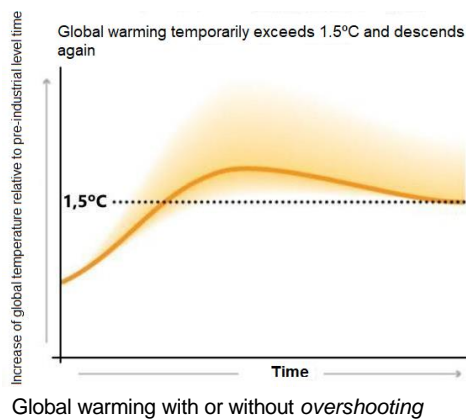
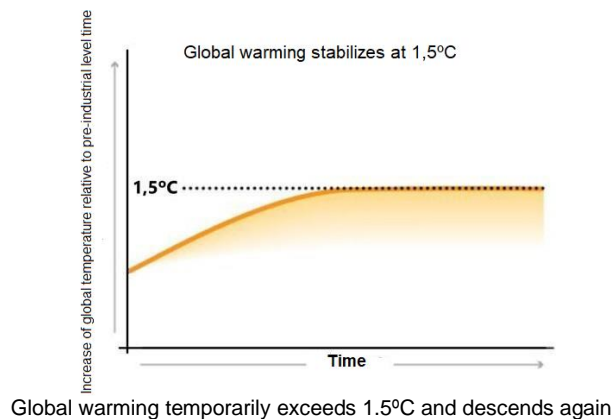
- Human-induced global warming in 2017 reached approximately 1°C above the pre-industrial level. Warming is greater in many regions, particularly in the Arctic region, which is between double and triple the global average. Warming is currently increasing at a rate of 0.2°C per decade due to past and present greenhouse gas emissions.
- Considering only past emissions, it is unlikely that a 1.5°C increase in global average temperature will be exceeded compared to the pre-industrial level.

If emissions continue at the current rate, a warming of 1.5°C will be achieved between 2030 and 2052

Warming caused by anthropogenic emissions will persist for centuries and millennia causing long-term changes in the climate system, such as sea level rise and associated impacts.



- There are two types of paths to limit the global warming to 1.5°C compared to pre-industrial level: those that stabilize the temperature at 1.5°C and those that temporarily exceed (overshooting) the limit of 1.5°C to reach this temperature at the end of the century.



- The amount of carbon remaining compatible with a heating of 1.5°C is 570 GtCO₂ with a probability of 66%. These estimates are higher than those made by AR5 and are subject to uncertainties that are similar to the amounts themselves. These estimates can be updated as research progresses, but at the current rate of emissions (approximately 42 GtCO₂/year) this remaining carbon will be consumed in less than two decades.
- The compliance with current mitigation commitments under the Paris Agreement is not enough to limit global warming to 1.5°C, even if it is complemented by ambitious and large-scale measures after 2030. With National Determined Contributions (NDC) under the Paris Agreement we would achieve a warming of around 3°C by 2100 with respect of the pre-industrial level, since emissions in 2030 would be approximately 52-58 CO₂eq/year, which doubles the emission rates compatible with a warming of 1.5°C.
- In the simulated paths that limit warming to 1.5°C, CO₂ emissions are reduced from 2020 until reaching zero emissions around 2050. In the paths that limit warming to 2°C, net zero emissions are reached around 2075. Emissions other than CO₂ show strong reductions that are similar in the 1.5°C and 2.0°C paths.

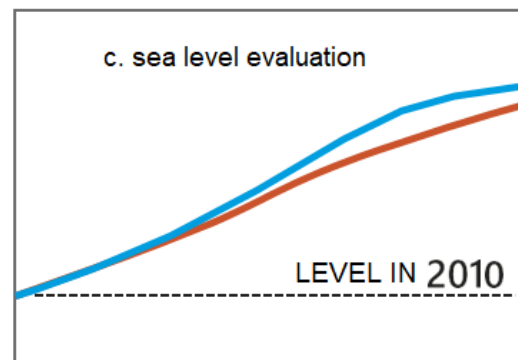
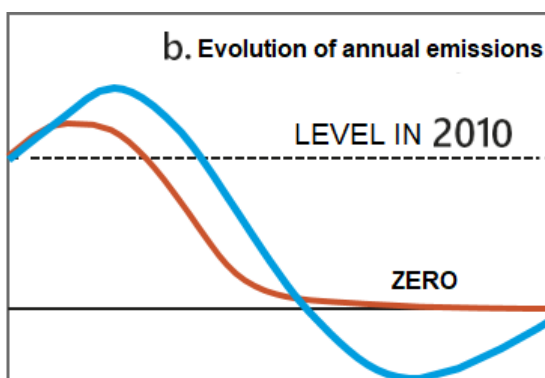
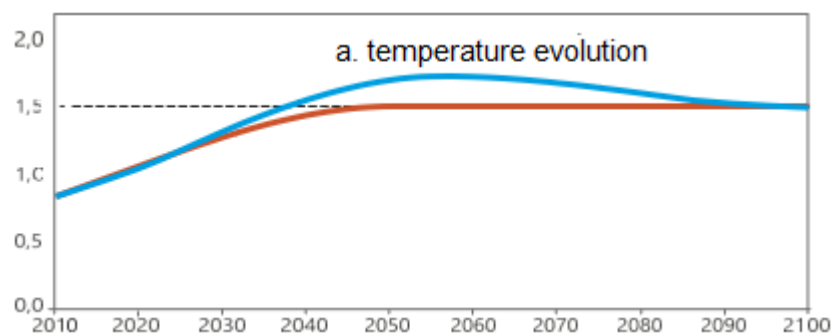
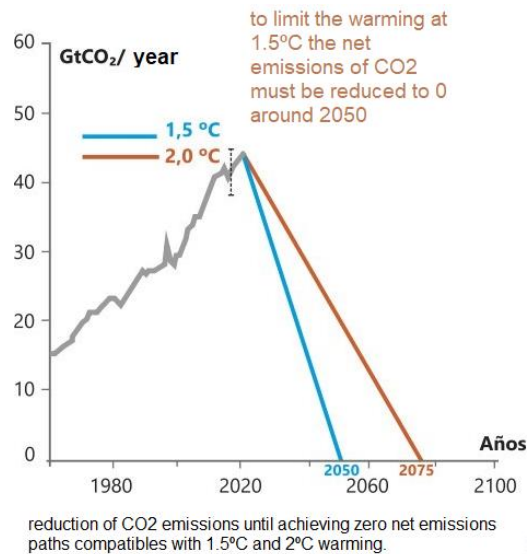


Chart 4.- Different paths consistent with a 1.5°C warming. Diagram of the relationship between (a) the evolution of the mean surface temperature change, with (b) the annual emission rate and (c) the rise in sea level that continues to rise after temperature stabilization.

What are the benefits of limiting heating to 1.5°C?

- The risks will depend on the rate, the possible temporary exceedance of the temperature and the duration of global warming. The risks will be greater if the heating temporarily exceeds 1.5°C and then returns to the level of 1.5°C (*overshooting*).
- Irreversible thresholds can be exceeded with heating between 1.5°C and 2°C. This would imply irreversible losses of many ecosystems and ice sheet instabilities that could cause sea

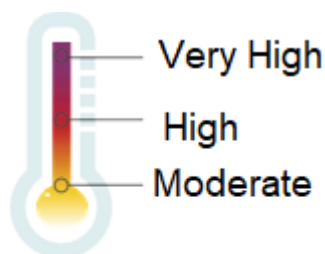
level rises of several metres on scales on hundreds to thousands of years.

- The risks to natural and human systems are lower for a warming of 1.5°C than for a warming of 2°C, including the frequency and intensity of extremes, impacts on terrestrial and marine biodiversity, on ecosystems and their services, livestock, food and water supplies, human health and safety, infrastructure and economic growth.



- Nevertheless, there are limits to adaptation and losses even for 1.5°C warming with specific implications for vulnerable regions and populations. Some impacts will continue beyond 2100, such as sea level rise, or will be irreversible, even if warming is limited to 1.5°C.

How risks depend on the level of warming



**Risk Due to
Climate Change**

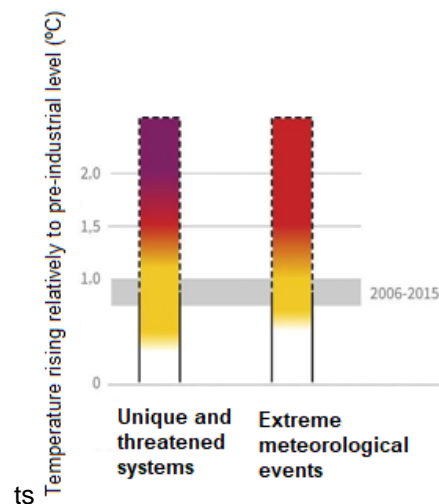
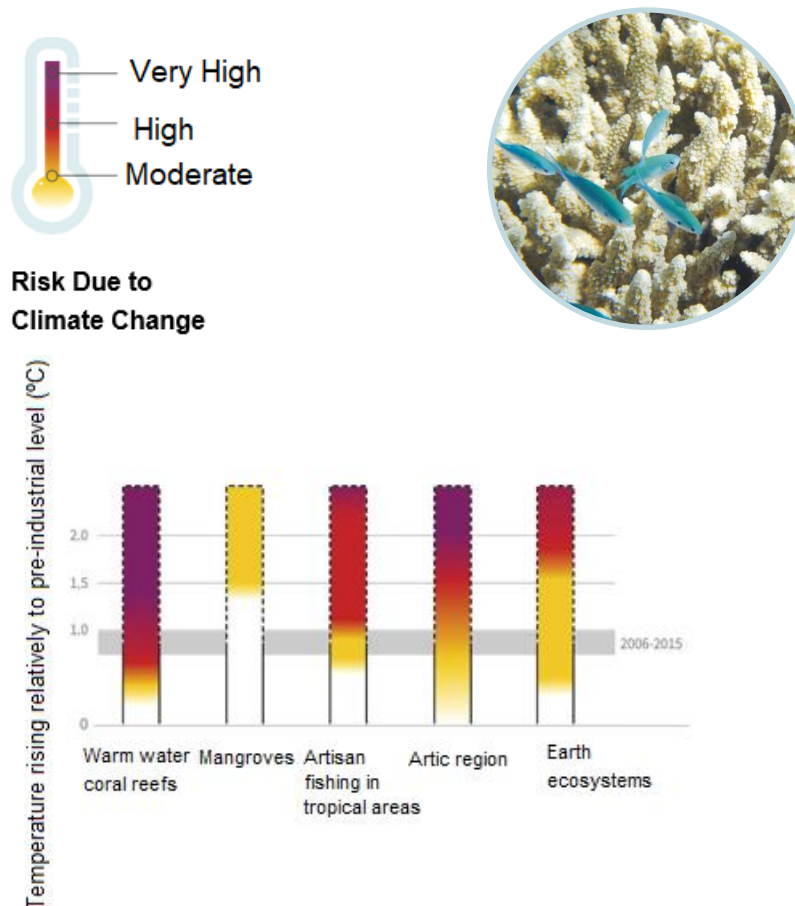
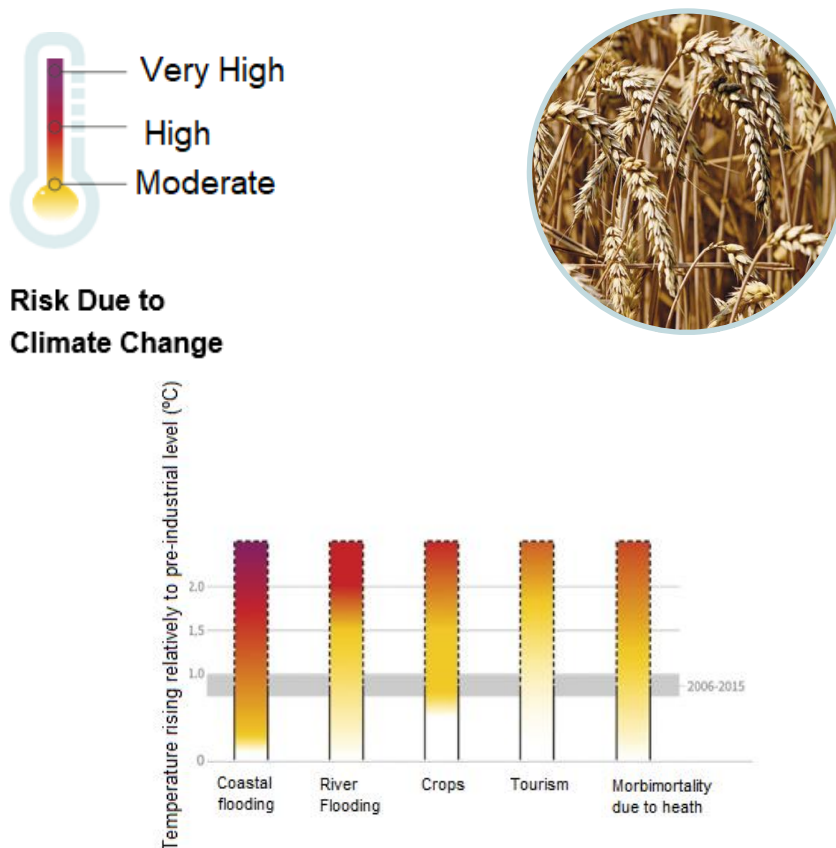


Chart 5a.- Risk dependence on the level of warming for a collection of key elements of the Earth system.



Risk dependence on the level of warming for a collection of key elements of the Earth system.



Risk dependence on the level of warming for a collection of key elements of the Earth system.

Half Degree Matters

Warm-water coral reefs will shrink between 70-90% at 1.5°C, and almost totally (>99%) by 2°C.

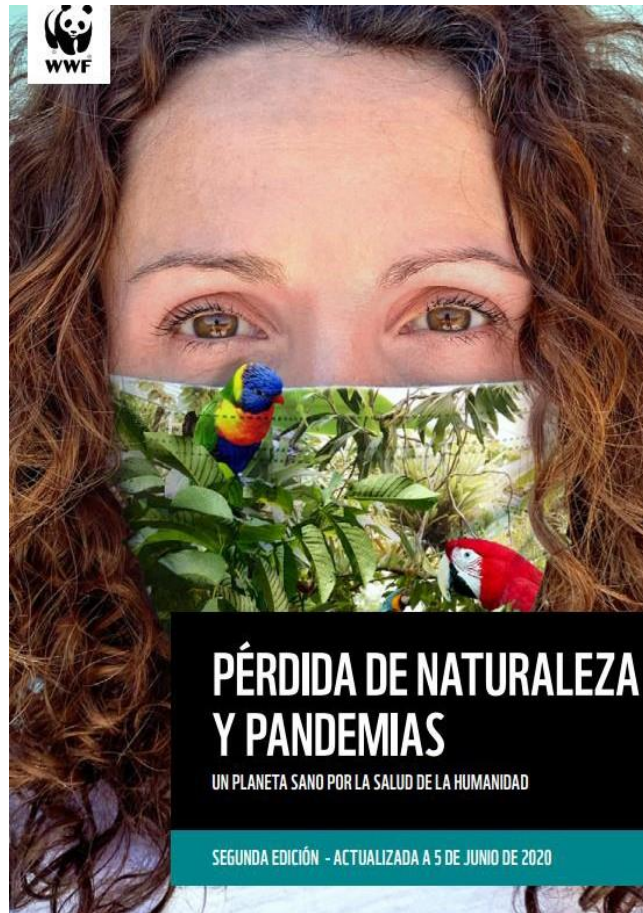
- A warming of 1.5°C is projected to shift the ranges of many marine species towards higher latitudes, as well as damaging many marine ecosystems, including loss of coastal resources and reduced productivity of ecosystems and aquaculture, especially in low latitudes. The risks of impact will be greater for 2°C than for 1.5°C.
- The probability of the disappearance of sea ice during the summer in the Arctic Ocean is substantially lower with a warming of 1.5°C than with 2°C. with a temporary temperature rise (*overshooting*). The loss of Arctic sea ice will take decades to reverse.

- Approximately 4% of ecosystems will undergo a transformation from one type to another with a warming of 1.5°C. This transformation will affect 13% with a heating of 2°C.

From 105,000 species studied, it is projected that 6% of insects, 8% of plants and 4% of vertebrates will lose more than half of their geographical distribution determined by the climate for a warming of 1.5°C. For a 2°C heating it would be 18% insects, 16% plants and 8% vertebrates.

- Other impacts associated with biodiversity, such as forest fires and the increase in invasive species, will be lower with 1.5°C than with 2°C of global warming.
- The risks associated with rising sea levels are greater at 2°C than at 1.5°C of warming. Increased warming amplifies the exposure of small islands, shallow coastal areas, deltas and consequently the risks associated with many human and ecological systems, including increased saline intrusion, flooding and infrastructure damage. The slower sea level rise associated with a 1.5°C warming reduces these risks and favors adaptation opportunities, including the management and restoration of natural coastal ecosystems and the strengthening of infrastructures.
- Lower risks are projected at 1.5°C than at 2°C for human health, particularly in relation to heat and ozone concentrations. The risks related to vector-borne diseases, such as malaria and dengue, will also be lower, including potential displacements in their geographic distribution.
- Limiting warming to 1.5°C, compared to 2°C, will translate into smaller reductions in harvests of corn, rice, wheat and potentially other cereals, particularly in sub-Saharan Africa, Southeast Asia and South and central America; and in the nutritional quality of rice and wheat that depends on CO₂. Reductions in food availability will be greater at 2°C than at 1.5°C in the Sahel, southern Africa, the Mediterranean, central Europe and the Amazon. Livestock will also be affected by increased temperatures through the quality of their diet, the spread of diseases and the availability of water.¹

¹ SUMMARY GUIDE IPCC SPECIAL REPORT ON THE IMPACTS OF 1.5°C GLOBAL WARMING AND EMISSIONS PATHS
RELATED. © 2019 Intergovernmental Panel on Climate Change.



Brochure: LOSS OF NATURE AND PANDEMIC
A HEALTHY PLANET FOR THE HEALTH OF HUMANITY
SECOND EDITION – REVISED 5TH JUNE 2020

THE DESTRUCTION OF THE PLANET, A KEY IN THE SPREAD OF ZOOZOSIS.

Viruses have always been present in the environment. We know that wildlife is a reservoir of diseases, many of them unknown, and we thought that entering dense and impenetrable jungles and other pristine ecosystems could mean coming in contact with terrible diseases. But the opposite is true. Unaltered natural systems reduce the possible transmission of diseases, as pathogens are “diluted” among the diversity of species (dilution effect), also limiting contagion and spread. In well-preserved habitats, with a great variety of species and a high number of specimens, viruses are distributed among the different species, but they also have a good chance of ending up in one that blocks their spread. In addition, there are predators that preferentially eliminate the weakest and sickest specimens. All of this contribute to keeping the effects of possible diseases under control in the population itself and to significantly reducing the risks of transmission to other species. The destruction and alteration of nature due to the increasing human impact on ecosystems and wildlife, combined with climate change, weakens natural ecosystems and facilitates the spread of pathogens, increasing the risk of contact and transmission to humans with the consequential negative effects on our health. Ultimately, humans can disrupt the balance of ecosystems, which also include potential pathogens, coming into direct contact with unknown viruses that can be lethal to our own species. Therefore, weakening the health of the planet means increasing the risks of transmitting new and old diseases and thus putting our health and our future at risk.²

² LOSS OF NATURE AND PANDEMIC. A HEALTHY PLANET FOR THE HEALTH OF HUMANITY. EDITION JUNE 5, 2020 WWF



UNWTO – COMMUNITY RURAL TOURISM (ACTUAR NETWORK)

1.2.- YEAR ZERO. COVID-19 PANDEMIC. CONSEQUENCES AND CURRENT SITUATION OF THE TOURISM INDUSTRY.

The **COVID-19 pandemic in Spain** is part of the [COVID-19 pandemic](#) caused by the [SARS-CoV-2](#) coronavirus. The first case of [COVID-19](#) in [Spain](#) was diagnosed on January 31, 2020 in [La Gomera](#),¹ although subsequent analyses revealed infection as early as January 1st, 2020,² while the first known death occurred on February 13 in [Valencia](#).³ It is estimated that the pandemic has caused more than 80,000 deaths in Spain, ⁴ of which more than 51,000 have been confirmed by PCR test.⁵ The vast majority of those who died were people over 65 years of age. According to the ENE-COVID seroprevalence study, one in ten Spaniards had been infected by the virus as of November.⁶

Faced with the rapid spread of the virus, on March 14 the [Spanish Government](#) decreed a [state of alarm](#) throughout the national territory and, protected by this measure, limited the free movement of citizens to essential acts such as the acquisition of food and medicines or to go to medical centres or to workplaces, resulting in the [population's lockdown](#) in their places of residence. On March 28, all non-essential face-to-face work activities were suspended for fifteen days. On April 2, the highest number of deaths from coronavirus was registered in one day (950). The [Congress of Deputies](#) was authorizing successive extensions of the state of alarm up to a total of six times.⁷ As of April 28, the [asymmetrical de-escalation](#) plan began by provinces.⁸ In mid-June, Spain was the fifth country in number of confirmed cases, behind the [United States](#), [Brazil](#), [Russia](#), and [United Kingdom](#), and the sixth country in number of deaths, behind the United States, Brazil, United Kingdom, [Italy](#) and [France](#).⁹

On June 21, after 98 days, the state of alarm expired and Spain entered the so-called "new normal". Throughout the summer, however, outbreaks multiplied in different parts of the country, which could not be contained and degenerated into community transmission. On October 25, the Government again decreed the state of alarm to face the second wave of infections. The [night curfew](#) was established, leaving the containment measures in the hands of the autonomous governments. Four days later, the Congress approved extending the state of alarm until May 2021.

On December 27, 2020, the vaccination campaign began in Spain with the [Pfizer y BioNTech vaccine](#), a week after being approved by the European [European Medicines Agency](#) and the [European Commission](#). On January 7, 2021, the infected exceeded two million.³

CONSEQUENCES AND CURRENT SITUATION OF TOURISM.

Tourism provides livelihoods for millions of people and enables billions to appreciate their own and different cultures, as well as nature. It represents more than 20% of the gross domestic product (GDP) of some countries and, in general, it is the third most important sector of the world's economy in terms of exports. Tourism is one of the sectors most affected by the coronavirus disease (COVID-19) pandemic, which has impacted economies, livelihoods, public services and opportunities on every continent. While maintaining livelihoods that depend on tourism should be a priority, rebuilding the sector also offers an opportunity to transform it by paying particular attention to harnessing the effects it exerts in the destinations visited and to create more resilient communities and companies through innovation, digitalization, sustainability and partnership.

³ Translated from: https://es.wikipedia.org/wiki/Pandemia_de_COVID-19_en_Espa%C3%B1a

According to available data, in 2019 tourism generated 7% of world trade, employed one in ten people worldwide and, through a complex value chain of interconnected sectors, provided livelihoods for millions of people in developed and developing countries.

Governments are struggling to recoup the lost revenue needed to finance public services, including social and environmental protection, and meet debt repayment schedules. According to UNWTO data, the number of international tourists fell by 74% in 2020. This endangers more than 100 million direct jobs in the industry, many of them in micro, small and medium enterprises (MSMEs) that employ a high proportion of women and young people. Informal workers are the most vulnerable.

The impact of COVID-19 on tourism threatens to increase poverty (Goal1) and inequalities (Goal10).

The pandemic could also slow progress towards achieving the Sustainable Development Goals (SDGs). Tourism is referred to directly in three of them: Goal 8 (Decent work and economy growth), Goal 12 (Responsible consumption and production) and Goal 14 (Life under the sea).

For women, rural communities, indigenous people and many other historically marginalized populations, tourism has been a vehicle for integration, empowerment and income generation. It has enabled service delivery in remote locations, supported economic growth in rural areas, facilitated access to training and employment, and often transformed the value that communities and societies place on their cultural and natural heritage.

Tourism's links with so many other spheres of society mean that this crisis also jeopardizes the industry's contribution to other SDGs, such as those of gender equality (Goal 5) and the reduction of inequalities within and between countries (Goal 10).⁴

THE TOURISM INDUSTRY IN SPAIN AND FORECASTS.

According to [Exceltur](#) data, the industry's employers association, nominal tourism GDP has barely been 48,051 million, which means a fall of 106,000 million (or -68.9%) compared to 2019, which has made this industry go from representing almost 12.4% of the national wealth to just 4.3%. Add and continue, because the forecasts for the future are not very promising and this year which has just started threatens to settle with a cut of 58,118 million in terms of GDP (37.6% less than 2019) and that will place the industry at the levels of a decade ago, whose weight in the national GDP will be around 8%.

Regarding the turnover of the companies, these have concluded the year with cuts of 69.7% and for this 2021 they estimate a cut in income of 45.4% compared to 2019. These forecasts, moreover, do not contemplate a total confinement, like the one experienced last spring, but there are mobility restrictions such as those currently being experienced and which are generating drops of activity of 86% in this month of January.

⁴ COVID-19 AND THE TRANSFORMATION OF TOURISM. UNITED NATIONS

In terms of employment, the impact has been even more dramatic, since workers in this industry are suffering particularly hard from the impact of the pandemic, to the point that 728,000 professionals have been affected: 435,000 are in ERTE (layoff) and 293,000 have lost their jobs. This means that 64% of the employment affected by the pandemic is tourism and, if you look at detail, it is 85% of the drop in affiliates and 56% of the ERTes (layoffs).

Add it all up and continue, because the survey carried out by Exceltur of businesspeople throws up harsh forecasts that are summarized in that only 31% of businessmen believe that the recovery will be in 2022 and 51.9% estimate that normality will not return until 2023. In addition, all this seasoned with achieving the necessary herd immunity, which makes the sector have its hopes pinned on the vaccine and on a unification criterion or a single passport that facilitates international mobility.

EFFECTS IN EUROPA MUNDO VACACIONES.

In 2019, Europamundo presented its best results since its start in 1997 with sales of 163.48 million and EBITDA of €10.59 million and 142,776 passengers in the year from 83 countries. Its human team consisted of 412 people, of which 195 are office personnel and 217 guides from our circuits, with a permanent employment percentage in the office of 82.8%.

Due to the COVID-19 pandemic and the paralysis of the tourism sector, our company, Europamundo, has had the following results at the end of 2020:

- Sales: 10,16 MM € (-94% 2019/2020)
- EBITDA: -9.09 MM €
- Number of passengers: 11.217 (-92% 2019/2020)
- Countries of our passengers: 46 (-44.6%)
- Staff: 218 people (-47% 2019/2020)

Our company is characterized by long and multinational tours, so the decrease in our sales is higher than the international data provided by the UNTWO, with a 74% drop in international arrivals. This decrease in sales in our company is mainly due to the constant evolution of the pandemic, in the vast majority of countries there are very strict restrictions on travel. Measures include mandatory testing, quarantines and, in some cases, the complete closure of borders, all of which have made it difficult to resume international travel from March to December.

There is also a significant decrease in the company's staff, but it is due to the group of guides that have the most work and service contracts. When there are tours to be carried out, they are registered in the company and when there are no circuits as in the 2020 from March to December they are not hired by the company.



UNWTO – CAHUITA NATIONAL PARK (COSTA RICA)



SOLODITARY CAMPS – CAMP FAOYE (SENEGAL)

2. METHODOLOGY

The creation of this report has used as a reference framework the manual “IPCC Guidelines for National Greenhouse Gas Inventories”, prepared by the Intergovernmental Panel for Climate Change, as well as “The Greenhouse Gas Protocol, a Corporate Accounting and Reporting Standard” and additional sources included in the bibliography at the end of this document.

The developed methodology is the following:

- Establish the limits of the evaluation to identify the main emission sources.
 - Collect activity data to quantify emission sources.
 - Analyse the quality of the and their sources.
 - Calculate emissions using the most appropriate conversion factors.
 - Analyse the results and assess them.
- Establish future action plans. Reduction plans.

Since it is a voluntary initiative, this methodology seeks to obtain rigorous results, but trying to avoid excessive complexity in sources that represent a small percentage of total emissions. The compromise between accuracy and complexity in sources that represent a small percentage of total emissions. The compromise between accuracy and complexity has been sought. Finally, an attempt has been made to offer maximum transparency.

GREENHOUSE GASES

There are six greenhouse gases recognized by the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), the group of hydrofluorocarbons (HFC) and perfluorocarbon (PFC) and sulphur hexafluoride (SF₆).

In order to homogenize the individual effects of each gas on climate change, the emissions of the different greenhouse gases are converted into a “single currency”: the equivalent in CO₂. This conversion is made from the “Heating

Gas recognized by Kyoto	Heating Potential (in 20 years)
Carbon Dioxide	1
Methane	86 ⁴
Nitrous Oxide	310
Perfluorocarbons (PFC)	6.500 – 9.200
Hydrofluorocarbons (HFC)	140 – 11.700
Sulphur Hexafluoride	23.900

Potential” of each gas, obtained by comparing the effect of the CO₂ molecule (see Image 1).

Kyoto Greenhouse Gas Warming Potential

As an example, reflect on the fact that a unit of methane has a warming potential 86 times greater than a unit of CO₂. Despite the lower warming potential of CO₂, it is this gas with the most important anthropogenic emissions.

It has been shown that, although the greenhouse effect potential of CO₂ is lower than that of other gases, the large amount of this gas emitted by man into the atmosphere in industrial processes, compared to the rest of GHG, represents between 60 and 80% of the global effect.

In this report we will always talk about CO₂ equivalent in the calculations made, apart from the warming potential of CO₂, and the warming potential of other greenhouse gases has also been taken into account.

2.1. SCOPE OF THE ANALYSIS

In this section we will see which sources of emission of greenhouse gases will be included in the report.

GHG Protocol divides the emission sources of all activities into three Scopes, which differentiate between direct emissions (Scope 1), produced in sources owned by the entity, and under its direct control and responsibility, and indirect emissions (Scope 2 and 3), which are emissions derived from emission sources that are owned by another entity, or that are not directly under the control of the company conducting the analysis.

The three scopes are the following:

- **Direct emissions or Scope 1:** Includes GHG emissions from emission sources that are owned or controlled by the organization. In this case, since the EMV headquarters does not have fossil fuel installations or fleet of vehicles owned by the company, no source of GHG emissions is taken into account for this scope.

This Scope includes:

In this scope none of the direct GHG emissions have been excluded.
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- **Indirect energy emissions or Scope 2:** It includes indirect GHG emissions produced by the generation of electricity, heat or steam of external origin and consumed by the organization. In the case of EMV, only emissions produced as a result of electricity consumption are taken into account in this section, since there is no heat or steam consumption by a third party.

This Scope includes: Electric Energy Consumption.

This Scope excluded: None of GHG indirect emissions have been excluded.

□ **Other indirect emissions or Scope 3:** Includes indirect emissions not included in Scope 2, and which, as a consequence of the organization's activities, originated from **GHG sources that are owned or controlled by other organizations**. Therefore, for the calculation, the GHG emissions derived from paper consumption, water consumption, professional travel by train, plane and intercity buses, waste production (paper, plastics and toners) and routes chartered by EMV have been taken into account in this section.

This Scope includes: Paper consumption, Water consumption, Professional travel by train, plane and intercity buses, Waste production (paper, plastics and toners) and Bus routes chartered by EMV.

When preparing an emissions report, GHG Protocol considers necessary to at least evaluate **Scopes 1 and 2**. It also recommends that the most relevant Scope 3 activities related to the company's activities be taken into account, in order to obtain a more complete and real assessment of the GHGs attributable to it.

2.2. CONSIDERATIONS FOR EACH SOURCE OF EMISSIONS

□ **ELECTRICITY CONSUMPTION DERIVED EMISSIONS**

The total electricity consumption of the billing for the year 2020 has been considered. This information has been provided by each of the electricity companies.

The Spanish electrical system is configured in such a way that almost all of the energy produced in the different plants located in the peninsula is "poured" into a common network, Red Eléctrica Española (REE) (Spanish Electrical System) from where it is supplied to all households and industries. The calculation will take into account the commercialization of that energy.

The different electricity markets with which this energy has been contracted are within the *Sistema de Garantías de Origen* de la *Comisión Nacional de los Mercados y de la Competencia* (Guarantees of Origin System of the National Commission of Markets and Competition), therefore we will use the emission factors of each marketer.

Since January 2020, the marketer hired in 55th, García de Paredes Street Office, ground and first floor, is **GESTERNOVA**, and a null factor has been applied since 100% of the energy consumed has been produced by renewable energy sources and cogeneration of high efficiency.

During 2020, for the offices located in the García Paredes building, annexed premises, the contracted marketer is **Naturgy** whose emission factor is 0,31 kgCO₂/kWh.

Electricity consumption in the warehouse located in 6-E Villaconejos has also been included, whose distributor was **Nabalia Energía**, and a null factor has been applied since 100% of the energy consumed has been produced by renewable energy sources and cogeneration of high efficiency.

□ **PAPER CONSUMPTION DERIVED EMISSIONS**

To calculate these emissions, we took in consideration, the consumption of paper in the offices in 2020, the consumption of toilet and kitchen paper, as well as the weight of the different catalogues published, of the different reports of Activities and Sustainability of the entity published for the same year, brochures, guides and magazines.

Although this year, 2020, due to COVID-19 Pandemic and the paralysis of tourism sector, with an ERTE (layoff) in Europamundo Vacaciones, the brochures made and budgeted in 2019 for the 2020 season have hardly been used, and they will serve in the 2021-2022 season. Furthermore, the Foundation's Activities Report, or the EMV Sustainability Report, or guides and magazines have not been printed.

Different published studies have made it possible to establish emission factors for the different types of paper used in the office and publications. The production of paper from virgin pulp, in addition to the consumption of a natural resource that is currently consumed at an unsustainable rate for the planet, is much more intensive in the use of energy than those obtained from recycled fibres.

We have the number of sheets of paper consumed in EMV (virgin paper⁶). The average weight is 80 g/m².

□ **PROFESSIONAL TRAVEL BY PLANE, TRAIN AND BUS DERIVED EMISSIONS**

We have the list of professional trips made in 2019 by plane, train and bus.

In calculating CO₂ emissions derived from air transport, it is important to note that not only CO₂ emissions have been taken into account, but also those of N₂O, following the indications of the Intergovernmental Panel for Climate Change regarding the calculation of emissions in the air travel. This is due to the fact that the combustion that takes place in aircraft turbines occurs at a high temperature that generates a not insignificant amount of N₂O. Furthermore, N₂O emissions at this point in the atmosphere have a much greater potential of greenhouse effect, than the same number of emissions generated at the ground level, as well as in the engines of land vehicles.

For this calculation, a differentiation has been made between short, medium and long distances, since the highest volume of GHG emissions occurs during the take-off and landing of the aircraft.

□ **WATER CONSUMPTION DERIVED EMISSIONS**

To calculate these emissions, we take in consideration the water consumption in the three EMV offices (ground floor, first floor and annexed premises) provided by the ISTA measurement company and the consumption of the Warehouse located in 6, Villaconejos Street, Alarcón, provided by the company Canal de Isabel II.

□ **WASTE PRODUCTION DERIVED EMISSIONS**

EMV has directly provided the volume of recycled waste produced in its different locations (paper, plastics, toners, PCs, mobiles and printers).

□ **BUS TRAVEL DERIVED EMISSIONS**

EMV has directly provided the kilometres travelled by the buses chartered by the company.



UNWTO – RURAL COMMUNITY TOURISM (ACTUAR NETWORK)

3.- STARTING POINTS

Following GHG Protocol methodology, **EMV** information has been verified, between the different registers.

Also the report has been completed with the contribution of other sources of additional information. Below is a summary of the additional information used.

- Information about the main **EMV** activity
- Information about the entity: structure, geographic location, etc.
- Documentation of activities to identify the source of emissions inside the organizational and operational ambit.
- A list and access to the responsible persons of the emissions data compilation (name, job and telephone number).

3.1 COMPILATION OF THE INFORMATION PROVIDED BY EMV

3.1.1 EMV General Data

EMV is one of the largest circuits operators in the world, circuits leader in Europe for the latinamerican market. It has more than 1.000 circuits in almost all the european countries, as well as in the United States, Canada, México, Costa Rica, Middle East, South Africa, Tanzania, Kenya, India, Far East, Southeast Asia and Oceania.

EMV is an affiliate member of the World Tourism Organization (organization dependent on the United Nations) from 2.012, whose ends are to promote more ethical tourism, responsible and creator of wealth in our world.

EMV joins the global code of ethics for tourism of the United Nations in 2.016 and from 2.014 is a member of the United Nations Global Compact (Global Compact), the largest corporate social responsibility initiative in the world and of the World Travel & Tourism Council from 2.015. Europamundo has its own Ethical Code, as well as a Good Practice Manual from 2.014.

Europamundo Foundation, created by EMV, works to promote coexistence and understanding between cultures, looking for a more tolerant and diverse world, favouring the use and enrichment of cultural heritage of humanity, and specially promoting tourism awareness between the different peoples of the world as an strategy for the development of a sustainable tourism in favor of the elimination of poverty, following the objectives of United Nations Millennium Summit 2.000. The contributions of these foundations come from Europamundo, suppliers, customers, partners, employees and collaborators. Through this contribution 153 countries have been financed, with 259.452 beneficiaries in 30 countries, collaborating with 50 NGOs, having as one of its main priority objectives, a Responsible and Sustainable Tourism as a vehicle of the development of peoples. The Europamundo Foundation has been developing a volunteer international cooperation program for several years, as well as corporate volunteering programs both in its formative and participative aspect.

Central EMV offices are in the Street García de Paredes 55 in Madrid.

General Data

Year 2018	
Number of headquarters for which this study is done	1
Staff	193 (Office) 218 (Office + guides)
Surface in m2 of all headquarters for which this study is done	3.026 m2 (ground floor, first floor, local annex and warehouse)

3.1.2. Identification of Emission Sources

Considering the activity sector, the following emission sources are considered:

- Energy Consumption (headquarters): Electricity
- Paper consumption (headquarters)
- Professional air, train and intercity bus travels.
- Water consumption (headquarters)
- Waste production (headquarters)
- Chartered bus trips by EMV

3.1.3 Data Verification

For each source, the following data provided have been verified:

Electricity

Data provided by invoices of the different contracted marketers during 2.020

HEADQUARTERS	2014	2015	2016	2017	2018	2019	2020
García de Paredes ground floor	31.289	13.518	39.003	41.847	13.452	12.776	4.259
García de Paredes 1st.	155.171	152.548	141.116	285.343	136.480	129.627	41.107
García de Paredes Local right							5.783
Villaconejos 6-E, ground floor				1.310	2.511	1.121	549
Total	186.460	166.066	180.119	328.500	152.443	143.524	51.698
Electricity consumption by site (Kwh)							

Paper

Relative data concerning the paper consumption come from the **EMV** records. Paper used by **EMV** is blank white paper, PEFC, certificated paper by the Association for Spanish Forest Certification, except for the Memories of Activities and Sustainability which are published on recycled paper. Although in 2.020, no edition of Memories or travel

catalogues, travel guides or magazines, except for a few brochures for the Spanish Market, European circuit and Monografic brochures have been done.

KIND OF PAPER	2014	2015	2016	2017	2018	2019	2020
Office Paper Consumption	7.659	5.651	6.531	7.218	6.668	5.267	888
Catalogue Paper Consumption	323.320	362.071	361.400	384.408	457.423	373.755	52.861
Memories, Guides and Magazines			250	219	268	422	0
Toilet Paper						2.155	831
Total	330.979	367.722	368.181	391.845	464.359	381.599	54.580
Consumption of office paper and publications (Kqs)							

Professional travel by air

STAFF	2014	2015	2016	2017	2018	2019	2020
Distance travelled by plane displacement staff	2.701.837	2.880.649	3.144.511	4.184.994	4.873.823	4.701.724	872.213
Routes in kilometers by plane							
DISPLACEMENTS BY PLANE 2020:							
Short trip (< 500 kms.):				8.520 kms.			
Medium trip (500 - 3.700 kms.):				516.385 kms.			
Long Trip (> 3.700 kms.):				347.308 kms.			

Professional displacements km by plane have been calculated based on the list of trips provided by the En Route Services department of EMV.

Professional train travel

Professional travel kilometers by train have been calculated based on the list of trips provided by En Route Services department of EMV.

STAFF	2014	2015	2016	2017	2018	2019	2020
Distance traveled by displacement by train staff	49.890	71.234	212.586	201.024	193.494	139.550	20.620
Routes in kilometers by train							

Professional travel by intercity buses.

Professional travel kilometers by intercity buses have been calculated based on the list provided by En Route department of EMV.

STAFF	2014	2015	2016	2017	2018	2019	2020
Distance traveled by displacement by INTERCITY BUS staff	10.858	8.778	18.514	15.003	15.019	19.340	2.211

Routes in kilometers by intercity buses

Water consumption

HEADQUARTERS	2014	2015	2016	2017	2018	2019	2020
García de Paredes ground floor	58	210	200	220	284	311	106
García de Paredes 1st.	960	945	861	891	903	956	332
García de Paredes Local Right							22
Villaconejos 6-E, ground floor	0	0	0	0	0	0	0
Total	1018	1155	1061	1111	1187	1267	460

Water consumption

For water consumption, GEI consumptions are considered, consequence of purification and sanitation. For this, the mean value of emissions derived from carrying on this type of process are used.

Water consumption in 2.019ha has been provided through ISTA and Canal de Isabel II invoices.

Waste production

Waste production is due mainly to discarded paper and paperboard consumption, removal of ink cartridges and toners, and plastic consumptions.

Other wastes exist being recycled but have not been valued in this report as batteries which are deposited in municipal containers, plastic plugs which are sent to Seur Foundation for its "Plugs for a new life" campaign.

Reduction in toner's numbers in the last years is due to modernization of the printer fleet on the entity that now uses XL ink cartridges more economically.

HEADQUARTERS	2014	2015	2016	2017	2018	2019	2020
PAPER AND PAPERBOARD	1.400	1.410	2.530	13.010	8.810	1.600	533
TONER	360	371	141	102	125	139	44
PLASTICS				26.796	26.099	26.751	8.917
PCs, PRINTERS, MOBILE PHONES						71	3

Waste production

Kms bus routes hired by EMV

Calculation for kms traveled by buses is based on the billing information provided by the Supplier Department and the data on motor type Euro 5 or 6 of buses of the circuits, provided by the Transportation Department.

	2014	2015	2016	2017	2018	2019	2020
Kms travelled bus routes	7.455.586	7.771.299	7.798.863	9.622.695	9.046.605	8.980.509	1.204.681
Kilometers traveled on bus routes							

SUMMARY TABLE OF THE INFORMATION PROVIDED 2019/2020

	2019	2020
Headquarters number for which this study is done	1	1
Number of workers	412	218
Total surface in m2	2.651	3.026
Consumed electricity in Kwh	130.748	51.698
Consumed paper in Kgs	381.599	54.580
Kms traveled by plane travel	4.701.724	0
Kms traveled by train travel	139.550	0
Kms traveled by intercity buses	19.340	0
M3 water consume	1.267	460
Kgs waste production (paper and paperboard)	1.600	533
Kgs waste production (plastics)	26.751	8.917
Kgs waste production (toners)	139	44
Waste units (PCs and printers)	71	3
Kms bus routes	8.980.509	1.204.681
Summary of Europamundo general data		

3.1 LIST AND ACCESS TO RESPONSIBLE PEOPLE OF EMISSION DATA COMPILATION

- Elaboration of the Report: Corporate Social Responsibility Department:
 - Justo Palma Bastos, Director jpalma.rse@europamundo.com
 - Lux Tribaldos Tierno. Attached. luz.tribaldos@europamundo.com
- Transportation:
 - Alberto Ballesteros. Responsible. transportes@europamundo.com
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- Spanish Market:
 - Carlos González Hernando. Director. carlosgonzalez@europamundo.com
- Translation guide team:

- Juliana Serenato. Coordinator. juliana@europamundo.com



MEDICAL SOLIDARITY - HEALTH VOLUNTEERS MANIQUI RIVER (BOLIVIAN AMAZON JUNGLE)

4. EMISSION STUDY

EMV has performed the emission calculation based on the data collected in the company, together with the different emission factors which are detailed below.

4.1 EMISSION FACTORS

Emission factors are updated annually, going to the most recognised up-to-date sources at international level with the purpose of finding greater rigor and precision.

Emission factors used have been the following:

Electricity

Emission source	Emission factor
Gesternova	0.00 kg CO2e/KWh
Nabalía Energia	0.00 kg CO2e/KWh
Naturgy	0.31 kg CO2e/KWh

Paper

Emission source	Emission factor
White paper (use)	0.9527 kg CO ₂ e/kg

Professional Travel by Plane

Emission source	Emission factor
Travels by plane short journey (<500 kms.)	0.255 kgs. CO ₂ e/Passanger Km.
Travels by plane medium journey (>500 kms. <3.700 kms.)	0.156 kgs. CO ₂ e/Passanger km.
Travels by plane long journey (> 3.700 kms.)	0.150 kgs. CO ₂ e/Passanger km.

Professional Travel by Train

Emission source	Emission factor
Travel by AVE	0.03128 kg CO ₂ e/Passanger km.

Professional Travel by Intercity Bus

Emission source	Emission factor
Intercity buses	0.029 kg CO ₂ e/Passanger km.

Water

Emission source	Emission factor
Billed water (purification and sanitation)	1.052 kg CO ₂ e/m ³ invoiced

For water consumption, GEi emissions are considered as a consequence of purification and sanitization. For this, an average value of the emissions derived from carrying out this type of process is used.

Waste

Emission source	Emission factor
Paper and paperboard	21.354 kg CO ₂ e/tn. Paper and paperboard
Toners	12.312 kg CO ₂ e/unit
Plastics	21.354 kg CO ₂ e/tn. Plastics
Mobile phones	21.354 kg CO ₂ e/tn. Mobile phones

Bus routes

Emission source	Emission factor
Km bus routes EUROV	0.30754 kg CO ₂ e/ km.
Km bus routes EUROVI	0.29216 kg CO ₂ e/ km.

4.2 STUDY OF EMISSIONS BY SOURCES

Obtained emissions considering all the data extracted from the information provided by **the different departments of Europamundo** and in relation with the emission factors identified in the previous section, are summarized in the following table:

Emission source	Emissions CO ₂ 2019 (tCO ₂ e)	%	Emissions CO ₂ 2020 (tCO ₂ e)	%
Electricity	21,101	0,56	1,79	0,33%
Paper Consumption	363,54	9,65	50,36	9,28%
Prof. Travel by Plane	736,69	19,55	134,82	24,85%
Prof. Travel by Train	4,37	0,12	0,64	0,12%
Prof. Travel by Bus	0,56	0,01	0,06	0,01%
Water consumption	1,33	0,04	0,48	0,09%
Waste production	3,19	0,08	0,29	0,05%
Buses (routes)	2637,58	69,99	354,18	65,27%
Total	3768,361	100	542,62	100%

From this analysis is stracted that as well as in the previous years, the most important contribution to the total GEI for EMV activity, with a total 65.27 % of emissions, are derived from the different chartered routes by EMV, far followed by the professional travels by plain (24,85 %). Paper consumption (9.28 %) has been considerably reduced as catalogues have almost not been published in 2020, as those ones already published in 2019 for the 2.020 season, are going to be the same ones for the 2021 season. All the other sources of emission, except for the electricity consumption, will not surpass 0.20% and so, they are not very relevant.

4.3 STUDY OF EMISSIONS BY SCOPE

Following the categorization proposed by GHG Protocol, we can determine emission according to the three scopes in the following way:

GEI Scope	Emissions CO2 2018 (tCO2e)	%
Scope 1	0	0,00%
Scope 2 (Electric consume)	1,79	0,33%
Scope 3 (Professional displacements by plane, train, bus, paper and water consumption, waste and hired buses autobuse fletados)	540,83	99,67%
Total emisiones	542,62	100%

As it can be seen in the previous table and in the following graphics, CO2 emissions equivalent from **EMV**, are all collected in what we should call indirect scope emissions 2 and 3.

4.4 EVOLUTION OF GREENHOUSE GASES EMISSIONS OF EUROPAMUNDO 2.018-2.020

Emission source	Emissions CO2 2018 (tCO2e)	%	Emissions CO2 2019 (tCO2e)	%	Emissions CO2 2020 (tCO2e)	Variations 2018/2019 tCO2e	%	Variations 2018/2020 %	%
Electricity	52,21	1,33%	21,101	0,56%	1,79	-31,109	-59,58%	-50,42	-96,57%
Paper consumption	443,77	11,27%	363,54	9,65%	50,36	-80,23	-18,08%	-393,41	-88,65%
Prof. Displ. by Plane	768,88	19,53%	736,69	19,55%	134,82	-32,19	-4,19%	-634,06	-82,47%
Prof Displ. by Train	7,43	0,19%	4,37	0,12%	0,64	-3,06	-41,18%	-6,79	-91,39%
Prof. Disp. by Bus	0,42	0,01%	0,56	0,01%	0,06	0,14	33,33%	-0,36	-85,71%
Water Consumption	2,5	0,06%	1,33	0,04%	0,48	-1,17	-46,80%	-2,02	-80,80%
Waste Production	2,44	0,06%	3,19	0,08%	0,29	0,75	30,74%	-2,15	-88,11%
Buses (routes)	2.659,79	67,55%	2637,58	69,99%	354,18	-22,21	-0,84%	-2305,61	-86,68%
Total	3937,44	100%	3768,361	100%	542,62	-169,079	-4,29%	-3394,82	-86,22%

Evolution for emission sources during the last years.

In the following table, emissions data of **EMV** are presented grouped for the years 2.018, 2.019 ans 2.020.

In 2.020, CO2 emissions have decreased a -86.22%, due to COVID 19 Pandemia and to the economic paralyzation of the sectors, mainly ours, and the paralyzation from march 2.020 of EMV, although it is reflected that global emissions of EMV have decreased according to the inventories of 2.018 in relation with 2.019, in a -4.29% (-169,04tCO2e) including all analyzed emission sources.

All the sources of emission analyzed in 2.018 regarding 2.019 have diminished in general, except for the professional travels by bus which have increased + 30.79% (+0.140 tCO2e) and the waste production which also have increased in +30.79% (+0.75 tCO2e). Electricity has suffered a positive evolution of -59.58% (-31.11 tCO2e), paper consumption -18.08% (-80.23 tCO2e), professional travel by plane -4.19% (-32.19 tCO2e), train professional travel -41.25% (-3.06 tCO2e), water consumption -46.68% (-1.17 tCO2e) and bus routes -0.83% (-22.20 tCO2e).

And the decrease on 2.020 in respect to 2.018 is 80% bigger in all items.

In general in a normalized situation, with the total operation of the company as in 2.019 will indicate improving environmental characteristics of buses hired by EMV for the realization of the different routes following available data. (In 2.018, 88% of the buses were Euro VI, in 2.019 this percentage raised till 90%) linked to a relative decline of route's kilometers by bus (more than 9.05 million in 2.018 and 8.98 million kms in 2.019) jointly explains the reduction in this source.



ACNUR - HORTICULTURE IN HAGADERA DADAAB (KENYA)



GREEN FOUND – ECOTOURISM CENTRE (OAXACA – MEXICO)

5. DATA ANALYSIS AND INDICATORS

The annual record of CO₂ emissions allows comparing the impact of the EMV activity along the years.

The chosen indicators have been:

- Total emissions tCO₂e/year,
- Employee emissions of EMV offices in tCO₂e/employee
- Employee emissions (offices and guides) EMV in tCO₂e/employee,
- Emissions by square meter, offices EMV in kgCO₂e/m²

For emissions by employees, two different indicators have been calculated as part of them (guides) are not physically placed in EMV offices, although in 2020 the number of hired guides has decreased drastically as from march, almost all the routes have not been operative. The first indicator includes only personal and the second includes also to this figure the guides hired by EMV.

The values calculated from 2.014 are collected in the following table:

INDICATORS	2014	2015	2016	2017	2018	2019	2020
tCO ₂ e/year	3.123	3.236	3.191	3.901	3.937	3.768	543
tCO ₂ e/ staff							
Office	24	22	21	22	20	19	3
tCO ₂ e/total staff	9	10	9	11	10	10	2
tCO ₂ e/m ²	1,56	1,62	1,60	1,67	1,69	1,42	0,18

For better relation the EMV evolution, emissions with its activity, we decided to join a battery of indicators in relation with the travelled km done by hired buses by the entity.

INDICATORS	2014	2015	2016	2017	2018	2019	2020
Km bus routes	7.455.586	7.771.299	7.798.863	9.622.695	9.046.605	8.980.509	1.204.681
tCO ₂ e/ km route	0,42	0,42	0,41	0,41	0,44	0,42	0,00



GREEN FOUND - ECOTOURISM CENTER (OAXACA - MEXICO)

4. COMPENSATION PROJECTS

In 2015 Greenhouse gases emission reports started to be done, our carbon footprint, through Ecodes Entity, and one of the action measures for Europamundo was the compensation of its emissions through projects localized in developing countries, that had to contribute to the sustainable development of the local populations where they were carried out, to protect, to keep and to get better the biodiversity and the natural heritage, as well as to mitigate the climate change.

For 4 years, from 2015 till 2018, the CO₂ emissions derived from the activity of our enterprise were compensated in Limay Community Carbon Project, a communitarian reforestation initiative grouping small farmers of Nicaragua to reforest parts of the lands they had not used, promoted by Taking Root NGO. The project is developed in a basin feeding directly the Estuario Real (Royal Estuary), one of the most important in Central America in terms of biodiversity.

<https://takingroot.org/es/>

During these four years from 2015 till 2018, approximately 60.000 trees were planted. The price by compensation ton was between 7 and 10 €/tn.

These compensation projects were financed 50% by Europamundo and Europamundo Foundation.

Since 2019, Europamundo started to work with one of the most important environmental enterprises in Spain, CO₂ Factor, and this year 3.937 tons of CO₂e emitted in 2018 were compensated through 3 projects:

- Wind generation in Tongliao (China), CER (Certified Emission Reduction), credited under UNFCCC (United Nations Framework Convention for Climate Change).

- Sustainable transport in Mexico. CER (Certified Emission Reduction) credited under UNFCCC (United Nations Framework Convention on Climate Change).

- Avoid deforestation, Brazil nut plantations in Peru. VCU (Verified Carbon Unit) under VCS (Verified Carbon Standard) standard, project validator: SCS Global Services

Medium price per ton was 2.5 €/ton.

In 2020 emissions compensations of CO₂e from 2019 were not done, being 3.768 tons, although it was asked to CO₂ Factor a compensation proposal at the beginning of the year, attached next with 2 investment areas (China and Brazil) that can vary depending on media environmental policy of EMV.

The need to stop climate change

Climate change is no doubt a reality and the main environmental challenge which our planet

faces.

Nobody doubts climate is turning more extreme, heat waves are more frequent all around the world, droughts and forest fires have intensified, sea level is increasing...and this is only the beginning.

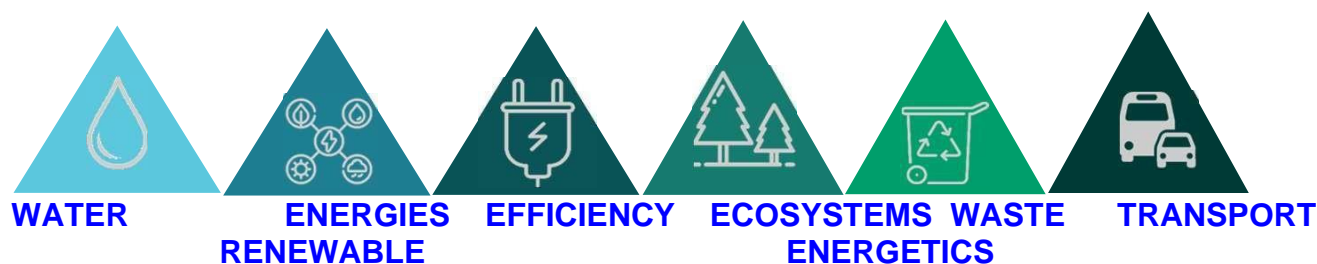
Climate change threatens agriculture, and water supply, health suffers, people are forced to abandon their homes, and natural habitats are changing putting into risk the survival of plants and animals living in them.

We must act to reduce greenhouse gases emissions and as soon as we do it, impacts will be less severe.

Emissions compensation

Emissions of greenhouse gases (GEI), although they are not generated in a specific point, disperse in the atmosphere in a global way. For this, GEI emissions in Spain have the same effect that emissions in any other point of the planet.

Compensation is a process of voluntary character, by which it is invested in emission reduction projects of GEI, protected under official standards proving these reductions really exist. Projects of emission reductions for compensation may belong mainly to any of the following categories:



What are we looking for in the compensation?

Search and selection of projects of emissions reduction

Perform a search and selection of projects to allow to carry out a compensation of a maximum percentage of our carbon footprint at a minimum price and always through interest projects of Europamundo, which reductions are guaranteed by maximum standards and always watching for the sustainability of the environment.

Purchase and Withdrawal of assets in official records

We will look for an entity to be an official intermediary in the carbon market, to proceed to the purchase and withdrawal of assets in the European Emissions Registry (or other registries where archives have been issued).

The withdrawal of assets is a key process as it is the only way to accredit that the reductions are effective and may serve to compensate the carbon footprint, as it is assured that these unities cannot be commercialized again.

Issuance of the compensation certificate

The hired enterprise must credit us through certificates the right compensation of the emissions, as well as the detail of the projects and the detail of the process of withdrawal in a transparent way.

This information is valid in any verification process and/or audit.

PROJECT SELECTION CRITERIA

TO GUARANTEE THE COMPENSATION OF EMISSIONS, PROJETS MUST FULFILL CERTAIN REQUIREMENTS

- Reductions **of emissions must** be effective and must be guaranteed by any kind of international standard of recognized solvency.
- CER credits coming from fulfilled projects within Kyoto Protocol Clean Development Mechanism (CDM), being backed up by the United Nations Framework Convention for Climate Change (CMNUCC) offer a very high security.
- It must be watched for the contributions of the organizations to compensate their emissions to be determinant so these reductions are produced.
- Projects of reduction of emissions which are not taking care of the environment around them must be avoided, when despite mitigating the climate change, they are not sustainable.
- Situations of "double accounting " must be avoided, it means if reduced emissions by a project are accounted as units of compensation by more than an agent or they
- Values of the organization willing to compensate the carbon footprint: projects not only reducing emissions , but also having medio environmental and social benefits. For example, socio-economic development will be considered.
- Area: Projects executed in areas where the organization has interest will be chosen.
- Standard: UN certified projects will be preferred, as the legitimacy of the credits is assured
- Type of project: there are many types of projects, the best option would be choosing a project related with the activity of the enterprise.



Source: CO2 Factor





**ASSOCIATION OF WAORANI WOMEN (ECUADORIAN AMAZONIAN JUNGLE)
PROJETS OF COMPENSATION**

COMPENSATION PROJECTS.

Proposals for offsetting CO2 emissions:

Project 1: Wind generation in Hami City (China)



Description: it is a project for the generation of electricity through the construction of a wind park with a total capacity of 200 MW in the eastern area of Luotuo Quanzi, city of Hami, autonomous region of Xinjiang Uygur, Popular Republic of China

Unyty: CER (Certified Emission Reduction) accredited under UNFCCC (United Nations Framework Convention on Climate Change) .

Main benefits associated to the project:

- **Local job creation:** both in construction services, as well as in associated maintenance of the wind park. Also, the staff from the region have been formed during the project for an optimal performance of their activity.
- **Reduction of greenhouse gases effect.**
- **Transference of technology:** By encouraging the development of the experience in wind energy and consequently, reducing the barriers related with this unconventional technology, the activity of the project will contribute to the transfer of technology.
- **Reduction in the use of fossil fuel:** As well as the reduction of greenhouse gases, the project has also achieved an important improvement on air quality, achieving the reduction of SO2 and NOx , associated with the use of fossil fuels.

Project 2: Avoided deforestation in the Amazon Rainforest – Brazil





Description: Main objectives of the project Agro cortex REDD is to avoid not planned deforestation (DNP) on an area of 186.219.06 hectares of Amazon rainforest. This avoided project of deforestation in the state of Acre in Brazil will reduce approximately 483.594 tCO₂e every year, for a total of 14.507.808 tCO₂e in emissions reduction during the useful life of this project - 30 years (01 - july 2014 till 30 - June 2.044).

Unity: VCU (Verified Carbon Unit) under VCS (Verified Carbon Standard).

Benefits:

- **Environmental benefit:** this project establishes a barrier against the advance of deforestation, restores and promotes the sustainable use of the terrestrial ecosystems to manage the timber forests in a sustainable way, to stop and to reverse land degradation and to stop biodiversity loss.
- The implementation of a monitoring system for **early detection of deforestation risks**.
- **Economic wellness:** To achieve a constant production, sustainable and economically satisfactory with a minimum impact in the residual forest. This reduces illegal deforestation and provides economic growth.
- **Generation of local employment:** reforestation activities, control and surveillance, border's plantation delimitation, among others.



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5. GLOSSARY

The United Nations Framework Convention on Climate Change (CMNUCC) was adopted in [New York](#), the 9th of may [1.992](#) and went into effect may 21st [1.994](#). It allows, among other things, to reinforce worldwide the public awareness of the problems related to climate change.

In 1.997, the governments agreed to incorporate an addition to the treaty, the [Kyoto Protocol](#), counting with stronger and legally binding measures (later on this Protocol will be discussed).

The COP Conference of Parties is the "supreme body" in the Convention, it is to say the maximum authority with capacity of decision. It is an association of all the countries being Part of the CMNUCC.

COP is in charge of maintaining the international efforts to resolve climate change problems. It examines the application of the Convention and the compromises of the Parts in function of the Convention objectives, the new scientific discoveries and the experience gained in the application of the policies related to climate change. A fundamental task of COP is to review national communications and the emissions inventories presented by the Parts. Taking as a base this information, it assesses the effect of the measures taken by the Parts and the progress made.

COP meets every year from 1.995. The meeting place is Bonn (Germany), Secretariat headquarters, except when a Part offers itself as a host of the session. (This is the habitual). In December 2.019 COP 25 will take place in Chile.

Media usually refers to each COP as the "[Climate Summit](#)".

Renowned were the agreements reached in Paris after COP 21 celebration in 2.015, where governments agreed to maintain the average world temperature rise under 2 °C over the preindustrial levels, and to limit the increase to 1,5° to avoid and reduce risks derived from the temperature rise. *If the temperature rise is not limited to 1,5°, the global warming effects will be irreversible*, according to an IPCC report of the UN.

Kyoto Protocol is a [protocol](#) of the [United Nations Framework convention on climate change](#), and an international agreement having as its objective to reduce the emissions of six [greenhouse gases](#) causing global [heating](#). Gases are [carbon dioxide](#) (CO₂), [methane](#) (CH₄), [nitrous oxide](#) (N₂O), and the other three are fluoridated industrial gases [hydro fluorocarbons](#) (HFC), [perfluorocarbons](#) (PFC) [sulfur hexafluoride](#)

The protocol was adopted December 11th 1.997 in [Kyoto, Japan](#), but it did not go into effect till February 16th 2.005. In november 2.009, 187 states had ratified it. [The United States](#) being the largest emitter of greenhouse gases when the protocol was signed (from 2.005 it is China), never ratified it.

The peculiarity of this protocol is that it is binding (of mandatory compliance for the countries ratifying it).

It consists of two periods, 2.008-2.012 and 2.013-2020. For the first period a reduction of at least 5% of the emission if this gases in comparison with the emissions of 1.990 was

agreed. Europe, the European Union of the 15 countries at that moment, took on more steps, agreeing a reduction of no less than 8%, getting at the end of the period a global reduction of 11.8%.

From this Protocol, the well-known carbon credits or bonus are derived. They are economic instruments, equivalent to a ton of carbon dioxide that have been stopped emitting to the atmosphere. The Kyoto Protocol relays on three important mechanisms:

- Emissions trading.
- Markets through which it is permitted to buy/sell carbon credits to other countries.
- Joint implementation (JI)
- Clean development mechanism (CDM).

The last two mechanisms are based in the development of reduction projects and/or emissions absorption, through which carbon credits are issued. Reference is also made throughout the document about Annex I countries of Kyoto Protocol, or industrialized countries attached to the Protocol, and No-Annex I countries, or developing countries attached to the protocol.

Intergovernmental Group of Experts on Climate Change (IPCC), created in 1988 by the World Meteorological Organization and the EC Environment Program, does a survey of world scientific and technical bibliography, publishing evaluation reports, widely recognized as the most credible information sources over climate change in existence. IPCC also works on methodologies and responds to the specific solicitations of the subsidiary organs of the Convention. IPCC is independent from the Convention.

Definitions:

- **Carbon credit:** is a common term used generically to refer to the main exchange unit on the different carbon markets, being equal to one metric ton of carbon dioxide equivalent (CO₂e), reduced or sequestered through an emission reduction process or carbon capture, being certified in accordance to the corresponding standard.
- **Carbon dioxide equivalent (CO₂e):** is a relative unit to describe the **Global Warming Potential** of a gas, compared to Carbon Dioxide.
- **Greenhouse Effect:** phenomenon why certain gases retain part of the energy of the solar radiation. This phenomenon prevents the energy received constantly to return immediately to the space, producing at a planetary scale, a similar effect as the one observed in a greenhouse.
- **Carbon Credits emission:** is the process of creation of emissions reduction certificates of GEI, generated, verified and certified by a project of reductions of emissions
- **Greenhouse Gases: (GEI)** Heat-trapping gases inside the atmosphere. Some of them, as carbon dioxide, exist naturally, and others are only produced by human factors. The following table resumes the GEIs of the **Kyoto Protocol**.

- **Mitigation:** It refers to the actions aimed at limiting or reducing the greenhouse gases concentration (**GEI**) in the atmosphere with the finality to diminish the possibility of occurrence of negative impact of climate change.
- **Voluntary Carbon Market:** It includes all carbon credit transactions not governed by a regulatory obligation to accomplish an emissions reduction goal of the **GEI**. This includes both credit transactions created specially for voluntary markets, as the operations where credits are sold to the regulated markets to buyers searching voluntarily to compensate their emissions.
- **Carbon sink (sink):** any process, activity, or mechanism absorbing CO₂ from the atmosphere, as forests, soils and oceans. Activities such as the afforestation (to plant trees in lands where there have never been forest plants) and reforestation, can generate carbon vouchers through the sink function.

Other technical definitions:

- **Cap-and-trade:** It refers to a strategy based in the structuration of economic incentives to reward pollutants emission reductions by which the central authority defines a defined contamination limit (cap) granting pollution permits representing the right of emission of a pollutant quantity. The total of permissions is the defined limit and the regulated entities can buy and sell them (trade) to assure the quantity of permissions corresponding to them. The emissions trading scheme of the European Union(**EU ETS**) is an example of the modified scheme of cap-and-trade.
- **Emission reduction certificate (CERs)** equals a metric ton of **carbon dioxide equivalent** (t CO₂e) reduced or kidnapped through a project that has been developed fulfilling the requirements of the **Clean Development Mechanism**.
- **Designed Operational Entities (DOEs):** they are accredited certifiers of MDL which responsibility is to evaluate if a proposed project fulfills all the eligibility requirements of the MDL (**validation**), and also, if the project has accomplished the reduction of greenhouse effect gases emissions. (**verification** and certification). So, it can be found in the UNFCCC Web page that DOEs are grouped considering different classifications.
- **Voluntary Standards:** with the goal to give a major credibility and uniformity to the **carbon market**, a set of standards oriented to guarantee the quality of the emitted voluntary credits were created (**VERs - Verified Emission Reductions**). The most important standards currently are **VCS** (Verified Carbon Standard), **GSF** (Gold Standard Foundation) and others, although its use is not widespread.
- **EU ETS:** It is the trading scheme of rights of emissions of the European Union Released early 2.005, is the most important international system in the world, with maximum limits of emission rights (**cap-and-trade**) of carbon dioxide (CO₂) and other **greenhouse effect gases** applied to companies. This mandatory system relies

on mechanisms established by the **Kyoto Protocol**: International emissions rights trade, the Mechanism of Clean Development and the Joint Implementation. ETS fixes a price for every emitted carbon ton, encouraging in this way the investment in low emissions technologies.

- **Gold Standard**: (GS) is an independent initiative designed to assure the emission reductions of greenhouse gases effect (**GEI**) achieved by projects under the Mechanism of Clean Development (**MDL**), Joint Implementation projects (**JI**) and Voluntary projects not only being real and verifiable, but also as a result of a clear and appreciable contribution to the sustainable development.
- **Joint Implementation**: It is one of the mechanisms of the **Kyoto Protocol** under which an Annex I country can implement an emissions reduction project or the carbon capture in another Annex I country, generating with this **Unities of Emissions Reduction** permitting the first to account such remissions of emissions reduction as part of their actions to fulfill with its obligations with the **Kyoto Protocol**.
- **Clean Development Mechanism (MDL)**: established mechanism of the **Kyoto Protocol** on its article 12, having two main objectives:
 - To help developing countries affiliated to the Kyoto Protocol (No Annex I countries) to achieve a sustainable development and contribute to the ultimate CMNUCC objective, and
 - Help the industrialized countries attached to the Kyoto Protocol (Annex I countries) to fulfill their quantified acquired commitments with the Protocol, of limitation and reduction of greenhouse gases (GEI) emissions.
- **REDD. Emissions reduction of deforestation and degradation of forests**: The Parts of the **United Nations Framework Convention on Climate Change**, have considered that reducing deforestation emissions and degradation of forests (**REDD**) is a possible mechanism to reduce climate change, considering that deforestation represents 18% of total **Greenhouse Gases** emissions.
- **GtCO2/year** is the abbreviation for "equivalent carbon dioxide gigatons". A gigaton is a billion tons.
- **AR5**. The fifth evaluation report of IPCC (**AR5**) is the first since 2007 (AR4), the year when IPCC won the Nobel Prize of Peace.



6. THANKS

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WAORANIE WOMEN (ECUADORIAN AMAZON RAINFOREST)

BIBLIOGRAPHY

SUMMARY GUIDE SPECIAL IPCC REPORT ON A GLOBAL HEATING IMPACT OF 1,5° AND THE EMISSION RELATED TRACKS. c 2.019 Intergovernmental Panel on Climate Change.

<https://www.ipcc.ch/sr15/>

LOSS OF NATURE AND PANDEMICS. A HEALTHY PLANET FOR HUMANITY HEALTH. 5 JUNE 2.020 WWF EDITION.

[informe perdida de naturaleza y pandemias actualizacion junio de 2020.pdf \(panda.org\)](#)

Pandemia de COVID-19 en España - Wikipedia, la enciclopedia libre

COVID 19 AND THE TRANSFORMATION OF TOURISM. UNITED NATIONS.

[https://unsdg.un.org/sites/default/files/2020-08/sg_policy_brief_covid-19_tourism_august_2020.pdf](#)

EXCELTUR

[https://madiuc3m.com/covid-19-impact/](#)

https://madiuc3m.com/covid-19-impact/ECODES EMISSIONS REPORT ON GREENHOUSE GASES 2019.

COMPENSATION PROPOSAL 2020 CO2 FACTOR.