

***ENVIRONMENTAL PROTECTION PLAN FOR THE FIUMICINO AND CIAMPINO  
AIRPORTS:***

***REPORT ON THE SECOND YEAR OF THE SECOND TARIFF SUB-PERIOD (1 July  
2018 - 30 June 2019)***

**Aeroporti di Roma S.p.A.**

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## INTRODUCTION

ADR is committed to providing high-quality services while ensuring the development and consolidation of an increasingly sustainable airport system. We are, in fact, aware of the need to combine economic growth with the protection of environmental heritage. With a view to continuously improve and with the ultimate aim of minimizing its impact on the environment and surrounding communities, the ADR Group is increasingly investing (in terms of economic and other resources) to transition from a purely regulatory compliance approach to pro-active management of environmental problems.

The final balance of the second year of the second sub-period of the Quality and Environmental Protection Plan, regulated by the Economic Regulation Agreement, shows the positive results achieved from July 2018 to June 2019. The performance of environmental indicators at Fiumicino and Ciampino airports shows an overall positive trend that exceeds the targets set at the time of signing the agreement.

This result was achieved essentially thanks to the company's commitment on the environmental front: the objective has always been to do the maximum possible, beyond the defined targets, also committing to issues that are not explicitly considered by the indicators set out in the Economic Regulation Agreement, taking into account the priorities of stakeholders, the projects included in the Environmental Sustainability Plan as well as the results resulting from the Environmental Analysis.

Some examples of the proactive corporate attitude in the field of territorial and environmental protection are:

- sharing with senior management the Environmental Sustainability Plan, which includes all projects aimed at protecting the environment, mitigating the airport's impact on the territory and the sustainable development of corporate services and infrastructures.
- the annual preparation of the Sustainability Report;
- the adoption of environmentally sustainable design and construction standards (LEED protocol and low land consumption);
- the application of a systematic and methodical environmental management system;

The company's commitment to environmental sustainability projects is further shown by the definition and yearly sharing with senior management of our Annual Environmental Sustainability Plan. This document is drawn up in the first few months of the year and receives input from all departments, summarizing and identifying all the projects that have implications in terms of environmental protection, mitigation of the impacts induced by the airport system and sustainability of services and activities.

The Plan is inspired by the international guidelines defined by the General Assembly of the United Nations through the SDGs (Sustainable Development Goals), and is proposed as a tool aimed at linking ADR's environmental policy to the shared objectives, so that the company with its program of actions/interventions can contribute, on a local scale, to achieving these international Goals.

The document is divided into four macro-areas of intervention:

1. Containment of the environmental impact of processes: this category includes measures that make a concrete and measurable contribution to improving ADR's environmental performance and reducing the environmental impact of airport processes/activities.
2. Consolidation and development of ADR's environmental system (Environmental System 2.0): this section includes a series of measures aimed at strengthening controls on the main airport operating processes and encouraging all operators to adopt rules of conduct that are consistent with ADR's environmental policies and current legislation.
3. Development and strengthening of environmental monitoring systems (Environmental Monitoring Plan 2.0): this category includes all measures aimed at mitigating and preventing the environmental impact of processes, a priority issue for ADR. In particular, the consolidation and development of the Environmental Monitoring Plan (EMP), the definition of a new system resulting from an analysis of the risk-based context, the development of Priority Environmental Indicators and the identification of tolerance and intervention thresholds.
4. Encouraging communication and cultural change: this class includes interventions aimed at developing and disseminating a culture of environmental sustainability by improving communication with the main stakeholders (development of the ADR site, publication of environmental data as required by the EIA Decree for the development of Fiumicino Sud, organization of opportunities for discussion with stakeholders, continuation of training programs and internal communication).

The periodic analysis of the progress of the Plan is carried out by means of an articulated structure of checks that include systematic weekly/monthly meetings, involving the General Manager and the Department Directors involved in the various actions envisaged by the Plan, and are designed to quantify the objectives achieved, any weaknesses or areas of improvement to address.

The Sustainability Report is the document that reports the objectives achieved in terms of sustainable development of the business and explains the main actions taken for continuous improvement. The report is a transparent communication tool with our stakeholders and encourages a debate that is effective and aimed at continuous improvement with the main businesses of the airport sector and of the production world. The document has been prepared in accordance with the most advanced international reporting standards and is available online.

Another aspect, which goes beyond the objectives of the Economic Regulation Agreement, but is nevertheless a priority for ADR, is the adoption of cutting-edge environmentally compatible design and construction criteria: the limitation of land consumption in the context of airport development is a priority issue for the company. The infrastructure development works carried out at Fiumicino airport have 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 ratio of runways, land, and passengers is a matter of international pride, as is the ratio of land and passengers served, a parameter much lower than the average of the 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. Although this is not one of the goals of the Economic Regulation Agreement, the airport design, and construction concepts are evolving in an increasingly "greener" direction, taking on a position of overriding importance. In 2016, ADR decided to undertake the path 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 the new projects to assessment to get 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 most advanced environmental protocols in the world for LEED-certified facilities are adopted for energy consumption as well.

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 obtain certification began with the submission of the General Aviation project at Ciampino airport and continued with the design and construction of the new departure area A and Hubtown at Fiumicino.

Significant progress during the past year was in fact made on Environmental Management System, whose certification was renewed according to the most advanced ISO 14001:2015 standard, providing additional proof of ADR's proactive approach to the development of the regulatory context. In addition to this, the internal management system was also entirely reviewed to ensure a "systemic" approach to the environmental themes, aimed at "regulating" and controlling the conduct of all figures working inside the Rome airports. A further innovation in this regard is the preparation of a new contractual document, the "Environmental Document". This tool requires that companies operating inside the airport areas, both at Fiumicino and Ciampino, define in advance how they will manage the potential environmental impact of their activities. The documentation, which has become contractually binding, is evaluated by the technical body responsible for approving it or, if necessary, following appropriate analysis, requires any 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 best environmental practices have also been systematized and stepped up.

The objective of all 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.

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 environmental sustainability actions that are the foundation of the choices and development of Aeroporti di Roma. This corporate commitment is formalized by summarizing the indicators required by the Economic Regulation Agreement.

On this subject, the results achieved for the second year are provided hereunder in the respective paragraphs.

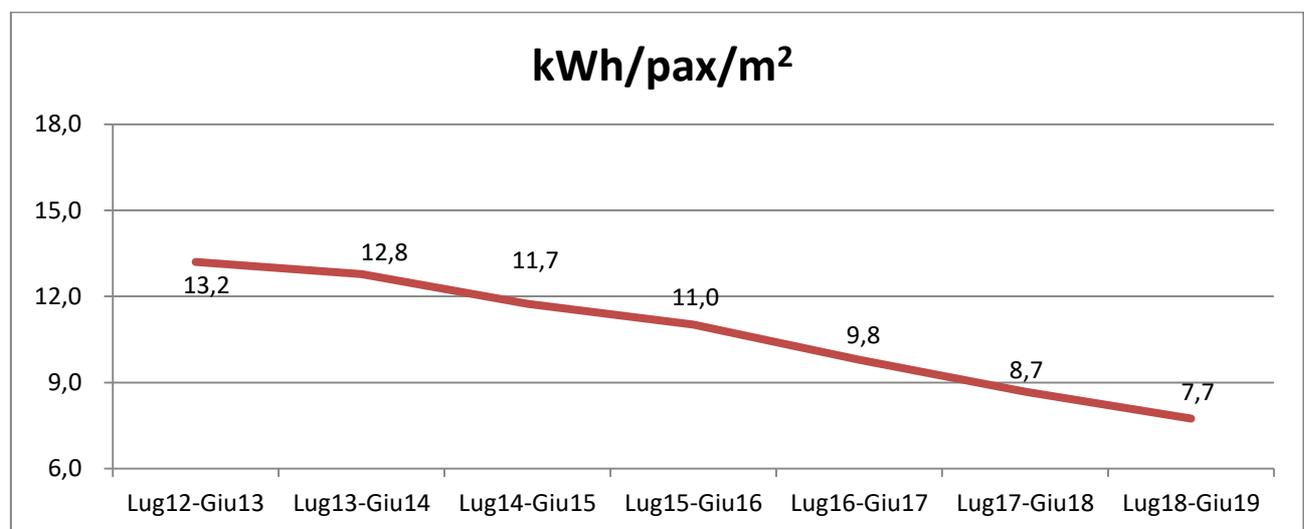
## *ENERGY SAVING*

Fiumicino airport decreased its energy consumption trend in the last few years due to significant action taken to improve energy efficiency, implemented on an on-going 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 on the airside side; work continued 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.

With a view to making its business increasingly sustainable, ADR installed several photovoltaic systems and a 10 kW mini 32 m tall wind turbine that generates about 2000 kWh per month.

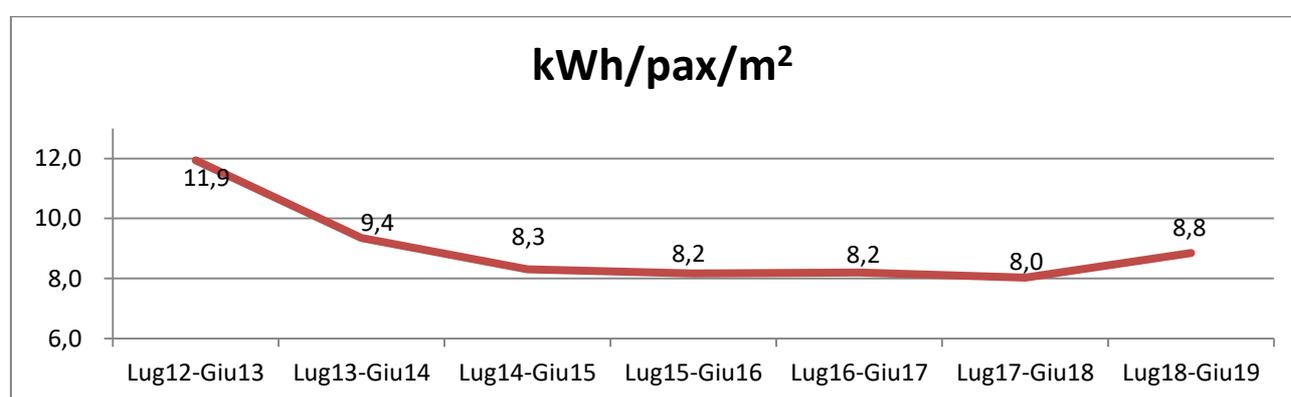
The kWh/(passenger\*m<sup>2</sup>) indicator decreased over the last seven months by 41%, as can be verified on the chart below. It was possible to attain this result thanks to the efficiency measures above and the highly efficient energy profile of the newly built buildings; the new, recently built departure area E, for example, stands out on the global scene owing to its extraordinary energy efficiency and its moderate consumption, in line with the best international practices.



As concerns the Ciampino airport, energy efficiency improvement 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 allow for its automated management.

A new and important factor that inevitably affected the energy consumption of the Rome Ciampino airport was the although gradual commissioning of the new General Aviation that started up (starting from 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. Despite the new facility coming into operation, the performance of the kWh/passenger\*m<sup>2</sup> indicator in the last six years has been in any case going down and this demonstrates a 26% decrease, as can be seen in the chart below.



In 2018, we submitted projects for obtaining white certificates to the GSE. Specifically, we submitted a draft for the March 2018–August 2018 semester for a total of 298 certificates for a semester. The total amount of certificates that can be obtained from this project is estimated at 550 TEE for a probable cost of € 130,000€.

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 taken to minimize atmospheric emissions, ADR is also engaged in neutralizing CO<sub>2</sub> emissions by joining the voluntary certification system Airport Carbon Accreditation (ACA) promoted by ACI Europe (Airport 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 calculation is made each year on the basis of the tally of the emissions of the previous year, taking into account both the direct activities of the airport operator (thermal power plants for

heating and air conditioning, energy consumption of the airport, operating means necessary for airport activities) and those of third parties who can be guided or influenced by airport activities. In 2019, Ciampino airport maintained the 3+ level of ACA "Neutrality" accreditation for 2018 emissions. Last year Fiumicino reconfirmed its ACA level 3+ accreditation "Neutrality" regarding emissions for the year 2017, the next ACA submission will take place in November for the certification of emissions in 2018.

Both airports are among the very few airports in the world to have achieved these results, achieved mainly thanks to energy-saving measures. Indirect emissions were also reduced at Fiumicino, thanks to stakeholder involvement 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 limit the number of vehicles in the fleet by organizing the fleet into micro "*pools*" and introducing vehicles with low CO<sub>2</sub> emissions, fully electric vehicles, and hybrid vehicles. Starting from a situation that initially included about 180 conventional vehicles (powered exclusively by gasoline or diesel), in June 2018 the company's car fleet reached a total of 174 vehicles including 12 fully electric vehicles (Citroen C-Zero) and 15 hybrids of which 13 full hybrids (Toyota Yaris Hybrid) and 2 plug-ins (BMW 530e).

Continuing along with this policy, between July 2018 and June 2019 ADR issued a tender to replace old gasoline vehicles with new ones, including 45 full hybrid vehicles (Toyota Yaris Hybrid) and by 30 June 2019, the first 10 new hybrid vehicles had already been delivered and placed in the fleet.

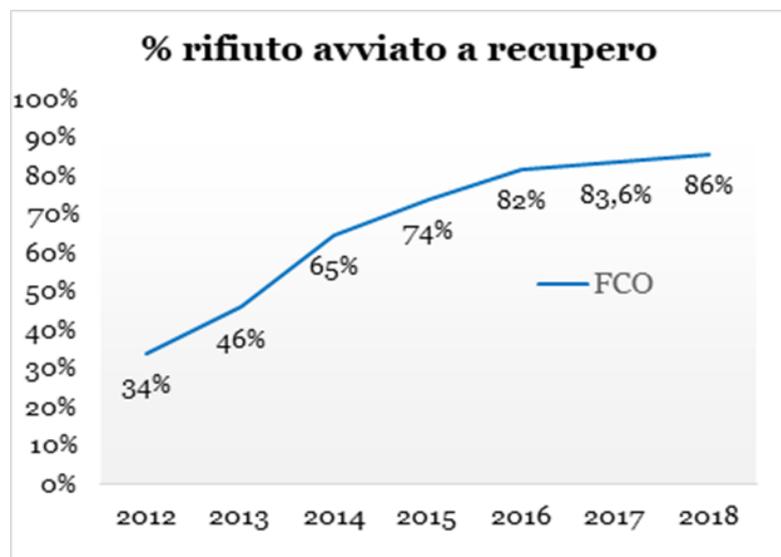
Delivery of the others is underway, and by September the number of full hybrid vehicles in the fleet will reach 53, while the last 5 are expected by the end of 2019 or the beginning of 2020.

In addition, as part of our sustainable vehicle fleet management policy, we have decided for the future that any new requirements will have to be met with hybrid vehicles, except in special cases.

## MANAGEMENT AND TREATMENT OF WASTE

ADR is constantly engaged in increasing the separation of the waste produced within the airport grounds.

Starting from 2012, the percentage of waste sent for recovery has increased considerably thanks to the process optimization measures implemented by ADR: the reconfiguration of the collection methods, implementation of door-to-door waste collection in the terminals, raising awareness among airport operators. In 2018, at Fiumicino airport, this parameter reached 86%.



This figure was the subject of an ad hoc communication campaign aimed at passengers, to encourage them to cooperate on the subject of proper waste separation at Fiumicino airport.

As regards the indicator defined for the final balance of the Economic Regulation Agreement, we decided to focus on the process used to sort the waste

generated in the 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, about 60% of the waste produced in the passenger transit

areas was separated during the period under review. This result is definitely better than the goal set by the Economic Regulation Agreement for the second year (36%).

With regard to Fiumicino, in the period under review (July 2018 - June 2019) the percentage of separated waste 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 points of sale. The results of the monitoring were periodically sent to the sub-concessionaires.

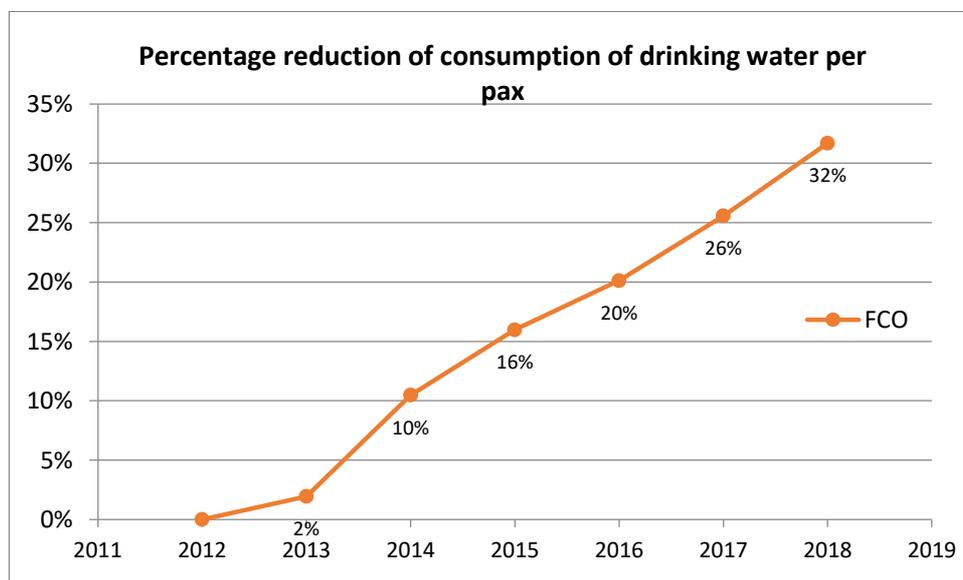
Verification of the delivery of mixed waste also continued, as an additional tool to encourage proper waste separation. The analysis, which was carried out by taking samples of non-separated waste, is aimed at ensuring that the percentage of "separable" waste is lower than the maximum levels envisaged. Non-compliant results are reported to sub-concessionaires so that they can improve their performance.

In addition, in the past year, we installed 2 PET bottle and aluminum can compacting machines near the T3 security checks in order to reduce the quantity of liquid waste to be disposed of and ensure the recovery of the containers themselves as plastic and metal packaging. In addition, in the second half of 2019 we will install additional compacting machines with similar characteristics (a total of 7 at Fiumicino and 2 at Ciampino) at the security checks at the terminals at Fiumicino and Ciampino airports.

In the first half of 2019, we completed the acquisition of two electromechanical composters. The purchase is aimed at the construction of a plant for composting food waste with a capacity of about 1,000 t/year, coming from restaurants and bars of the terminals. 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 always significantly invested in optimizing drinking water consumption by modernizing the distribution network, upgrading significant parts of it, and ensuring the use of drinking water only for those uses for which it is specifically necessary, to then switch to the use of industrial water in all the other cases. Over the years, these interventions have made it possible to save more than 30% of drinking water per passenger, compared to the figure for 2012.



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 the case in point, the recent works aimed at optimizing consumption were:

- o The installation of local pressurization units equipped with inverters, able to guarantee adjustment of the supplied pressure (and, as a result, the flow rate);
- o 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.

#### *VERIFICATION OF ENVIRONMENTAL CLAUSES INCLUDED IN CONTRACTS*

In compliance with the provisions of the Economic Regulation Agreement and in legal requirements, we initiated several monitoring activities to manage third parties that work at the airport to ensure that their conduct was consistent with ADR's environmental policies.

As regards contract management, we included specific environmental clauses in the special tender specifications during the revision of the contract forms and found that, for both airports, it was appropriate to include the objective of verifying their correct implementation among the objectives for improvement.

In particular, some of the indicators of the Quality and Environment Plan presented to ENAC for the 2017-2021 period are designed to consolidate the implementation of the environmental clauses contained in the contracts entered into with third parties, by gradually strengthening auditing. Therefore, the objective is to operationally verify that third parties properly apply the content of the environmental requirements governed by the specifications.

The control activity described can be set in a more extensive intervention program initiated by ADR on the supply chain concerning sustainability topics. This verification applies to a percentage of Class A suppliers, i.e. suppliers representing 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 monitoring activities involve the various environmental media, such as waste management, emissions into the atmosphere, water drainage and withdrawal, and the management of hazardous substances, the correct authorization procedures with the Competent Bodies, the measures taken to reduce noise, etc.



A global analysis of the results of the activities carried out during the past year shows that the areas of waste management and the correct maintenance of the logistics and construction site areas have been the most vulnerable areas for improvement to date.

The latter is a particularly relevant issue for ADR, in fact last year 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 defining 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 units, form part of 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. In this regard, in recent months, ADR has been preparing an *ad hoc* procedure aimed at governing this process and sharing an integrated assessment method among the various Compliance Units.

ENVIRONMENTAL INDICATORS July 2018 - June 2019 FIUMICINO AIRPORT

		<b>FIUMICINO</b>	
		<b>Year 2</b>	<b>Objective</b>
<b>Reduction of electricity consumption at terminals</b>	Reduction of energy consumption (in kWh) compared to base year	<b>75,238,341</b>	<b>83,230,555</b>
<b>Electricity generation by installing photovoltaic systems</b>	MWh generated by traditional sources (not renewable) compared to the MWh consumed	<b>99,28%</b>	<b>99,5%</b>
<b>Replacement of car-pooling vehicles with low emission vehicles</b>	% of non-low emission vehicles compared to the ADR vehicle fleet	<b>78,08%</b>	<b>87%</b>
<b>Separated waste collection of non-hazardous waste</b>	% of separated waste at the passenger transit areas	<b>64%</b>	<b>52%</b>
<b>Reduction of consumption of drinking water*</b>	% reduction of consumption (in liters) of drinking water per pax compared to Liters the base year	<b>16%</b>	<b>2%</b>
<b>Verification of environmental clauses included in contracts</b>	% of contracts not verified	<b>81%</b>	<b>85%</b>

\*refer to the report on drinking water consumption that ADR published last year for the 2019 consultation

*ENVIRONMENTAL INDICATORS July 2018 - June 2019 CIAMPINO AIRPORT*

		<b>CIAMPINO</b>	
		<b>Year 2</b>	<b>Objective</b>
<b>Reduction of electricity consumption at terminals</b>	Reduction of energy consumption (in kWh) compared to base year	<b>11,611,783</b>	<b>10,574,123</b>
<b>Electricity generation by installing photovoltaic systems</b>	MWh generated by traditional sources (not renewable) compared to the MWh consumed	<b>100%</b>	<b>99,5%</b>
<b>Replacement of car-pooling vehicles with low emission vehicles</b>	% of non-low emission vehicles compared to the ADR vehicle fleet	<b>68,75%</b>	<b>82%</b>
<b>Separated waste collection of non-hazardous waste</b>	% of separated waste at the passenger transit areas	<b>60%</b>	<b>36%</b>
<b>Verification of environmental clauses included in contracts</b>	% of contracts not verified	<b>67%</b>	<b>85%</b>