ENVIRONMENTAL PERFORMANCE REPORT
2020
CHAPTER 1

INTRODUCTION

This document presents the company’s main environmental performance results of 2020 and aims to inform ANA’s main stakeholders and the general public.

ANA – Aeroportos de Portugal, SA (ANA) seeks continuous improvement in its environmental performance and, to this end, the company has an Integrated Management System that takes the Environmental component into account.

It defines the priority actions due to the environmental impacts arising from the activity, setting out strategic action goals, which include efficient consumption of energy and water, monitoring and reducing greenhouse gas emissions, controlling potentially pollutant emissions, land use and water resource management, promoting the reduction, reuse and recycling of waste, noise management and biodiversity conservation.
2020 was a year marked by the COVID-19 pandemic and its effects on society as a whole, including the world aviation sector as a result of the substantial reduction in traffic compared to the previous year (Chart 1).
This strategy has clear and ambitious goals:
• to maintain our ISO 14001 certification;
• to reduce our energy consumption;
• to reduce our carbon footprint;
• to obtain Level 4 (optimisation) or 4+ (neutrality) in our Airport Carbon Accreditation;
• to reduce the amount of waste produced;
• to reduce the amount of waste sent to landfills;
• to increase our material and organic recovery rates;
• to reduce our water consumption and our consumption of plant protection products.

These goals are achieved through specific targets, plans and actions at each one of the airports managed by the company.

Therefore, the company’s environmental management in 2020 was mainly focused in readjustments, reassessment and realignment of its environmental systems in light of the new reality. It was a year filled with many challenges, but it was also the year that ANA reaffirmed its commitment to the environment, taking up the challenge of making this decade the “decade of the green transition”.

It was in this context that, in 2020, the company launched its new environmental strategy, AIRPACT 2030, which applies to all airports in the VINCI Group.
CHAPTER 2

NOISE
Management of noise emissions continues to be of great relevance to ANA, as is our commitment in the Company’s Environmental Policy. The mitigation of its impact around airports remains a priority action area, although this is heavily dependent on airlines as the surrounding noise is generated by aircraft flying over the city.

In this context, continuous noise monitoring was maintained through the Noise Monitoring System installed in the airports where this environmental descriptor is more significant (Humberto Delgado, Francisco Sá Carneiro, Faro, Madeira), as well as Porto Santo Airport, and Noise Monitoring Reports were issued.

Lisbon Airport has seven fixed monitoring stations and one mobile station, complemented by two stations on the airport perimeter, in order to check use of the engine braking procedure (reverse thrust). Francisco Sá Carneiro Airport, Faro Airport and Madeira Airport are equipped with three fixed stations each.

Monitoring is complemented by one portable station at each airport in order to enable analyses to be carried out in places not covered by the fixed stations, or in response to any complaints made. A portable station is used for continuous monitoring at Porto Santo Airport. In the specific case of João Paulo II Airport, the Noise Monitoring Reports are prepared by an external laboratory, based on monitoring campaigns carried out per IATA period.

Simulations/forecasts are also carried out through the regular preparation of Noise Maps which characterise the acoustic environment around larger airports, where the impact of increased expression in relation to the particular noise of the aircraft is expected.
For this purpose, real data associated with aircraft movements during the reference periods are used, thus ensuring higher accuracy in the results obtained. These are validated using the results from the continuous noise monitoring stations installed in and around the airport.

The results are presented in dB(A) and the noise indicators used are those resulting from the provisions of the General Noise Regulation, namely Lden and Ln.

As they are deemed to fall under large air transport infrastructure, and in coordination with the Portuguese Environment Agency, the measures contained in the Noise Reduction Action Plans continued to be implemented in 2020 at Lisbon and Porto airports.

To this end, different types of interventions were defined, aimed at noise management, control, minimisation and reduction, from a balanced approach perspective, which is in line with current best practices and international guidelines.

However, it should be noted that the basic benchmarks and references studied under these plans did not take into account, nor indeed could they have, the effects of the COVID-19 pandemic on the air traffic sector, which have consequences that must not be neglected and with repercussions that are still hard to account for, much less predict.

Bearing these constraints in mind, the entire assessment will have to be reanalysed, particularly as to a review of the Action Plans, based on the scenario associated with the Strategic Noise Maps for 2021. It should also be noted that noise blackspots were monitored in Porto Airport in 2020. In 2020, five complaints were received at Lisbon Airport and one at Faro Airport.
CHAPTER 3

AIR QUALITY
ANA continues to monitor gas emissions at its airports, in accordance with its legal obligations, particularly those associated with point sources. In the same way, air quality is also monitored at Humberto Delgado, Francisco Sá Carneiro and Madeira airports. This control is generally achieved through monitoring campaigns that take place both in summer and winter.

In 2020, air quality at the airports maintained a mostly favourable level of air quality indices, with values lower than the regulatory threshold values and with classifications of “Good” and “Very Good”, occasionally with results showing lower quality, associated with local factors or specific atmospheric conditions.

Generally speaking, it is concluded that the outdoor ambient air quality at the airport was not significantly affected by the emissions sources in the airport.

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CHAPTER 4

VOLUNTARY CARBON MANAGEMENT
Continuing with the annual calculation of the company’s carbon footprint (ANA total, head office and by airport), the carbon footprint for 2019 was calculated in 2020 (direct and indirect emissions).

Table 1 shows the changes in ANA’s total footprint between 2016 and 2019. In 2019, ANA’s total Scope 1 (direct emissions) and Scope 2 (emissions associated with electricity) emissions, increased by 2% and fell by 26%, respectively, compared to 2018. When the analysis takes airport growth into account (emissions by TU), emissions decreased for both scopes (-5% and -31%, respectively).

Scope 3 emissions (indirect emissions) increased 10% compared to 2018. The increase in emissions is essentially related to the increase of aircraft emissions (LTO) and to passenger transport, in operations, that reflect the increase in operations at ANA airports. Thus, Scope 3 emissions by TU only increased 3% last year.
Given that VINCI Airports defined targets for carbon intensity reduction (-20% GJ/TU) for 2020, in comparison to 2013, it was decided to carry out an analysis for carbon emissions in 2019 using that year as the reference. In this case, there was found to have been a 5% reduction in absolute emissions in Scope 1 and a 21% reduction in Scope 2.

### TABLE 1

**CHANGES IN ANA’S CARBON FOOTPRINT BY SCOPE**

(TON CO₂ eq)

<table>
<thead>
<tr>
<th>Scope 1 (t CO₂e)</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>Δ 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7.976</td>
<td>9.068</td>
<td>9.533</td>
<td>9.703</td>
<td>1.8</td>
</tr>
<tr>
<td>Scope 2 (t CO₂e)</td>
<td>37.352</td>
<td>46.325</td>
<td>41.436</td>
<td>30.583</td>
<td>-26.2</td>
</tr>
<tr>
<td>Scope 3 (t CO₂e)</td>
<td>718.855</td>
<td>821.336</td>
<td>896.096</td>
<td>986.473</td>
<td>10.1</td>
</tr>
</tbody>
</table>

| Scope 1 +2 + 3 (t CO₂e) | 764.182| 876.729| 947.065| 1,026,759| 8.4   |
When traffic is also taken into account, there is an increase in emission reduction levels in both scopes (-42% and -57%, respectively).

In relation to Scope 3, there is a 71% increase in absolute emissions, again mainly due to the emissions associated with LTO and passenger travel, revealing the influence of the increase in passengers at the airport. Thus, when the emissions are analysed by TU, there is a decrease of 8%.
The following table makes it possible to analyse the changes in emissions by scope for each one of the airports.

<table>
<thead>
<tr>
<th>AIRPORTS</th>
<th>ABSOLUT VARIATION (%)</th>
<th>VARIATION BY TdU (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope 1</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Scope 2</td>
<td>-31</td>
<td>-22</td>
</tr>
<tr>
<td>Scope 3</td>
<td>5</td>
<td>77</td>
</tr>
<tr>
<td>ASC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope 1</td>
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<td>-14</td>
</tr>
<tr>
<td>Scope 2</td>
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<td>-27</td>
</tr>
<tr>
<td>Scope 3</td>
<td>17</td>
<td>87</td>
</tr>
<tr>
<td>AFR</td>
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<td></td>
</tr>
<tr>
<td>Scope 1</td>
<td>20</td>
<td>85</td>
</tr>
<tr>
<td>Scope 2</td>
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<td>-26</td>
</tr>
<tr>
<td>Scope 3</td>
<td>20</td>
<td>55</td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Scope 1</td>
<td>161</td>
<td>148</td>
</tr>
<tr>
<td>Scope 2</td>
<td>-6</td>
<td>27</td>
</tr>
<tr>
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<td>66</td>
</tr>
<tr>
<td>ASM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope 1</td>
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<td>2</td>
</tr>
<tr>
<td>Scope 2</td>
<td>-1</td>
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<tr>
<td>Scope 3</td>
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<td>AHR</td>
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<td>Scope 1</td>
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<td>Scope 3</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>AFL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope 1</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>Scope 2</td>
<td>38</td>
<td>-6</td>
</tr>
<tr>
<td>Scope 3</td>
<td>10</td>
<td>47</td>
</tr>
<tr>
<td>ABJ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope 1</td>
<td>-44</td>
<td>-38</td>
</tr>
<tr>
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<tr>
<td>Scope 3</td>
<td>36</td>
<td>-55</td>
</tr>
<tr>
<td>AM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope 1</td>
<td>15</td>
<td>-51</td>
</tr>
<tr>
<td>Scope 2</td>
<td>26</td>
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</tr>
<tr>
<td>Scope 3</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>APS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scope 1</td>
<td>-23</td>
<td>-11</td>
</tr>
<tr>
<td>Scope 2</td>
<td>2</td>
<td>-7</td>
</tr>
<tr>
<td>Scope 3</td>
<td>-15</td>
<td>13</td>
</tr>
</tbody>
</table>

ASC - Francisco Sá Carneiro Airport, in Porto; 
AHD - Humberto Delgado Airport, in Lisbon; 
AFR - Faro Airport; AJP - Beja Airport; 
AJP II - João Paulo II Airport, in Ponta Delgada; 
ASM - Santa Maria Airport; AHR - Horta Airport; 
AFL - Flores Airport; 
AM - Madeira Airport, in Funchal; 
APS - Porto Santo Airport.
As to the eligibility of the airports for Level 2 Airport Carbon Accreditation (reduction) and bearing the programme’s calculation requirements in mind, when the changes in Scope 1 and Scope 2 emissions are analysed by TU, all ANA airports are shown to be eligible for maintaining this accreditation level (next table).

TABLE 3
EVOLUTION OF SCOPE 1 AND 2 EMISSIONS BY TU

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AHD</td>
<td>0.00082</td>
<td>0.00076</td>
<td>0.00072</td>
<td>0.000769</td>
<td>0.00067</td>
<td>-13%</td>
</tr>
<tr>
<td>ASC</td>
<td>0.00104</td>
<td>0.00094</td>
<td>0.00088</td>
<td>0.000953</td>
<td>0.00071</td>
<td>-28%</td>
</tr>
<tr>
<td>AFR</td>
<td>0.00046</td>
<td>0.00053</td>
<td>0.00054</td>
<td>0.000508</td>
<td>0.00051</td>
<td>-0.1%</td>
</tr>
<tr>
<td>AJP</td>
<td>0.00066</td>
<td>0.00058</td>
<td>0.00058</td>
<td>0.000607</td>
<td>0.00056</td>
<td>-9%</td>
</tr>
<tr>
<td>ASM</td>
<td>0.00239</td>
<td>0.00219</td>
<td>0.00227</td>
<td>0.002285</td>
<td>0.00188</td>
<td>-18%</td>
</tr>
<tr>
<td>AHR</td>
<td>0.00092</td>
<td>0.00088</td>
<td>0.00089</td>
<td>0.000894</td>
<td>0.00081</td>
<td>-10%</td>
</tr>
<tr>
<td>AFL</td>
<td>0.00047</td>
<td>0.00045</td>
<td>0.00042</td>
<td>0.000447</td>
<td>0.00044</td>
<td>-2%</td>
</tr>
<tr>
<td>ABJ</td>
<td>0.35551</td>
<td>0.13214</td>
<td>0.02844</td>
<td>0.172028</td>
<td>0.06565</td>
<td>-374%</td>
</tr>
<tr>
<td>AM</td>
<td>0.00056</td>
<td>0.00049</td>
<td>0.00049</td>
<td>0.000514</td>
<td>0.00050</td>
<td>-3%</td>
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<tr>
<td>APS</td>
<td>0.00158</td>
<td>0.00133</td>
<td>0.00141</td>
<td>0.001442</td>
<td>0.00140</td>
<td>-3%</td>
</tr>
</tbody>
</table>

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CHAPTER 5

ENERGY

MORE
At ANA, both direct energy (gasoline, diesel, natural gas, propane gas and butane gas) and indirect energy (electricity) are consumed. In 2020, electricity continued to be the most representative energy source. The following chart shows a breakdown of energy consumption at ANA, expressed in TOE.

The chart shows a 16.9% decrease in overall energy consumption at ANA between 2019 and 2020, arising from the reduction in absolute consumption at all the airports and at the headquarter. This reduction was significant at AFR (-35.2%), AJPII (-27.7%) and AHD (-17.9%) airports.
In 2020, a consultation was carried out for the installation of charging stations for electric vehicles at Lisbon Airport, divided up into public stations (at the terminal car parks), and private stations (for the use of company vehicles as well as the private vehicles of staff members, with a total of 106 parking spaces assigned). Ultra-Fast (150 kW), Fast (50 kW), normal (22 kVA) and slow (3.7 kVA) charging points are also provided.

- RHPL (Road-Holding Position Lights) – Installation of red position lights on the access routes to Runway 03-21 with LED technology and equipped with photovoltaic panels;
- replacement of exterior light fittings in the Fuel Farm security control post with LED technology;
- optimisation of ambient temperature regulation windows in the public areas of the terminal, with remote regulation through the centralised technical management system (GTC), reducing energy consumption both in summer and in winter;
- adoption of a procedure to turn off 50% of the lighting in the aircraft parking positions at night-time, between 10 pm and 5 am;
- load shedding in lighting circuits, air conditioning equipment and air handling units (AHU);
- in the area of consumption monitoring, new electricity meters were installed.

At the same time as the reduction in consumption associated with air traffic, a set of measures was implemented aimed at reducing consumption and improving energy efficiency at the airports during 2020, namely:
• Updating of the GTC system in heating plants (cold and hot). Implementation of the set point assignment and control function and improving modelling and temperature control conditions in the installation, under the scope of improving water control in the HVAC condensation circuit in the Cargo Terminal;
• installation of air curtains in the Metro access tunnel;
• continuation of the programme to replace conventional bulbs with LED technology.

• Replacement of 50% of the less efficient lighting in Buildings 3 and 4 with LED technology;
• licensing process underway for the self-consumption solar power plant, with installed power capacity of 2.9 MWp. This will supply an estimated 20% of the energy consumed at the airport. At the end of the year, the licensing process was concluded with APA, CCDR, ANAC, NAV and CMF and the licensing process is underway with DGEG;
• progressive replacement of less efficient lighting on roadways and exterior public areas in the airport with LED technology;
• improving the lighting management process on the aircraft parking apron, underway.

These actions will continue in 2021.
• Continuation of the programme for replacement of transformers with less powerful ones.
• Continuation of the programme for the replacement of conventional fittings with LED technology.
• Specifically at Ponta Delgada Airport:
  - Replacement of 77 transformers for the centre line (150 W -> 45 W) and 51 transformers for runway edge lights, 150 W -> 45 W;
  - Replacement of 16 fittings and transformers on the threshold of Runway 30, fittings with 2 x 105 W bulbs -> 60 W LED and 200 W transformers -> 65 W;
  - Replacement of some fluorescent fittings with LED, but only occasionally and insignificantly (during maintenance work).
• Specifically at Santa Maria Airport:
  - Replacement of 12 fluorescent fittings with LED in the lighting in the public atrium.
• Specifically at Horta Airport:
  - Replacement of 33 fittings with LED in exterior lighting.

• Installation of LED technology in the lighting system at the aircraft parking apron;
• acquisition of an electric ambulift at Madeira airport;
• replacement of the south chiller and pumps at Madeira Airport;
• continuation of the project for the replacement of the people movers at Madeira Airport;
• replacement of 4 diesel vehicles with the same number of hybrid plug-in vehicles.

• Continuation of the programme for replacement of transformers with less powerful ones.
• Continuation of the programme for the replacement of conventional fittings with LED technology.

Energy efficiency actions at this airport mainly refer to continuous consumption monitoring (electricity and fuel). However, the changes in energy consumption behaviour weighted by traffic unit (TEP/TU) had an opposite trend to those recorded in absolute terms.
In fact, there was an increase in specific energy consumption at all ANA airports as a result of the sharp reduction in traffic and the weight of fixed energy consumption, which does not reflect the actions and measures taken aimed at reducing energy consumption and carried out during 2020.

This increase weighted by traffic unit was only less intense at Beja, Santa Maria and Flores airports, where the fall in traffic compared to 2019 was not as steep.
Even so, and in order to align the company’s operation with the challenges of the new environmental goals particularly with energy and carbon management, it is important to note that the Voluntary Carbon and Energy Management Project was set up in late 2020.

Note: TEP/TU at ABJ was 0.021 in 2018, compared to 0.048 TEP/TU and 0.050 TEP/TU in 2019.
ANA manages and controls water consumption in the airport facilities. This includes restaurants, sanitary facilities, green spaces irrigation, washing vehicles, pavements and buildings, as well as consumption associated with firefighting drills.

Of note is the maintenance of the monitoring practices in water quality and quantity, aimed at ensuring the health of users of all ANA airports and improving consumption efficiency.

During 2020, ANA was responsible for total consumption of 493,147.4 m³ of water, which represented a decrease of 31.4% compared to 2019, reflecting a general reduction in absolute water consumption at the airports, with the exception of Horta Airport. In fact, the increase in water consumption at this airport was due to the fact that one water meter was repaired. It had been out of order in 2019, which made it impossible to measure the water consumed. This situation is now being reflected in the differences in consumption recorded for the two years.

Overall, the reduction in water consumption was not in proportion to the reduction seen activity-wide, given that the airports have fixed consumption (associated with washing, watering, minimum maintenance, etc.), which are unrelated to variations in passenger numbers.

In fact, specifically with regard to water, the pandemic also brought about an increase in water consumption as a result of:

• Increased frequency of handwashing and sanitisation/cleaning of spaces and floors by airport users (staff, passengers, concessionaires, handlers, airlines, etc.);
• Extra maintenance on supply/reservoir networks, also in accordance with indications from national authorities to assure water quality;
• Airport activity maintenance, such watering and more frequent washing airport spaces or irrigation maintenance in green spaces, for example.
In terms of specific consumption, this had an overall value of 0.02550 m³/TU in 2020 and there was also an increase in specific consumption in all the airports, with the exception of Beja Airport. There was a 46.6% reduction at this airport where, along with the fact that this infrastructure has a particular kind of behaviour with regard to traffic, measures were also implemented arising from the Water Audit carried out in 2020, the WONE tool by EPAL was installed to identify and rectify leaks in the supply network and a well was opened for watering the green areas.

Note: At ABJ, the average water consumption values were 1.3330 m³/TU in 2018, 0.8940 m³/TU in 2019 and 2.1744 m³/TU in 2020.
The compact WWTP at Ponta Delgada Airport is in the consultation phase. Faro Airport presented a request to change the groundwater quality monitoring programme to the Portuguese Environment Agency. This request was justified by the existence of a history of 10 years of results which revealed the effectiveness of the measures adopted to avoid contamination of this natural resource – groundwater, whether by construction activities or operating activities.

Also of note in 2020, research was carried out into the presence of the SARS-CoV-2 virus in the wastewater at Faro, Lisbon and Porto airports as a predictive indication of the disease in the airport community.

Water audits continued to be carried out at ANA airports, but their conclusion was severely constrained by the effects of the COVID-19 pandemic.

Regarding the production of liquid effluent and contaminated rainwater or run-off, ANA has been investing in the improvement of drainage systems at its airports, with the reformulation of existing networks in some cases and with the introduction or improvement of programmes to monitor the quality of the wastewater, rainwater and run-off produced.

About the systems installed in the airports, it should be noted that at Lisbon Airport, in 2020, there was the extension of the predictive watering project on the landside. At Porto Airport, water bottle collection points were installed in the security control area, to be reused in the washing and watering network.

The compact WWTP at Ponta Delgada Airport is in the consultation phase. Faro Airport presented a request to change the groundwater quality monitoring programme to the Portuguese Environment Agency.

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CHAPTER 7

WASTE
ANA was responsible for the production of approx. 3825.29 tonnes of waste, a decrease of 57.4% compared to 2019. This decrease was seen in all the airports and is directly related to the sharp contraction in airport activities.

Note: At the Madeira airports (DAM) and the Azores airports (DAA), MSW waste is not included, given that this is collected by the municipal services (except for paper and cardboard at A(PI)I). At ABJ, only MSW is produced and this is also managed by the municipal services. Therefore this indicator is not included for this airport.
In terms of specific waste production by traffic unit, ANA recorded an increase of 34.2% and the company’s overall value in 2020 was 0.1978 kg/TU.

Flores and Porto Santo airports didn’t send any waste to proper destination. In specific terms, there was only a reduction in average waste production by traffic unit processed at Santa Maria (-55.9%) and Horta (-44.3%) airports.

In the others, there was a general increase in waste production by traffic unit processed, again due to the reasons mentioned previously.
It should be noted that at Faro and Ponta Delgada airports, the decrease in waste production as a result of the decreased traffic was not as significant given the increase in waste production:

- at Faro, as a result of cleaning a warehouse in the terminal basement (and sending the waste for appropriate disposal), carried out in the spring of 2020, as well as an increase in hazardous waste being sent for appropriate disposal due to airport cleaning (also resulting from the conclusion of the construction work on the new terminal);
- at Ponta Delgada, due to the private management of paper and cardboard by the licensed waste operator and the management of effluent from the aircraft, which is no longer discharged into the AjPll wastewater network and will be managed as waste until the future airport WWTP is commissioned.

Note: At the Madeira airports and the Azores airports, MSW waste is not included, given that this is collected by the municipal services (except for paper and cardboard at AjPll). At ABJ, only MSW is produced and this is also managed by the municipal services. Therefore this indicator is not included for this airport.
There was an overall fall in the rate of waste recovery at ANA compared to 2019. The overall recovery rate in 2020 was 62.7%, mainly due to the decrease in this indicator at Faro Airport, as the rate at Lisbon and Porto airports stabilised close to 90%.
It should be noted that in response to the pandemic, bags and containers were acquired to collect hazardous hospital waste suspected of being contaminated with SARS-CoV-2 and a collection point was designated for this waste at all ANA airports.

In late 2020, a diagnostic study was begun on waste management at Lisbon, Porto and Faro airports, aimed at optimising and improving waste management at these airports and increasing recovery rates. An in-house taskforce was also set up for specific optimisation of construction waste management, with representatives from all the airports, with a view to improving procedures in this particular area at ANA airports.
CHAPTER 8

BIODIVERSITY
Given that airport activity is not compatible with the existence of birds in and around the airport perimeter (particularly in aircraft movement areas), specific measures are implemented to keep them away, such as the use of bioacoustics, gas cannons and the control of plant species. Although, ANA also uses falconry to complement the traditional methods, particularly at Lisbon, Faro and Madeira airports, where its use is clearly more efficient.

ANA has also been applying biodiversity protection measures since 2008, when it joined the Business & Biodiversity project, promoted by the then Institute for Nature Conservation, under the scope of which it has been sponsoring two centres for wildlife recovery, thus contributing to the conservation of biodiversity in Portugal. At central level, there is support for CERVAS – Centre for Ecology, Recovery and Monitoring of Wildlife and, at Faro Airport, RiAS – Wildlife Recovery and Research Centre, both run by the ALDEIA Association.

A strategic cooperation agreement was continued with QUERCUS – National Association for Nature Conservation, aimed at increasing ANA’s commitment to the protection of nature, the environment and biodiversity through the development and implementation of an annual plan of cooperative activities.

In May 2020, ANA joined the Act4Nature initiative promoted by BCSD Portugal, under the scope of Act4Nature International, launched in France in 2018 with the aim of mobilising companies to protect, promote and restore biodiversity. By joining this initiative, ANA has undertaken a set of Common Commitments and defined a set of Individual Commitments. The individual commitments were outlined under the Biodiversity Working Group (since created), bearing in mind the strategic line of ANA and VINCI for this area and were publicly announced in December 2020.

With a corporate strategy imbued with the enhancement and protection of the natural and human environment, the protection and conservation of species and ecosystems, which are indispensable for the balance of environmental quality, are an integral part of ANA’s business plan.
A “Study on Biodiversity at Humberto Delgado Airport” was carried out at Lisbon airport, aimed particularly at studying wild orchids. Meanwhile, a Study on the Impact of Grass at the Airport, with the aim of studying the height of the grassland and the attraction of birdlife, which was underway, was suspended due to the pandemic. It is expected to resume in the first quarter of 2021.

At Faro Airport, an agreement was signed with CCMAR - Centre of Marine Science/Algarve University, for the development of projects that contribute to learning more about the biodiversity existing at the airport. Under this scope, a project to study the large brachiopod crustaceans and amphibians (larval stage) in the temporary marshes existing in the territorial area managed by Faro Airport.
As a result of the wildlife management work done at AFR and the consequent identification of the risk some species represent for aviation, awareness campaigns were held, resulting in meetings with:

- Empresa Águas do Algarve SA, Faro Municipal Council and ICNF, for raising awareness on the problems associated with seagulls at the Faro NW WWTP (near the airport) and the consequent search for solutions;
- Faro Municipal Council, for controlling the population of domestic pigeons around the airport.

Finally, risk assessment was also carried out on the occurrence of birdstrikes at AFR (2015 to 2020) and an annual wildlife management plan was defined for the airport.

Through participation in the SOS Cagarro campaign, the Azores airports raise awareness among their staff and participate actively in rescuing Cory’s shearwaters found on the ground in and around the airports and delivering them to the island’s Environmental Services. These are later released near the sea, during the day, from where they will begin their first annual migration to the seas of the South Atlantic or to productive areas in the Northwest Atlantic.

Under the scope of the protocol signed with RIAS (above mentioned), a “Birdlife monitoring, photovoltaic central Study at Faro Airport was carried out - September - December 2020”.

Also the CED (Capture – Sterilise – Return) Project, in partnership with PRAVI.org was continued, with the aim of minimising and controlling the population of stray cats on the airport perimeter.
During the 2020 campaign, 12 rescues of Cory’s shearwaters were recorded at Ponta Delgada Airport, 3 at Horta Airport and 5 at Flores Airport. This campaign is promoted by the Government of the Azores each year, from 1 October to 15 November. Its main objective is to alert the people of the Azores to the need to preserve this protected species that nests in the Azores. This campaign is also intended to involve local people and entities in the rescue of young Cory’s shearwaters found near roads and in the surrounding area, during the period which coincides with their leaving their nests for their first ocean flight. The strong artificial lights disorientate the birds, causing some of them to fall in places where they are at risk of being run over or from predators.

A Sentinel Apiary was then installed at Ponta Delgada Airport. Varroosis is a disease of bees (Apis mellifera) that is found all over the world. The Azores is the third place in the world to have been awarded varroosis-free status. In order to preserve this health status, attributed to six islands in the Autonomous Region of the Azores (São Miguel, Santa Maria, Terceira, Graciosa, São Jorge and Corvo) and to comply with the Apiculture Health Plan, a partnership was set up between the Farm Development Services on São Miguel and the Azores Airports Department, with the installation of this apiary at AJPII, as a health measure to protect the regional area from bee diseases. This airport is also expected to join a project entitled “Abelha Amiga” (Friendly Bee), the main aim of which is to plant species of honey plants (which give rise to Portuguese honey and provide the huge variety of Portuguese honey we have all over the country), particularly *Metrosideros excelsa*, *Echium candicans* and *Weigelia*. 
CHAPTER 9

ENVIRONMENTAL MANAGEMENT OF CONSTRUCTION WORK
In 2020, the company's Plan for Environmental Management of Construction Work, in force since 2004, continued to be implemented, aimed to ensure the implementation of environmental requirements/measures for minimizing environmental impacts through the timely definition of roles, responsibilities and procedures in all phases of project execution, the tender process and construction work. In the same way, a review of the procedure began in late 2020, continuing into 2021.
CHAPTER 10

RAISING ENVIRONMENTAL AWARENESS
ANA invests in environmental awareness as a primary tool for promoting a change in behaviour and developed a number of campaigns throughout the year, both informative and requesting the active participation of its employees, holders of occupancy and/or operating licences, customers and/or the neighbouring community.

A large number of cooperative initiatives were held in 2020 which, due to the pandemic, were mainly remote. One of the most important initiatives was the broadcast at all airports and on ANA’s YouTube channel of a film raising awareness for the correct management of “new waste” arising from the pandemic (gloves, visors, masks), developed in partnership with QUERCUS. This film was made available after the end of the first general lockdown, when activities were resumed in the airports, and was aimed at passengers, visitors and the public in general.
Internally and to celebrate World Environment Day, on the topic of Biodiversity, ANA repeated its environmental commitment in a context of increased social, economic and also environmental challenges. To this end, in addition to awareness raising and sharing of the activities for promoting biodiversity at the company, a film on biodiversity management at Lisbon, Faro and Madeira airports was also made available on the YouTube channel. And there was an opportunity for internal dissemination of teaming up with BCSD Portugal’s Act4Nature and other biodiversity projects underway at the company’s airports. The day chosen for this was 22 May, International Day for Biological Diversity.
In fact, and contrary to what might have been expected due to the pandemic, VINCI reinforced its commitment and its focus on the environmental area, with greater commitment to a sustainable recovery, assuming that this will be the transition decade. Therefore, the VINCI Group defined 22 September as VINCI Environment Day. To mark the date, VINCI held a global online conference which was also important at ANA. Challenged to present its environmental initiatives, ANA held a web conference that day, aimed at informing its employees about the projects and best practices implemented by its teams in the field, as well as those developed with partner entities.

The conference agenda was divided into two key topics: “Partners for biodiversity” and “Efficient water and waste management”, ending with a statement from the company CEO, Thierry Ligonnière, who once again stressed the company’s commitment in the environment area.

All of ANA’s environment officers took part in this conference, whether in the making of films (on the aforementioned best practices), or in the preparation of the actual presentations or in association with partner entities, namely RIAS, CERVAS, UALg and Blueotter.
Also company-wide, an internal campaign was developed for promoting and raising awareness on the topic “October: Water month”. Thus, during October, the different initiatives underway at ANA airports and aimed at the rationalisation of consumption and higher quality assurance were promoted each week, showing the company’s commitment to improving environmental water management at the airports and in the surrounding communities.
Also based on digital initiatives, ANA took part in the European Week for Waste Reduction (EWWR 2020), releasing a video on the YouTube channel to raise awareness of waste reduction, recycling and reuse and providing information about the management of this environmental description at the company and about the different projects underway at the airports. This campaign was aimed at passenger, visitors and the general public.

In late November, the Eco-Driving campaign was also developed and shared with the entire ANA universe. The campaign contains information and tips aimed at reducing fuel consumption and carbon emissions, while also fostering road safety.
Environment concern is a core part of ANA’s activity and is continuously implemented, always trying to do more and better. This desire extends to the VINCI universe, whose 220,000 employees were encouraged to take part in a collaborative process of proposing ways and means of contributing positively to the environment. This initiative began in 2020 and will continue in 2021.

The VINCI Environment Award is aimed first and foremost at involving each employee in the Group’s environmental ambition, raising their awareness of environmental commitments, sharing initiatives and joining forces for the good of the environment. It is organised around three areas: acting to prevent climate change, optimising resources through the circular economy and preserving natural resources.
In addition, and arising from the protocol with CERVAS, a travelling photo exhibition was set up, travelling to Porto Airport and Lisbon Airport. The STRI exhibition – Nocturnal Birds of Prey in Portugal, aimed at sharing the importance of nocturnal birds of prey, along with photos by photojournalists on the work of CERVAS, was on display at Porto Airport from 17 September to 15 November 2020.

The exhibition began in Lisbon Airport on 19 November 2020 and remained on display during the early months of 2021. This exhibition will then move on to Faro, Ponta Delgada and Madeira airports.
Porto Airport also took part in the European Waste Prevention Week in 2020, releasing films on the subject of “Invisible Waste”. There were also exhibitions in the terminal in partnership with LIPOR and posts on the airport’s Facebook page. The results of water analyses and information on environmental management of the airport were also posted in the airport terminal every month.

An awareness campaign on waste was also developed for the shops and restaurants and the cleaning company, visiting 28 spaces and reaching 130 employees, as well as a campaign for monitoring the disposal of waste by the producers in the intermediate storage areas, for clarifying issues and identifying opportunities for improvement.

Under the scope of the World Environment Day celebrations, the “Airport Environment” exhibition was also on display.

There was a meeting with ALGAR - Valorização e Tratamento de Resíduos, SA at the airport, aimed at analysing the campaigns that could be developed to reduce the amount of waste produced at AFR and that gets sent to landfills.

A meeting was also held with Groundlink to assess the different possibilities for sorting the waste produced on board the aircraft, aimed at increasing the recovery rate for waste produced at the airport. And an awareness campaign was held at ARH Algarve alerting to the need for the clearing drainage ditches (rainwater) south of the airport due to insufficient drainage, which strongly increased the risk of flooding at the airport, particularly the area around the SLCI building.

Under the scope of World Recycling Day (17 May), a digital quiz was develop to raise awareness and allow ANA employees to test their knowledge in this area.

At all ANA airports, service providers, customers and holders of occupancy and/or operating licences were made aware of waste management, hazardous waste management and the reduction of water and energy consumption through environmental monitoring visits.
CHAPTER 11

CONCLUSIONS
2020 was a year of major changes in the activity and of increased challenges in the environmental area. In just a few short weeks after the beginning of the COVID-19 pandemic, demand for air transport fell sharply and air connectivity suffered a systemic collapse. In April 2020, when the pandemic reached its first peak in most of Europe, airports registered a 98.6% drop in passenger numbers. At ANA airports, the reduction in traffic units was around 70%. The impact of COVID-19 on European air traffic and on revenue will be significant and protracted.

At the same time, aviation has been fundamental for fighting the pandemic, allowing for the transfer of medical equipment and the provision of repatriation flights.

In fact, as critical infrastructure, airports all over the world have been at the forefront in this response to the crisis, providing support to health professionals and their communities. The aviation sector is now facing a protracted and uncertain recovery. Therefore, in this context, VINCI reinforced its commitment to environmental values. This commitment was made public all over the world on 22 September, VINCI World Environment Day, an event that was also celebrated at ANA.

In effect, the company continued to work hard to be more and better in a variety of areas during 2020, particularly regarding the environment: goals were reviewed, procedures change and environmental systems at the airports were readjusted and reanalysed. These campaigns are now underway. New solutions were sought out, interdisciplinary teams were set up and there was a focus on environmental innovation. The company is now redefining goals, targets and action plans in light of the new environmental goals defined in AIRPACT 2030.

Being a sustainable airport operator also means being resilient and contributing to more cohesive and resilient societies, making them better prepared to withstand major environmental impacts and economic or social pressures in a rapidly changing world. Of course this also implies preserving the bases of a prosperous world for future generations.

Thus, in 2020, there was a significant decrease in absolute energy and water consumption, as well as the production of waste and effluent, accompanied by a significant fall in traffic at ANA airports. Campaigns were developed to ensure compliance with the environmental legislation in force and to suit environmental performance to the new reality in the airports.
In short, the environmental performance of ANA airports in 2020 was marked by the result of a number of environmental campaigns defined according to the major changes imposed by the COVID-19 pandemic. These campaigns are enshrined in structured plans as a way of ensuring proper monitoring and follow-up by the company’s stakeholders.

This year posed increasing environmental challenges, implying an increase in the number of occurrences and activities to be developed in order to minimise possible impacts and to minimise consumption, while at the same time focusing on environmental efficiency. In the same way, we must highlight the importance of local and corporate environmental campaigns for reducing energy consumption, CO2 emissions, water consumption and waste production, as well as compensatory measures related to the promotion of biodiversity and environmental awareness-raising campaigns for all of the airports’ stakeholders.

Regarding ANA’s operation in 2020, it complied with the requirements of the Concession Contract in terms of management of the aspects that give rise to environmental impacts and compliance with the applicable legislation in force. It is to be expected that 2021 will be marked by the definition of Action Plans for the airports that will allow them to move towards compliance with the goals and targets defined for VINCI Airports under AIRPACT 2030.