A GREEN LIGHT FOR THE FUTURE
ATR has made protecting the environment a high priority. Our commitment to providing more efficient and therefore “greener” aviation is already producing results: we make it possible for airlines around the world to make big reductions in their fuel consumption and carbon emissions while maintaining passenger comfort. Through our ongoing research, we are constantly making improvements to our aircraft. For example, we can make them more lightweight to decrease the impact on the environment while still making them safe and reliable.

But our environmental ambitions do not stop there: at every stage in the life cycle of an aircraft, from design to retirement, and throughout its service life, our priority will be to incorporate it harmoniously into its environment and limit its environmental impact. ATR sees itself as a pioneer in eco-design for aircraft and received ISO 14001 certification in 2011, showing that it meets environmental-management standards. At ATR, we are proud to be helping pave the way to greener aviation.

Patrick de Castelbajac
Chief Executive Officer
CONTRIBUTING TO A SUSTAINABLE AIR TRANSPORT DEVELOPMENT

Global aviation
- carries passengers for distances of up to 15,000 km
- transported almost 3 billion passengers in 2012
- transports 40% of the goods exported between regions (in value).
Aviation has significant economic impact, generating an estimated $2,200 billion worldwide, which is 3.5% of global Gross Domestic Product (GDP).
The air transport industry generates 56.6 million jobs worldwide (direct and indirect employment).

A RELATIVELY LOW ENVIRONMENTAL IMPACT OF AVIATION

Aviation has to be an efficient industry. Efficiency is an essential first step towards sustainability and this is the key to minimizing aviation’s environmental impact.

Compared to other means of transport, aviation has an enviable environmental record, but this is still a well-kept secret!
Although environmental disturbances from the aviation industry are very low compared to other sectors, efforts to minimize these play an important role in aircraft design and engine manufacturing.
The impact of aviation on resources is a major issue since oil is expected to become rare in the future as reserves run out. Operators are also affected by increasing oil prices and to rapid changes in price, which have a strong impact on their profits.

In some areas of the world, airplanes are a necessary means of transport.
Air travel is the most economical and most readily-available solution for geographical areas such as islands, mountains, and other hard-to-reach places.

ATR aircraft can operate in these areas without impact to the environment, eliminating the need to dig tunnels, and providing access at a lower cost and in a short time.

A TR: AN ENVIRONMENTAL LEADER

For a number of years, ATR has proven its environmental responsibility by producing aircraft that combine cost-efficient performance with an environmentally-friendly approach.
Our aircraft use the most advanced technologies: advanced aerodynamics, light structures and efficient systems give airlines unrivalled fuel efficiency as well as a remarkably low noise and gaseous emissions signature, thus meeting all environmental regulations. ATR is committed to ensuring a sustainable future for aviation and maintaining our position as an environmental leader.

DID YOU KNOW...?

Since 2012, ATR is engaged on the industry commitment to sustainable development, signed at the ATAG summit.

ATR
- More than 1,500 aircraft sold
- 27 million flights operated
- 190 operators worldwide
- More than 1,200 aircraft delivered in 2015

TOWARDS SUSTAINABLE AVIATION

As leaders of the aviation industry, we signed a Declaration in 2008 put forward a set of ambitious goals and implemented initiatives to meet commitments to action on climate change. Since then we have committed to ensuring a sustainable future for aviation and maintaining our position as a strategic contributor over $2.2 trillion of global GDP with a strong track record of fuel efficiency and CO2 emissions savings, is a strategic contributor...
Set up in 1981, French-Italian company ATR was born of a shared desire: a human adventure forged around the belief that turboprop aircraft (with propellers) constituted a solution for the future, due not only to the level of safety and comfort offered, or to their flexible use and their total synergy with long-haul planes, but also due to their very low energy consumption and excellent environmental performance.

**THE ADVENTURE CONTINUES!**

ATR is currently the world leader on the market for regional aircraft with 90 seats or less. Since its creation, ATR has sold over 1,500 aircraft and has today over 190 operators based in about 90 countries. ATR planes have totaled about 25 million flight hours. Our head office is in Toulouse, and equal shares of our capital are held by our two partners: Airbus Group and Alenia Aermacchi (a Finmeccanica Group company). ATR is ISO 14001-certified, the international reference standard in the field for environmental friendliness.
THE IMPACT OF AVIATION ON GLOBAL GREENHOUSE GAS EMISSIONS

2% the proportion of CO₂ emissions generated by air transport and the aeronautical industry

60% The reduction in fuel consumption and CO₂ emissions since 1960. An extremely high-tech industry that aims for maximum efficiency.
Air transport and the aeronautical industry are minor contributors to greenhouse gas emissions: the scientific consensus places the proportion of CO₂ from humans attributable to these two activities at 2%. Even with the exponential growth of air transport over the past two decades, this percentage has remained stable and is not expected to exceed 3% from now to 2050.

Air transport and the aeronautical industry recognize their responsibility and are making the necessary efforts to transition to a greener way of operating, which will also be more fuel-efficient and cost-effective. Since the 1960s, thanks to the combined efforts of aircraft and engine manufacturers, the industry has already cut fuel consumption by 60%, and by extension, reduced CO₂ emissions. Moreover, massive investments are being made worldwide to improve operational efficiency, from aircraft design and manufacturing to air traffic management, both in cruise phase and on the ground.

Huge improvements over many years

Aware of this impact, the industry has worked for 50 years to address environmental issues through more efficient flight operations, infrastructure improvements to Air Traffic Management systems and technological innovations on aircraft. Manufacturers continue to invest heavily to further reduce the environmental impact of their products. Significant improvements have been made in fuel efficiency and new aircraft are 20% more fuel efficient than 10 years ago. Innovation continues in aerodynamic design, materials and alternative fuels to further reduce aircraft fuel consumption.

CO₂ emissions growth from aviation in relation to passenger growth and growth in distance travelled, since 1990

CO₂ from commercial airline fuel burn, emissions and efficiency
Propellers are the future of aviation. A technology with extraordinary potential, the propeller is the engine solution that will allow the emerging needs for mobility to be met while also reducing fossil fuel consumption.

Turboprop airplanes fly at lower altitudes and lower speeds, consuming much less fuel than aircraft powered by engines without propellers: aligned along the same route covering 250 nautical miles (460 kilometers), with similar load factors, a turboprop airplane will produce two tons less CO₂ than a jet plane. In a year, this amounts to savings of no less than 5,000 tons of CO₂ (based on 2,500 flights per year), the equivalent of what 950 cars would produce in a year.

The ATR72 is the only aircraft in the world to consume less than three liters of jet fuel per passenger and per kilometer. An airline can save more than two million liters of fuel each year by replacing a regional jet with an ATR turboprop aircraft. An airline can save up to $33 million in fuel costs each year by replacing 20 regional jets with 20 ATR turboprop aircraft.
TURBOPROP: THE OPTIMAL CHOICE FOR SHORT-HAUL TRAVEL

Like the turbofan, the turboprop engine uses a thermodynamic turbine. With its large propeller and its gearbox, the turboprop moves a larger quantity of air for reduced thermal power. This saves energy and therefore requires less fuel.

Equipped with highly efficient turboprops engines, ATR aircraft have been designed from the start for short-haul operations. This engine technology offers the best fuel burn and an optimal speed. This makes ATR aircraft the best solution for short-haul routes. For missions of around one flight hour, the difference in flight time between a turboprop and a jet aircraft is minimal but turboprop aircraft are significantly more fuel efficient and cost about 1/3 less to operate.

TURBOPROP ATR

Through 6-blade propeller technology and efficient aerodynamics, the latest generation of ATRs are among the quietest aircraft in the industry. The noise footprint of an ATR is 35% lower than that of a new jet and 88% lower than a jet from 30 years ago.

DID YOU KNOW...?

Modern aircraft are 75% quieter today than their forebears were 50 years ago and it is estimated that the noise footprint of each new generation of aircraft is at least 15% lower than that of the aircraft it replaces. ICAO estimates that between 1998 and 2004, the number of people exposed to aircraft noise around the world was reduced by 35%. Even so, the need for a coordinated effort is recognized by ICAO, the noise standards agency that promotes a Balanced Approach to aircraft noise management (reducing noise impact of aircraft without impeding air traffic growth).
Turboprops and jets produce emissions: carbon monoxide, carbon dioxide, sulphur oxide and particulates. Those emissions have consequences on the environment as they contribute to global warming and influence the formation and properties of clouds. In addition to their low consumption, ATR aircraft operate at relatively low altitude, leaving the ozone layer unaffected and thus they barely contribute to the pollution of the upper atmosphere.

In recognition to their low pollutant emission levels, turboprop aircraft are not covered by the ICAO Annex 16 Volume 2 on emissions at the moment even if regulations on CO₂ are expected in a close future. Meanwhile, given their exceptional profile, ATR aircraft are not threatened by any legislation and remain among the best performing aircraft.

As gaseous emissions are directly linked to fuel combustion, the only way to reduce them is to lower the quantity of fuel burnt. Due to their reduced fuel consumption, ATR aircraft emit very low levels of gaseous substances in the atmosphere compared to other means of transport and to jet aircraft.

AROUND 5,000 TONS LESS CO₂ EMISSIONS PER AIRCRAFT PER YEAR

Around 80% of aviation CO₂ emissions are emitted from flights over 1,500km, for which there is no practical alternative mode of transport. Nitrogen oxide levels have been reduced by 40% since 1981 and today’s new aircraft emit 50% less carbon monoxide and 90% less smoke and unburned hydrocarbons than they did 50 years ago.
ATR’s commitment

ATR and its partners are strongly involved in International Research and Project development through active participation in several European research programs aimed at reducing the environmental impact of aircraft. ATR’s involvement with these two major programs, CleanSky and Sesar, started in 2007.

The SESAR (Single European Sky Air traffic management Research) program, made up of some 3,000 European experts in the field of aviation, is working on restructuring the European air space and redefining air traffic in order to make it more efficient and reduce the environmental impact.

The objectives of this program are:
- to increase capacity and improve the overall efficiency of the air traffic management system,
- to improve safety by a factor of 10, even with air traffic expected to double over the next 20 years,
- to reduce the environmental impact of air transport,
- to make the system more cost-effective.

As a partner member of the SESAR project, ATR takes part in equipping its aircraft with technological solutions developed to reduce the impact of the environment.

Clean Sky is another European program focused on EU-wide goals to reduce the environmental impact of aviation. The program’s particularly ambitious objectives for 2020, set by the Advisory Council for Aeronautics Research in Europe (ACARE), are:

- to reduce:
  - perceived noise by 50% compared with 2000,
  - CO₂ emissions and fuel consumption per passenger and per kilometer by 50%,
  - NOₓ emissions by 80%.

As part of the Clean Sky program, ATR is associated with the Green Regional Aircraft project and takes part in the development of innovative technological solutions in areas such as weight optimization and low noise pollution, managing energy to optimize the use of electricity in the aircraft, new configurations in terms of aerodynamics, engine technology, etc.

As a participant in the Clean Sky project, ATR is responsible for installing the solutions developed on a test aircraft and approving them through a campaign of flight tests.

DID YOU KNOW…?

ATR is the first aircraft manufacturer to experience the new carbon-fiber on its fuselage section.
The PW100 turboprop engine is the proven airline benchmark for low fuel consumption over distances of 350 miles or less.

Commercial aircraft equipped with PW100 turboprop engines consume 25 to 40% less fuel and produce up to 50% less CO$_2$ than similar-sized regional jets. This is why many airlines are renewing their fleets with PW100-powered aircraft. With a range of 1,800 to over 5,000 shaft horsepower, the PW100 has clearly demonstrated its versatility and its ability to power all of the ATR families.

---

**Planes, trains and vehicles**

Population exposed to noise above 50dB at night in Europe (in Millions)

- Planes: 1.8M
- Trains: 4.5M
- Vehicles: 4M
TECHNOLOGY IN MOTION
PW127M ENGINES

A QUIET TECHNOLOGY

Noise around airports is a major issue for residents living in landing and take-off flight paths. Any engine-powered aircraft produces noise during a flight. Around the world, and especially in Europe, airports and authorities are taking action against excessive aircraft noise and emissions. If not compliant with environmental regulations, airlines have to pay additional airport taxes (noise permission surcharges) or are subject to operational restrictions. Technological innovations over the last 40 years have enabled significant reductions in noise levels around airports. According to the FAA, the number of people negatively impacted by aircraft noise in the United States decreased from seven million in 1975 to fewer than 300,000 in 2009, despite the fact that the volume of flights more than doubled during that time.

Air transport is not, of course, the only source of noise for communities. In a 2011 study in the European Union, it was found that both road transport and rail have a significantly larger noise impact, but they do not receive as much political or media attention.

In addition, ATR aircraft show a significantly reduced cumulative noise impact compared to regional competitors and benefit from the highest margin, anticipating thus future stricter regulation. All ATR models, even the first generation series still in operation, are compliant with the latest ICAO’s regulation. As a result, ATR’s most recent technologies produce very low noise levels while taking off and landing and in flight, far below the legal restrictions.

As a consequence, all ATR aircraft are welcome throughout the world, even in countries where local regulations go beyond international legislation. All ATR aircraft comply with the strict policy of the Bromma Stockholm Airport.

Noise around airports is a major issue for residents living in landing and take-off flight paths. Any engine-powered aircraft produces noise during a flight. Around the world, and especially in Europe, airports and authorities are taking action against excessive aircraft noise and emissions. If not compliant with environmental regulations, airlines have to pay additional airport taxes (noise permission surcharges) or are subject to operational restrictions. Technological innovations over the last 40 years have enabled significant reductions in noise levels around airports. According to the FAA, the number of people negatively impacted by aircraft noise in the United States decreased from seven million in 1975 to fewer than 300,000 in 2009, despite the fact that the volume of flights more than doubled during that time.

Air transport is not, of course, the only source of noise for communities. In a 2011 study in the European Union, it was found that both road transport and rail have a significantly larger noise impact, but they do not receive as much political or media attention.

In addition, ATR aircraft show a significantly reduced cumulative noise impact compared to regional competitors and benefit from the highest margin, anticipating thus future stricter regulation. All ATR models, even the first generation series still in operation, are compliant with the latest ICAO’s regulation. As a result, ATR’s most recent technologies produce very low noise levels while taking off and landing and in flight, far below the legal restrictions.

As a consequence, all ATR aircraft are welcome throughout the world, even in countries where local regulations go beyond international legislation. All ATR aircraft comply with the strict policy of the Bromma Stockholm Airport.
ISO 14001 CERTIFICATION: major recognition for ATR, the first regional aircraft manufacturer to obtain green certification for all stages in the life cycle of its aircraft.
ATR’S ENVIRONMENTAL APPROACH

Within the framework of its 2021 environmental Vision, ATR is committed to improving the environmental footprint generated by its sites and throughout the life cycle of its aircraft. Two environmental organizations have been set up to:

• enable deployment of the ATR Environmental Vision,
• contribute to reaching the objectives to continuously improve the environmental performance of sites and products between now and 2018.

For some years now, ATR has demonstrated strong commitment to protecting the environment. This led to an important initiative which culminated in ATR's ISO 14001 certification, placing the company at the forefront in regional aviation innovation.

ATR’s objective is to produce aircraft in environmentally-friendly facilities, taking into account the limitation of hazardous substances and dangerous materials, and to continually improve performance.

Following numerous initiatives, ATR’s activities and facilities have been certified ISO 14001 since 2008. Eco-responsible employees and management are committed to taking environmental considerations very seriously, to comply with regulations but also to prevent all forms of pollution.

EXPANDED RESPONSIBILITY

At ATR, we plan to make our environmental management system the benchmark.

DID YOU KNOW…?

OUR VISION FOR 2021
To establish our ISO 14001 environmental management system as the benchmark
• To continuously improve the Environmental Management System that applies to both ATR sites and ATR aircraft.
• To ensure continued regulatory compliance with the requirements that apply to our sites and aircraft
• To make the environment a core part of our corporate culture
  - supported by suggestions for improvements from our employees and partners
  - serving airlines in order to respond to environmental challenges and reduce our impact on the environment.
Concrete actions are continuously undertaken, such as conserving natural resources (paper and energy) to make thinking about the environment part of our daily lives.

**1. Eco-design and develop ATR aircraft eco-efficiently:**
- Participate in R&D projects to reduce gas and noise emissions
- Communicate our environmental requirements to all of our Partners and Suppliers and encourage them to declare the environmental footprint of their parts and equipment to us
- Communicate good operational, maintenance and recycling practices for aircraft
- Implement Eco-design in all technical developments or modifications

**2. Control the consumption of natural resources:**
- Reduce energy consumption by 12% (electricity and gas) – ATR Blagnac
- Reduce water consumption by 7% - ATR Blagnac
- Reduce paper consumption by 10%
- Manage all chemical products used on our sites in compliance with the Regulation
- Stock and consumption, Cancerogenic Mutagenic and Reprotoxic products**, labelling, Material Safety Data Sheet Management

**3. Control waste management:**
- Sort 100% of Non-Hazardous Waste
- Sort 100% of Hazardous Waste
- Recover 100% of Non-Hazardous Waste and have 100% of Hazardous Waste processed by appropriate industrial entities
- Reduce packaging waste by 10% at the source

**4. Control pollutions in the environment generated by our activities:**
- Reduce CO₂ emissions by 8%
- Reduce VOCs (Volatile Organic Compounds) emissions by 5%
- Prevent any pollution of the ground and water

**5. Achieve compliance with the environmental regulations for our sites and our aircraft:**

We are proud of our results and especially:
- In waste management with 97% of non-hazardous waste sorted (compared to 53% in 2008) and 100% of hazardous waste treated.
- In chemical management, 100% treated in compliance with current regulations.
Achieving these objectives requires the involvement of not only ATR but also our sub-contractors, partners and suppliers.

**2015-2018: ATR’S ENVIRONMENTAL OBJECTIVES**

*In reference to 2012 isoperimetric
** In reference to the list followed in relation to state labour administration
*** Acceptance of a 3 % margin of error
**DESIGN**
Conceiving of eco-efficient aircraft compliant with regulations, anticipating future steps of life cycle.

**SUPPLIERS**
Sharing visions and setting environmental requirements.

**TRANSPORTATION**
Developing green transport means.

**MANUFACTURING**
Producing environmentally friendly plants, sorting waste, managing resources to reduce environmental impacts.

**OPERATIONS**
Identifying and diffusing good environmental practices during the operational life of the aircraft.

**MAINTENANCE**
Developing and promoting good environmental maintenance practices.

**END OF LIFE**
Define good environmental practices for the dismantling and recycling of aircraft elements to fulfill current regulations and anticipate future ones.

**MATERIALS**
Optimizing their choice, improving knowledge through research programs, anticipating future regulations.
ECO-DESIGNING ATR AIRCRAFT

An innovative environmental management system, based on the entire life cycle of the airplane, from the design phase to the end of life stage of ATR aircraft.

Eco-designing ATR aircraft means:

- Measuring our products’ environmental footprint using environmental indicators
- Incorporating environmental criteria for our aircraft from the design phase and through to the end of their life cycle.
- Reducing environmental impacts in the different stages of the life cycle: design, part manufacturing, part transport, assembly, operation and maintenance, end-of-life management.
- Sharing information and experience with partners, especially through supplier management.

TO DEVELOP A PRODUCT POLICY
aimed at making eco-efficiency our goal in order to eco-design aircraft that are even more competitive on environmentally-friendly sites with controlled and/or reduced environmental impact.

OUR GOAL
To ensure maximum reduction and/or control of environmental impact at the source by optimizing choices in terms of materials, manufacturing processes, aircraft weight, fuel consumption, combustion emissions, noise pollution.

TO ACHIEVE THIS GOAL, ATR:

- Provides the designers with tools:
  - a manual of good eco-design practices,
  - environmental requirements,
  - simplified eco-design tools.
- Trains new Design Office staff in order to inform and educate them about ATR eco-design policy and practices
- Informs companies involved in eco-design about its policy and requirements.

TO ACHIEVE THE FOLLOWING OBJECTIVES

- Deploy environmental mapping of ATR aircraft.
- Raise designers’ awareness about materials, natural resources, manufacturing processes and the chemical products used.
- Improve the eco-design rules.
- Look for more “green” technologies that protect the environment.

DID YOU KNOW…?

REACH - EUROPEAN REGULATION FOR CHEMICALS

ATR is involved in the “Reach” initiative. “Reach” is a European regulation for the Registration, Evaluation, Authorization and restriction of Chemical substances. ATR’s approach, in effect since 2007, involves working with our supply chain to identify and trace substances and materials that pose risks to human health and the environment so that they can be safely replaced in our products.
SUPPLIERS AND PARTNERS

Eco-design at ATR requires the involvement of its suppliers, OEMs, partners, airlines and maintenance centers. Getting these stakeholders on board is a key factor in improving the environmental performance of ATR aircraft.

ATR’s partners are active players in activities and projects aimed at:
• making aerodynamic forms as effective as possible,
• reducing fuel consumption,
• reducing noise pollution from our aircraft to the lowest possible level.

OUR GOAL

To share our environmental approach and communicate our requirements through the following means:
• communicating our environmental policy,
• disseminating eco-design-related environmental requirements,
• sharing information and feedback with suppliers, OEMs (Original Equipment Manufacturers) and partners,
• communicating good environmental practices to airlines and maintenance centers,
• taking the environment into account in the evaluation of suppliers and OEMs,
• incorporating our new requirements into new contracts.

“Informing and assisting suppliers in their environmental approach”

ATR, Head of Direct Procurement

“ATR takes care to ensure that its suppliers commit to reducing their environmental impact by using recyclable products or finding alternative green solutions. Candidate companies’ environmental policy is one of the selection criteria in our calls for tender. Among other things, we ask candidates to draw up a list of the hazardous substances and materials they use and to specify how they manage these products. This allows us to verify whether they comply with existing standards and to assess their ability to adapt to future regulations. For example, we can evaluate their ability to anticipate the replacement of substances that are now authorized but soon to be prohibited in Europe. To assist them, we also take care to keep all of our suppliers informed and up-to-date on existing or pending regulatory requirements, e.g., through our Supplier Conferences.”

ATR, Head of Airframe Procurement
PRODUCTION
FROM THE SUPPLY CHAIN TO TRANSPORT

OUR GOAL:
TO PRODUCE AIRCRAFT ON ENVIRONMENTALLY-FRIENDLY SITES

The assembly stages include the manufacture, transport and assembly of the different components, after which ATR aircraft undergo the various ground and flight tests. These stages have various impacts on the environment, such as fuel consumption, the use of chemical products, and waste production. Our principles are:
• eliminating and reducing the use of hazardous materials and substances,
• informing and educating staff and external companies about our approach,
• promoting lower consumption of natural resources,
• reducing waste at the source and recycling more waste,
• incorporating environmental recommendations into work documents,
• anticipating and ensuring compliance with regulations,
• continuously improving our environmental performance, including within the scope of industrial performance.

“Optimizing our flight testing to reduce our emissions”
ATR, Head of Flight Dispatch

ATR planes have already proven their excellent environmental performance. This could have been enough for us, but at ATR, we always strive to do better. To ensure quality and safety, it is essential that our aircraft be flight tested as many times as necessary. However, during each flight, we perform as many tests as possible, for our pre-delivery validation processes or development testing. Finally, fuel consumption and gas emissions are systematically recorded for every flight. These data are valuable indicators in our effort to reduce the environmental impact of flights, which is why we have further improved our measurement reliability and processing speed.

KEY FIGURES FOR 2008/2014

• Sorting of non-hazardous waste has increased from 53% in 2008 to 96% in 2014.
• Reclaiming of 99% of hazardous waste.
• 100% of hazardous waste is processed through the proper treatment channels.
• 99% of chemical products are managed as per regulations.
• The consumption of natural resources has been controlled and reduced (with equal production and staffing).
OUR GOALS

Share good practices for:

- the operation and maintenance of ATR aircraft in order to meet and anticipate the needs and expectations of airlines.
- ATR aircraft recycling and to work with the stakeholders involved to define strategies for end-of-life aircraft management.
Aircraft operation is the stage that has the most significant environmental impact, due to the use of fossil fuels and the release of gas emissions.

By comparison, maintenance has a much lower environmental impact, but maintenance operations are an important factor because they extend aircraft service life, which means the fleet does not need to be renewed as often.

End-of-life management of aircraft is a challenge in itself. To facilitate the dismantling and recycling of aircraft, these procedures need to be anticipated from the aircraft design phase.

The aims of sharing our good practices are to provide:
- technical assistance for customer airlines and airports in order to optimize operational procedures (optimization of fuel consumption, noise reduction procedures, flight profile optimization, gas emissions reduction, etc.),
- support with regard to maintenance and consumables (incorporating information on consumables into structure repair manuals, etc.),
- “environmental” updating of ATR manuals,
- evaluation of environmental impact within the scope of maintenance repairs,
- “responsible” environmental procedures for end-of-life aircraft,
- reclaiming certain parts in order to re-integrate them into a maintenance circuit,
- recycling for secondary materials.

“Tips for lower fuel consumption”

ATR, Flight Operations Support Engineer

In 2008, a brochure entitled “Fuel Saving” was published to help airlines use ATRs more fuel-efficiently and cost-effectively. This document sets out good practices for aircraft operation and maintenance in the aim of reducing fuel consumption. For example, delaying the descent phase to have a steeper angle of descent or flying at a higher altitude during cruise phase are ways to save fuel. A Danish airline has proven the effectiveness of these simple measures: by following all of our recommendations, it used 5% less fuel in a year – a significant savings!

This brochure also includes notions on how to reduce CO₂ in order to help airlines in managing their emissions quotas.

DID YOU KNOW...?

The “Fuel saving” document has been edited to help airlines to better operate an ATR fleet. The document presents best practices on operations and maintenance to minimize fuel consumption. In the next update, best practices to reduce CO₂ emissions will be included to address the European Trading Scheme issues and anticipate future ICAO regulation.

Pre-flight advice to:
- Maximize the aircraft load factor
- Minimize the take-off weight thanks to optimized fuel tankering
- Optimize the weight distribution on the aircraft to reach the fuel-efficient center of gravity

In-flight advice to:
- Fly at the most fuel efficient speed, altitude and wind
- Optimize descent
- Use one engine to taxi whenever safely possible
A national presence and international actions

INTERNATIONAL ACTIONS

2005
Aid for tsunami victims in South East Asia (in partnership with Fondation de France)

2006
In 2006, ATR partnered with Tanzanian airline Precision Air Service (the leading operator of ATR planes in Africa) to create a training program for aeronautical mechanics. Within three years, 12 students had graduated from the program and have been employed by the airline. Other students took part in the program in following years.
ATR: AN ENVIRONMENTALLY RESPONSIBLE COMPANY

ATR is dedicated to humanitarian causes and is actively involved in a variety of actions at both the national and international levels. For more than ten years running, in partnership with AWB (Aviation Without Borders), ATR:

- has organized humanitarian convoys to various countries, in collaboration with non-profit organizations and in support of its customers,
- has provided aircraft for use by non-governmental organizations for travel to areas that cannot be reached over land,
- has organized aeronautical events to promote discovery of the sky.

2010
01/2010 • Aid for earthquake victims in Haiti (Fondation de France)
05/2010 • Aid for flood victims in Pakistan with PIA and AWB
10/2010 • Call for donations to help AWB finance an aircraft
11/2010 • Humanitarian convoy with Lao Airlines for ASF

2011
03/2011 • Humanitarian convoy with Cuba Air for ASF destined for a hospital in Manila
In 2011, ATR and the Brazilian airline Azul partnered together on a breast cancer prevention campaign.

2013
Aid for children in need in Cambodia for the non-profit organization «Pour un Sourire d’enfant» («For a child’s smile»)

2015
03/2015 • Humanitarian convoy for flood victims in collaboration with Air Madagascar, AWB, Emmaüs
03/2015 • Aid for cyclone victims in Vanuatu with ASPA (Association of South Pacific Airlines)
05/2015 • ATR supports Nepal. To show our solidarity with our customer Buddha Air, ATR senior management has made a donation of $15,000 to the «Society of Ex-Budhanikantha Students». These funds will be allocated to rebuilding around 650 houses for those affected by the earthquake in Sindhupalchowk district.
2008
03/2008 • Financial support for an operation called « Conquering cystic fibrosis in Midi-Pyrénées »

2009
04/2009 • Participation in an event organized by « Toulouse Atout Coeur » an organization that works with children who have cancer
The same way as at the international level, ATR is also committed to support actions helping organizations fight against various diseases.

**2010**

07/2010 • Every year since 2010, ATR has sponsored the Corrida, a foot-trace which raises funds for non-profit organizations that support research or patients.

**2011**

Since 2011, ATR has funded cancer research at the Oncopole and has taken part in «Octobre Rose» by conducting breast cancer awareness actions.

**2013**

ATR took part in an inter-company relay race to raise funds for people with developmental and intellectual disabilities.

**2014**

Financial sponsoring through an employee involvement initiative to help combat leukodystrophies.
AT THE INTERNATIONAL LEVEL

Our goals:

- To protect the forest and its biodiversity
- To give our customers the opportunity to offset their CO₂ emissions.

Aware of the environmental impact of our products throughout their life cycle and our corporate responsibility, and in keeping with our social and environmental policy, ATR has undertaken two projects in South America, in the heart of the Amazonian rainforest – home to the highest concentration of biodiversity on our planet.»

ATR, Head of Environment/Eco-design & Reach

Arees provide unparalleled services for the ecosystem at no cost; no other investment on the market today offers as many benefits for every stakeholder involved.

In terms of agroforestry, it strikes the perfect balance between forest conservation and agricultural development – the basis of the circular economy.»

Tristan Lecomte
Founder of Pur Projet

ATR has undertaken to donate each year the savings generated thanks to ideas and projects proposed by its employees.
RESPONSE TO CLIMATE CHANGE ISSUES AND PROTECTING BIODIVERSITY

In collaboration with “Pur Projet,” ATR has chosen to support reforestation and tree planting projects in the heart of the Peruvian rainforest, called the “green lungs” of our planet – projects with an economic and social dimension.

An area of astonishing biodiversity – with 2,500 plant species and 700 animal species, including 300 on the UNESCO list of priority species and twenty which are highly endangered, this region is also inhabited by twenty-two indigenous communities supported by five non-profit organizations.

**MARTIN SAGRADO, PERU FOREST CONSERVATION**

Project start date: 2010
Latest figures in 2014

- 387,195 hectares (949,366 acres) of forest protected until 2050
- 37 million trees saved from deforestation
- 10,000 beneficiary families, 87% of whom rely on forest services for survival in 3 regions (San Martin, Amazonas, La Libertad)

Goals: environmental and social

- To protect 387,195 hectares (949,366 acres) of incredibly species-rich virgin forest and to develop activities for and with the local communities.
- To promote conservation of the region’s biodiversity and ecosystems

**DID YOU KNOW...?**
Approximately 1,340 hectares (3,311 acres) of forest protected after one year of partnership, or 320 tons equivalent CO₂ certified.
The reforestation/agroforestry project conducted over the past several years has enabled the development of fair trade, with almost 2,000 cocoa farmers whose cocoa crops are now sold in leading chocolate shops.

Project start date: 2008
Latest figures in 2014:
- 2.2 million trees at the end of 2014, covering 1,241 hectares (3,066 acres)
- 2,000 small-scale cocoa farmers have a livelihood growing cocoa
- approximately 1,500 property titles have been issued, considering that more than 80% of the farmers have no legal property title on record nationally
- the project successfully passed its 1st VCS verification audit from Ecocert in August 2014

Goals: environmental and social
- To plant two million native trees within fair and sustainable agroforestry systems to ensure sustainable cocoa crops and long-term conservation of the agricultural environment while also meeting the needs of small-scale farmers and promoting their development. Design and development of the Forest Management Plan to increase and diversify farmers’ revenues, developing sales channels, empowering the local communities, enabling them to implement timber activities and manage sustainably their environment and resources.

With these projects, ATR has undertaken to promote the ATR forest accessible to its employees, suppliers, partners, and clients, making it possible to offset the carbon footprint.

DID YOU KNOW...?

AT THE LOCAL LEVEL

In 2014, ATR became a sponsor of VNF (France’s network of navigable waterways), joining the effort to save the Canal du Midi through a project to replant the plane trees that line the canal, listed as a UNESCO World Heritage Site since 1996.