

***REPORT ON THE ENVIRONMENTAL PROTECTION PLAN  
FOR FIUMICINO AND CIAMPINO  
REPORT ON PERFORMANCE IN 1 JULY 2019 – 30 JUNE 2020 PERIOD***

**Annex 1**

## INTRODUCTION

For Aeroporti di Roma (ADR), the intention to combine economic growth and safeguarding our environmental heritage is a strategic priority to achieve by adopting sustainability policies that require major investments and systematic commitment.

With a view to continuous improvement, and in order to minimize our impact on the environment, ADR has shifted from a logic based on mere regulatory compliance to a proactive and sustainable management of airport issues, always keeping in mind the needs and requirements of its local communities.

In 2020 the worldwide epidemic situation, which also affected our country, had severe repercussions on the operation of Rome's airports due to the dramatic drop in domestic and international air traffic. As a result, the reporting of the third year of the second sub-period of the Quality and Environmental Protection Plan, regulated by the Economic Regulation Agreement, covers an atypical reference period (July 2019-February 2020) aimed at excluding the period characterized by the pandemic spread of COVID-19 and the ensuing economic repercussions it caused to airport operations. However, the environmental indicators for Fiumicino and Ciampino airports show an overall positive trend, despite the fact that the data are difficult to compare with previous years due to the different time frame.

Notwithstanding the emergency we faced, in the past year we continued to be committed to sustainability, illustrating and reporting on our actions in our Sustainability Report, available online on Aeroporti di Roma's corporate website. We prepared the Sustainability Report according to the most advanced international reporting standards (GRI, Global Reporting Initiative) and for the first time it has been submitted to assurance; it reports the objectives achieved in terms of sustainable business development, outlining the main projects that contributed to it.

Our Sustainability Report is a transparent tool to communicate with our stakeholders and encourages an effective relationship with the main airport operators, focusing on continuous improvement. In addition to the targets set for the objectives set out in the Economic Regulation Agreement with the grantor, Aeroporti di Roma is also working intensively on issues not explicitly addressed by the Economic Regulation Agreement indicators, but which may constitute priorities for its stakeholders.

This approach is summarized in the Sustainability Plan, a document that includes all the projects designed to protect the environment, mitigate the airport's impact on the local area and sustainably develop corporate services and infrastructures. The Plan includes input from all departments, summarizing and identifying all the projects that have implications in terms of sustainability and mitigation of environmental impacts. The document, endorsed by senior management, is periodically monitored by means of an extensive framework of checks on the progress of the work that includes systematic weekly/monthly meetings, involving the General Manager and the Department Directors and are designed to quantify the objectives achieved, any weaknesses or areas of improvement to address.

The Sustainability Plan is in line with the international guidelines defined by the General Assembly of the United Nations through the SDGs (Sustainable Development Goals), and acts as a long-term tool that links ADR's environmental policy with the internationally endorsed objectives, enabling our company to help achieve the international goals on a local scale through its programme of initiatives and measures.

A further aspect that goes beyond the objectives of the Economic Regulation Agreement, but is a priority for ADR and converges into the Sustainability Plan as one of its cornerstones (as proof of the company's commitment to goal no. 11) is the adoption of cutting-edge environmentally-friendly design and construction criteria.

The limitation of land consumption in airport development is in fact a priority issue for the company. The infrastructure development carried out at Fiumicino airport has contributed to

achieving excellent performance in terms of the quality of services offered to passengers and have earned us important worldwide awards (such as the "World's Most Improved Airport 2018" or the "ACI Best Airport Award 2019"). These measures were carried out by building the airport on itself and without consuming additional land. The low ratio of land consumed to passengers served, to date, is much lower than the average of other European hubs.

Apart from paying special attention to the airport's "vertical" development process, the company's profile is becoming more and more environmentally sustainable over time in the way it manages new projects and infrastructures. Airport design and construction concepts are evolving in an increasingly "greener" direction, becoming a top priority. In 2016, ADR decided to start the process to achieve LEED (Leader in Energy and Environmental Design) certification, Gold level. The LEED protocol is an international standard that ensures that the new infrastructures observe the most advanced and strictest environmental criteria in the world. The company's decision to submit new projects to assessment to obtain this certification entails a number of virtuous environmental requirements, including, for example, recovery of almost all waste produced by demolition and their resulting re-introduction in the production/construction process. Furthermore, in a perspective of assuming a responsible design, the new infrastructures are built preferentially using material coming from recycling processes, in this way reducing consumption of raw material and the impacts made by the extraction and machining processes. Another requirement set out by the protocol is to encourage the use of locally (regionally) sourced material, to reduce the environmental impact of transportation. The environmental protocols concerning energy consumption required for LEED-certified facilities are among the most advanced in the world.

Those listed above are only a few of the requirements imposed by the certification, and they contribute to making the phases of designing and building new infrastructure more sustainable and responsible for the "environment system" in which these latter fall. ADR's decision to achieve certification began by submitting the General Aviation Authority project for Ciampino airport, which reached Gold level in 2019, and then continued with the design and beginning of construction of the new boarding area A and Hubtown at Fiumicino.

Our Environmental Management System is another fundamental component of the Sustainability Plan, the certification of which has been extended under the most advanced ISO 14001:2015 standard, as additional proof of ADR's proactive approach to the development of the regulatory framework. The Internal Management System is the main tool, together with the "Environmental Document" and the "Control System", through which the company takes a "systemic" approach to environmental issues, committing itself to audit the behaviour of all the subjects operating within Rome's airports. The "Environmental Document" is a tool which requires that companies operating inside the airport grounds, at Fiumicino and Ciampino, define in advance how they will handle the potential environmental impact of their business. The documentation, which has become contractually binding, is evaluated by the technical body responsible for approving it or if necessary, following appropriate analysis, requiring additions or amendments.

Continuing ADR's commitment to "monitoring environmental conduct", field inspections aimed at assessing the correct application of regulations, third-party conduct, and environmental best practices have also been systematized and stepped up. The findings of the audits carried out show a situation of general compliance with the reference legislation and environmental guidelines defined by ADR. In 2019 no significant "non-conformities" were found and the situation has generally improved compared to 2018, pointing to a progressive development of the environment-friendly culture.

The objective of the above measures of the Environmental Document, of the operational checks and of the entire management system is to increasingly ensure that everyone working at the airport behave properly in respect of the environment and to turn the values of sustainability and respect for the environment into guiding principles for everyone who works at Rome's airports.

The substantial effort (summarized and briefly described in this paragraph), by which in recent years the company has made sustainability policies a key driver in the development and proper management of its airports, was officially recognized in 2020 by the UNWTO (United Nation World Tourism Organization). In fact, the "Leonardo da Vinci" Airport has received a

prestigious award for sustainability from the United Nations, which proves how it is possible to operate and manage such a complex airport while respecting sustainability, a key value of Aeroporti di Roma's business strategy.

ADR's willingness to grow and continuously improve by increasingly limiting its "Environmental footprint" in several areas it is responsible for (energy saving, water saving, reduction of emissions into the atmosphere, inclusion of environmental clauses in contracts, increase in the percentage of separate waste collection) is a main objective for the company. The annual monitoring of these environmental KPIs is in fact in addition to all the measures described so far to implement the sustainability policy that is the foundation of the choices and development of Aeroporti di Roma.

This corporate commitment is reflected in the final accounting required by the Economic Regulation Agreement. In detail, in 2016, we defined a new system of environmental indicators, to use for the second regulatory sub-period (2017–2021). Using as reference the guidelines defined by ENAC in 2015, we have been able to select a list of indicators and define improvement objectives that – compared to what has already been achieved in the previous five years – can be considered much more relevant in terms of developing an increasingly sustainable airport system. The following indicators were identified for Fiumicino and Ciampino:

- *reduction in energy consumption at the terminals* by 2.5 percentage points, compared to the energy used in 2015. We also included the energy used by the air conditioning systems;
- *energy production using photovoltaic plants*: in the 2017–2021 five-year period ADR expects to produce 1.5% of its electricity using renewable sources, at both FCO and CIA airports;
- *replacement of the car pooling fleet with low-emission vehicles* (mainly electric or hybrid), to achieve replacement of 35% of the vehicles at FCO and 60% at CIA;

- *separate waste collection of non-hazardous waste in the passenger transit areas.* For this type of indicator we expect an improvement of 5 and 6 percentage points respectively, at FCO and CIA, over the five years of the plan;
- *reduced drinking water consumption per passenger* by 5% compared to the water consumption recorded in 2015 (indicator only for the FCO airport);
- *verification of environmental clauses included in the contracts,* to check operational implementation and reliability of the related contents.

The results achieved for the third year are provided hereunder in the respective paragraphs.

#### ENERGY SAVING

Fiumicino airport decreased its electricity consumption in the last few years as a result of significant action taken to improve energy efficiency, implemented on an ongoing basis. Work was completed on replacing the luminaires with LED lights in the Terminals and on the external access road network, and work continued on replacing the light towers with LED lights in the airside area; work was done on replacing the refrigeration units and absorbers with high-performance units. We made an important contribution to energy efficiency improvement with the innovative FDD software, which can predict malfunctions and optimizations in air conditioning systems using AI logic, on the basis of which hundreds of reports have been generated.

ADR installed several photovoltaic systems and a small, 32 m tall, 10 kW wind turbine that generates about 2000 kWh per month.

Energy saving results have been achieved thanks to these measures and also thanks to the very efficient energy profile of the new buildings. The new boarding area E recently built, for example, stands out in the global context for its consumption in line with the best international practices.

As concerns the Ciampino airport, measures continued in the departures area and the external areas by replacing conventional light bulbs with LED lamps, installing inverters in the air-conditioning system on the air treatment units and implementing the so-called free-cooling system that, by using outside air, reduces the energy consumption of the air-conditioning system. A system was also installed to monitor air-conditioning and heating at the airport in order to automate its operation.

A new and important factor that inevitably affected the energy consumption of the Rome Ciampino airport was the commissioning – although gradual – of the new General Aviation that started up (starting with the common areas of the ground floor) in January 2017 and continued in 2018 (January) making available additional handler rooms. Despite the LEED certification, the new structure's implementation has had an impact on the airport's energy requirements, resulting in an overall higher consumption of electricity in the light of the change in the reference perimeter.

In 2018, we submitted projects for obtaining white certificates to the GSE. Specifically, we submitted a plan for the March 2018 – August 2018 semester for a total of 298 certificates and a plan for the 01/09/2018 – 31/08/2019 period for a total of 488 certificates. The compensation obtained amounts to approximately € 197,000.

A project was also submitted to replace refrigeration units in the PG344 thermal power plant in Terminal 1, and was approved, for which about 60 TEE will be recognized.

### *REDUCTION OF EMISSIONS*

As part of the measures to minimize atmospheric emissions, ADR is also engaged in neutralizing its CO<sub>2</sub> emissions by joining (in 2011) the voluntary Airport Carbon Accreditation (ACA) system promoted by ACI Europe (Airports Council International). This certification system envisages four increasing accreditation levels depending on the mapping and quantification of the emissions produced and the relevant actions taken to reduce them (1 Mapping, 2 Reduction, 3 Optimization e 3+ Neutrality).

The determination is made each year on the basis of the calculation of the emissions of the previous year, taking into account both the direct activities of the airport operator (heating and air conditioning systems, the airport's energy consumption, the operating vehicles required by the airport activities) and those of third parties that may be guided or influenced by airport activities.

In 2020, the Fiumicino and Ciampino airports both maintained level 3+ of the ACA "Neutrality" accreditation for their 2019 emissions. This result was achieved both for the emissions avoided together with the measures put in place, and for the regulatory extension issued as a result of the Covid emergency.

Both airports are among the very few airports in the world to have achieved these results, mainly thanks to energy-saving measures. Indirect emissions were also reduced at Fiumicino, thanks to stakeholder engagement in the use of free-floating car sharing and the upgrading of bus stations, as sustainable alternatives for passengers to reach the airport.

The management and development of a vehicle fleet that is increasingly respectful of the environment have been the cornerstone of the development of ADR's company fleet for several years, especially for the portion of its fleet that is used for personnel mobility and representation services.

To reduce polluting emissions, in recent years ADR has begun to optimize and reduce the number of vehicles in its fleet by dividing it into micro "pools" and introducing vehicles with low CO<sub>2</sub> emissions, fully electric vehicles, and hybrid vehicles. Based on a situation which initially had a total of about 180 conventional vehicles (fuelled exclusively by petrol or diesel), the Company's car fleet reached a total of 163 vehicles in February 2020, of which only 96 fuelled by petrol/diesel. Of the remaining vehicles, 12 are fully electric (Citroen C-Zero), 53 are classified as "full Hybrid" (Toyota Yaris Hybrid) and 2 are Hybrid Plug-ins. A further 7 full hybrid vehicles will be delivered during 2020.

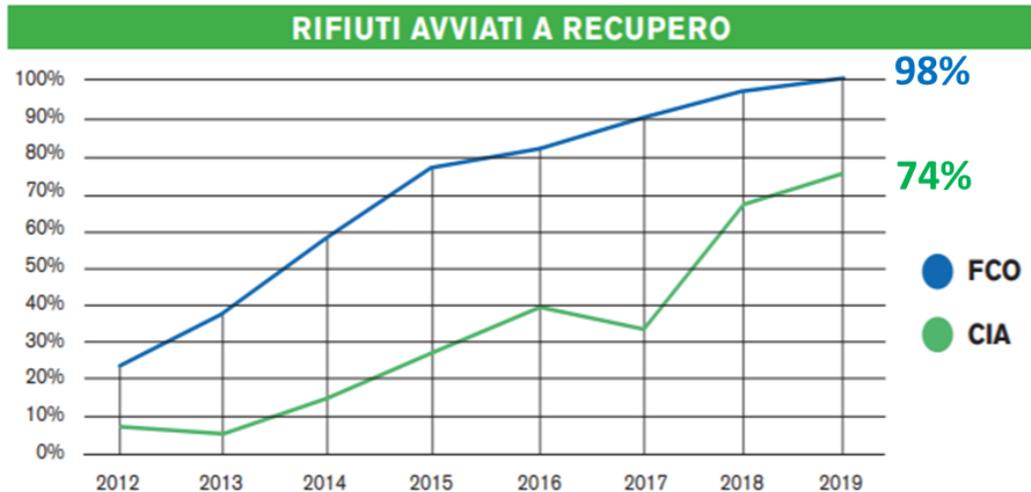
	Rental		Property		% Fiumicino	% Ciampino
	FCO	CIA	FCO	CIA		
Petrol/diesel pooled service cars	55	4	31	6	59.72%	52.63%
Full electric cars			11	1	40.28%	47.37%
Hybrid cars	47	8				
	102	12	42	7	100.00%	100.00%
	163					

Tab. 1: Company vehicle fleet photo (pre-COVID) as of 28 February 2020

As part of our sustainable vehicle fleet management policy, we have decided that any future requirements will have to be met with hybrid vehicles, except in special cases. In addition, to maximise the use of truly environmentally-friendly vehicles, we decided to opt for full hybrid vehicles, even if mild hybrid vehicles were less expensive.

#### WASTE MANAGEMENT AND TREATMENT

ADR is constantly engaged in increasing the separation of the waste produced within the airport grounds. Since 2012, the percentage of waste sent for recovery has increased considerably thanks to the process optimization measures implemented by ADR: reconfiguration of the collection methods, implementation of door-to-door waste collection in the terminals, and raising awareness among airport operators. In 2019, at Fiumicino airport, this parameter reached 98%.



<sup>14</sup> Percentuale di rifiuti avviati a recupero ricalcolata senza considerare i rifiuti costituiti da fanghi, fosse settiche e miscele acque grasse.

Concerning the indicator defined for the final accounting of the Economic Regulation Agreement, we decided to focus on the process used to separate the waste generated in the airport terminals. The indicator considers separated waste only waste that has been properly separated by users (businesses and passengers) in the terminals, not taking into account the results achieved by the subsequent processing phases that take place at the treatment plants.

In this context, over the past year, we further optimized the "door-to-door" separated waste collection program, which is now fully operational at the two Roman airports.



As far as Ciampino is concerned, we gradually started the program in March 2018, and it became fully operational in June 2018, sharply improving the percentage of separated waste at the airport. Thanks to this investment, in the period considered (July 2019-February 2020), about 56% of the waste produced in passenger transit areas was separated. This result is markedly better than the objective set by the Economic Regulation Agreement for the third year (37%).

In the period, (July– February 2020) the percentage of separated waste at Fiumicino reached 64%. The environmental performance of the food & beverage sub-concessionaires served by "door-to-door" collection was monitored by preparing a specific report that compares the turnover and the areas of the sub-concessions with the production of waste of the individual shops. The outcome of the monitoring was periodically sent to the sub-concessionaires.

Verification of the delivery of mixed waste also continued, as an additional tool to encourage proper waste separation. The analysis, performed on samples of mixed waste, is aimed at ensuring that the percentage of "separable" waste remains below the set maximum levels. Non-compliant results are reported to the sub-concessionaires to help them improve their performance.

In addition, we installed 7 PET bottle and aluminum can compacting machines near Fiumicino airport's security checks to reduce the quantity of liquid waste to be disposed of and ensure that the containers themselves are recovered as plastic and metal packaging. At Ciampino airport, 2 additional compactors with similar characteristics were installed at the terminal's security checks (a total of 7 at Fiumicino and 2 at Ciampino).

In September 2019 we also started composting the "wet" fraction of the waste produced in the



terminals. This made it possible to reuse 150 tonnes of organic waste, converting it into compost.

The goal is to promote a green system to manage and give value to the organic fraction of airport waste. In fact, the treatment cycle begins and ends in the local area (self-composting) where the organic waste is produced. The compost obtained will be reused in the green areas of the airport, directly using on-site the value of the product after its treatment.

## *REDUCTION OF CONSUMPTION OF DRINKING WATER*

ADR has invested substantially in optimizing drinking water consumption by modernizing its distribution network, upgrading significant parts of it, and using drinking water only where it is specifically necessary, switching to industrial water in all other cases. Over the years, these actions have saved more than 30% of drinking water per passenger, compared to the 2012 figure.

To confirm ADR's effort in previous years, measures aimed at saving water continued last year, with the ultimate aim of further developing and optimizing the methods of using drinking water, considered as a resource.

In this case, the recent work done to optimize the consumption of drinking water includes:

- The installation of local pressurization units equipped with inverters, able to guarantee adjustment of the supplied pressure (and, as a result, the flow rate);
- The installation of flow rate and pressure meters in certain strategic points of the airport distribution network. During May 2018, ADR installed 8 continuous flow rate/pressure meters near the same number of ACEA volumetric meters (located on the main drinking water distribution network ring). These devices connected to the airport remote control platform do not only control that the water is provided by ACEA in real-time (and a total value measured of the total airport water supply), but they also monitor and manage the pressure and the flow rate parameters.
- The upgrade of various sections of the airport's organic treatment plant, and the construction of new mechanical filtration systems for the effluent from the organic treatment plant are aimed at improving the quality of the industrial water.

## *VERIFICATION OF THE INCLUSION OF ENVIRONMENTAL CLAUSES IN CONTRACTS*

To comply with the provisions of the Economic Regulation Agreement and legal requirements, last year we continued to monitor the third parties that operate at the airport to ensure that their conduct was consistent with ADR's environmental policies. Concerning contract management, while reviewing the contract forms, we included specific environmental clauses in the special tender specifications and found that, for both airports, it was advisable to include, among the improvement objectives, audits of the proper implementation of such clauses.

Some of the indicators of the Quality and Environmental Protection Plan presented to ENAC for the 2017–2021 period are designed to consolidate the implementation of the environmental clauses included in the contracts entered into with third parties, by gradually stepping up auditing. Therefore, the objective is to operationally check that third parties properly apply the content of the environmental requirements governed by the specifications.

Such auditing is part of a broader intervention program initiated by ADR on the supply chain concerning sustainability topics. The check applies to a portion of the Class A suppliers, i.e. the suppliers that represent up to 80% in value of the total transacted amount, net of the intragroup and leaving out orders that are not affected by environmental requirements (e.g. simple supplies) and orders whose activity ended before the control period.

The control activities involve several environmental media, such as, for example, waste management, atmospheric emissions, water discharges and withdrawals, as well as the management of hazardous substances, the correct permitting procedures with the competent authorities, etc. The results of the inspections, together with the relevant reports, are recorded and archived with the "Archibus" environmental management software that supports the various control phases, from planning the inspection to managing the surveys and terminating the flow. The overall analysis of the outcomes of last year's activity identified waste management and the proper management of logistics and construction site areas as the most vulnerable areas in need of improvement.

The latter is a particularly relevant issue for ADR, in fact we issued a special procedure to govern the proper management of these areas, to manage the related environmental aspects and schedule and anticipate the need for them by the lines. The objective is to identify the different areas within the site to be made available to third parties, assess their compatibility according to the intended use, fence them correctly and uniquely identify the recipient of them in an area assignment report. At the same time, this activity is aimed at preventing any incorrect management of the areas within the airport grounds and at using a suitably populated summary database, that includes the complete range of areas for ADR's "technical" use with the specific characteristics relating to each area.

Lastly, it is important to point out that the outcome of the system of checks addressed to third party contractors also provides an environmental assessment of their suppliers. These results, together with the results of further audits carried out by the various corporate compliance departments, make up an integrated assessment system known as "Vendor Rating". The purpose of this system is to integrate the certification and assessment of companies registered into the Suppliers List, as a tool for assessing performance.

ENVIRONMENTAL INDICATORS July 2019 – February 2020 FIUMICINO AIRPORT

<b>YEAR 3 FINAL ACCOUNTING FOR FIUMICINO</b> (Jul 19–Feb 20)		<b>Year 3</b>	<b>Objective</b>
<b>Reduction of electricity consumption at terminals</b>	Reduction of energy consumption (kWh), compared to the baseline year	<b>50,834,096*</b>	<b>82,810,199</b>
<b>Electricity generation by installing photovoltaic systems</b>	MWh generated by traditional sources (non-renewable), compared to the MWh consumed	<b>99.72%</b>	<b>99.0%</b>
<b>Replacement of car-pooling vehicles with low emission vehicles</b>	% of non-low emission vehicles compared to ADR's vehicle fleet	<b>59.72%</b>	<b>79.0%</b>
<b>Separated waste collection of non-hazardous waste</b>	% of separated waste from passenger transit areas	<b>64%</b>	<b>53.0%</b>
<b>Reduction of consumption of drinking water**</b>	% reduction of consumption (in litres) of drinking water per pax, compared to the baseline year	<b>10%</b>	<b>3%</b>
<b>Verification of compliance with environmental clauses included in contracts</b>	% of contracts not checked	<b>84%</b>	<b>80.0%</b>

\* the final balance of 50,834,096 kWh refers to a period of only 8 months (July 2019-February 2020). In order to obtain an annual consumption (76,251,144 kWh) comparable and consistent with the final figures for previous years and with the target (82,810,199 kWh) the monthly consumption for the 4 months of the airport closure period was set equal to the monthly value extrapolated on the basis of the consumption recorded during the 8 months of activity (July 2019–February 2020).

\*\* refer to the report on drinking water consumption for the methodology used to report water consumption

ENVIRONMENTAL INDICATORS July 2019 – February 2020 CIAMPINO AIRPORT

<b>FINAL BALANCE OF YEAR 3 FOR CIAMPINO (Jul 19–Feb 20)</b>		<b>Final balance</b>	<b>Objective</b>
<b>Reduction of electricity consumption at terminals</b>	Reduction of energy consumption (kWh), compared to the baseline year	<b>6,146,169*</b>	<b>10,520,718</b>
<b>Electricity generation by installing photovoltaic systems</b>	MWh generated by traditional sources (non-renewable), compared to the MWh consumed	<b>100%</b>	<b>99.0%</b>
<b>Replacement of car-pooling vehicles with low emission vehicles</b>	% of non-low emission vehicles compared to ADR's vehicle fleet	<b>52.63%</b>	<b>70.0%</b>
<b>Separated waste collection of non-hazardous waste</b>	% of separated waste at the passenger transit areas	<b>56%</b>	<b>37.0%</b>
<b>Verification of compliance with environmental clauses included in contracts</b>	% of contracts not checked	<b>50%</b>	<b>80.0%</b>

\* the final balance of 6,146,169 kWh refers to a period of only 8 months (July 2019–February 2020). In order to obtain an annual consumption (9,219,254 kWh) comparable and consistent with the final figures for previous years and with the target, the monthly consumption for the 4 months of the airport closure period was set equal to the monthly value extrapolated on the basis of the consumption recorded during the 8 months of activity (July 2019–February 2020).