

# WELCOME

# Alaska Air Group 2009 Environment Report

**IN THIS REPORT** 

**ABOUT THIS REPORT** 

**2009 PERFORMANCE HIGHLIGHTS** 

Welcome to Alaska Air Group's 2009
Environment Report. Our goal in
publishing this report is to communicate
openly with employees, customers,
investors, analysts and other key
stakeholders about our environmental
impact. The hope is that this report
will serve as a foundation for increased
understanding of the challenges associated with continued environmental
improvement and aid in the search
for innovative solutions.

# ABOUT THIS REPORT

# Alaska Airlines Horizon Air.

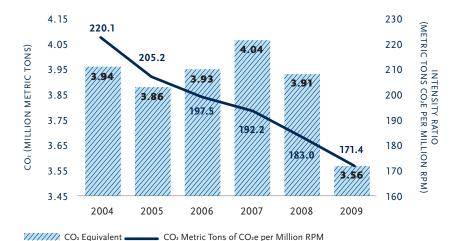
Alaska Air Group's first corporate Environment Report is structured around communicating Alaska Air Group's commitment to leadership and continuous improvement in environmental performance; openly discussing the key impacts, opportunities, and challenges in our industry; and describing our performance and initiatives in each of the significant areas of environmental impact. Within this structure, we also convey the character, values, and strengths of our people and organizational culture.

We are just beginning the process of assessment and reporting. A major task over the past two years has been developing appropriate key performance indicators, measurement processes, and infrastructure for data collection and analysis as a foundation for understanding where we are, establishing baseline data, reporting meaningful information, and developing improvement plans. This report focuses on the environment. The time period covered by this report is January 1, 2009, to December 31, 2009, for Alaska Air Group's two airline carriers: Alaska Airlines and Horizon Air. Where data is available, we describe environmental impacts for two to six years prior to 2009. We have made every effort to accurately and fully assess and transparently report all significant environmental impacts and issues, focusing primarily on those impacts within our direct control. Our determination of significant issues is based on the knowledge of internal staff experts, common industry practices, and informal feedback from customers, employees, and other stakeholders. In the future, we will build more rigorous stakeholder engagement processes to define material issues, obtain feedback on our progress, and dialogue about critical issues and opportunities.

# 2009 PERFORMANCE HIGHLIGHTS

# ALASKA AIR GROUP (COMBINED) TOTAL GREENHOUSE GAS EMISSIONS AND EMISSIONS INTENSITY, 2004–2009

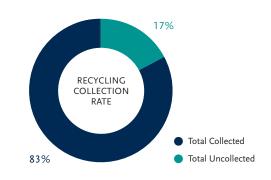
Alaska Airlines and Horizon Air's greenhouse gas emissions intensity has decreased steadily since 2004. This represents a 23% reduction in  $CO_2e^*$  intensity over the past six years and a 10% reduction in total  $CO_2$ .



\* CO<sub>2</sub>e, or carbon dioxide equivalent, is a measure for describing the impact of a given type of greenhouse gas (GHG). Other GHGs, such as methane and nitrous oxide, are expressed in terms of CO<sub>2</sub>e.

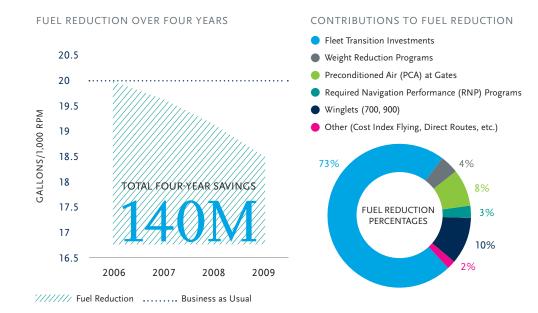
### HORIZON AIR INFLIGHT COLLECTION OF RECYCLABLE MATERIALS. 2009

Horizon Air initiated inflight recycling efforts in the 1980s. Our flight attendants now collect over 83% of all recyclable materials generated during inflight service. Approximately 70% of all the food and beverage service waste generated in the air is recycled on the ground. Horizon Air's inflight recycling program diverts an estimated 300 tons of waste from landfills each and every year.



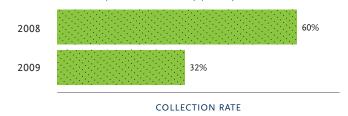
### ALASKA AIRLINES FUEL-REDUCTION EFFORTS, 2006-2009

Over the past four years, Alaska Airlines has invested in more fuel-efficient aircraft and aerodynamic improvements, instituted fuel-saving procedures, and initiated flying efficiencies that now conserve over 35 million gallons of fuel per year.



### ALASKA AIRLINES INFLIGHT RECYCLING CAPTURE RATE, 2008-2009

Recycling capture rates declined in 2009 after a temporary suspension of the program due to H1N1 concerns. Improvement is a key priority in 2010.





# WHO WE ARE

# Fueled by Jet A, powered by people

### IN THIS SECTION

Message from Bill Ayer, Chairman and CEO

**About Alaska Air Group** 

**Our Core Values** 

Alaska Air Group Corporate Environmental Policy

Alaska Airlines and Horizon Air realized long ago that this business is about people more than planes. Our core values of "Alaska Spirit" and "Horizon Heart" embody this knowledge.

These corporate values not only encompass our direct commitment to our customers and employees, but they also set Alaska Air Group on a path to continually embrace the challenges of an ever-changing world, including the necessity for continued environmental improvements.

# MESSAGE FROM BILL AYER

CHAIRMAN AND CHIEF EXECUTIVE OFFICER

With our history rooted in the magnificent beauty of Alaska and the Pacific Northwest, caring for the environment has always come naturally to us. However, like most corporations, over the past decade we have gained a deeper understanding of customers' and other stakeholders' increasingly high expectations for environmental stewardship and corporate responsibility.

The traveling public, corporate customers, investors, employees, communities, and regulatory bodies all have increasing requirements for transparency and disclosure about environmental impacts. Additionally, these stakeholders expect evidence of proactive reduction of greenhouse gas emissions, energy utilization, materials, water resources, and waste.

We aim to meet or exceed these expectations. We also believe there are significant business benefits and opportunities in optimizing our environmental performance. Many of these benefits can be shared with customers, improve employees' work lives, and increase our contribution to the community and society.

Alaska Air Group's board of directors, executives, and employees have a shared vision to continually strengthen our environmental performance and become an environmental leader in the domestic airline industry. Our strategic decision to upgrade Alaska Airlines and Horizon Air's fleets with newer aircraft, pioneering use of next-generation flight guidance technology, investment in more efficient ground systems and vehicles, and programs to reduce excess weight onboard have made Alaska Airlines and Horizon Air domestic leaders in fuel



BILL AYER
Chairman and CEO
Alaska Air Group

"Alaska Air Group's board of directors, executives and employees have a shared vision to continually strengthen our environmental performance and become an environmental leader in the domestic airline industry." efficiency. These efforts grew at first from grassroots activities and cost-cutting programs. In 2008, however, Alaska Airlines and Horizon Air began evaluating our environmental impact and formalizing initiatives to reduce our footprint.

This report describes the results of those efforts and the major programs at each airline to address our carbon footprint, aircraft and vehicle emissions, energy use and conservation, resource conservation and recycling, noise pollution, and compliance. It represents a commitment to continually assess our environmental impacts and performance, and identify areas for improvement. And it allows us to communicate our successes, strategy, and challenges to customers, employees, and other stakeholders, while providing a structure for more clearly defining our plans and monitoring our future progress.

We have a foundation of initiatives and accomplishments that we can be proud of. Now, we are committed to moving our environmental performance and corporate responsibility to the next level.

But Chy

Bill Ayer Chairman and Chief Executive Officer, Alaska Air Group



BRAD TILDEN, President, Alaska Airlines

"There are more and more people that this planet has to support each year, so it's imperative that we each have as small a footprint as possible. I'm proud of Alaska's progress with our very fuel-efficient fleet, our winglets, and with our industry-leading flight decks, which allow for the most direct routings possible. But there is much more that we can and should be doing."



JEFF PINNEO
President and CEO, Horizon Air

"'Horizon Air Country' is a region of unsurpassed natural beauty, and we're committed to treasuring and protecting it. This is reflected in our long-term decisions, such as our use of quiet aircraft with lowest-in-class emissions, as well as in our day-to-day activities, like our award-winning onboard recycling efforts. These result in outcomes that current and future generations will benefit from—something we're all quite proud of."

# ABOUT ALASKA AIR GROUP

Alaska Air Group, Inc., is the holding company for Alaska Airlines and Horizon Air, Seattle-based carriers that collectively serve more than 90 cities through an expansive network in Alaska, the Lower 48, Hawaii, Canada, and Mexico. Alaska Airlines, which accounts for approximately 88% of Alaska Air Group revenues, has a fleet of 112 Boeing 737 jets serving 50 destinations. As the ninth largest carrier in the United States, Alaska Airlines operates from hubs in Anchorage, Alaska; Los Angeles, California; Portland, Oregon; and Seattle, Washington. Alaska Air Group also owns regional carrier Horizon Air, which flies to approximately 50 destination cities in the western United States, Canada, and Mexico, with a fleet of 18 jets and 40 Q400 turboprops. Horizon Air's hubs are Seattle; Portland; Spokane, Washington; and Boise, Idaho.

Alaska Airlines and Horizon Air are headquartered in Seattle, Washington. Together, the two airlines employ more than 13,000 people. Alaska Air Group's 2009 full-year net income was \$121.6 million.

Alaska Airlines and Horizon Air have different brand identities, defined shared values, infrastructures, and initiatives. Alaska Airlines' pioneering spirit of innovation and integrity is complemented by Horizon Air's heartfelt caring and continuous improvement for the customer.

Alaska Air Group is committed to high standards of environmental performance and compliance with all regulations. Ultimate responsibility for environmental issues rests with our Alaska Air Group executive team. Environmental Affairs for both Alaska Airlines and Horizon Air are managed through our joint services Environmental Affairs Department. The Environmental Affairs Department reports directly to the chief ethics & compliance officer.

Alaska Air Group's fleet is among the most fuel-efficient in the nation, which translates to one of the lowest carbon footprints per revenue passenger mile (RPM).



Together, Alaska Airlines and Horizon Air service more than 90 destinations in the United States, Canada, and Mexico.

# OUR CORE VALUES

Alaska Airlines and Horizon Air each have a set of core values that define their unique character, guide decision-making and behavior, and underlie our relationships with customers, the community, the environment, and each other.

### Alaska Airlines Core Values

### **ALASKA SPIRIT**

Alaska Spirit is the heart of Alaska Airlines. It springs from our rich heritage where aviation plays a vital role in the life of every resident. Throughout our system, the Alaska Spirit defines the unique character of Alaska Airlines. Our fun-loving, energetic, and adventurous personality flows from this spirit, as does our belief in service and community involvement. From our Alaska Spirit comes the pride, the passion, and the perseverance that sets Alaska Airlines apart.

### INTEGRITY

Our actions will reflect our absolute commitment to ethical and honest behavior. When faced with uncertainty, we will always use our best judgment to do the right thing.

### CARING

Caring about and helping people is the soul of Alaska Airlines. We regularly go the extra mile to help our customers, our community, our environment, and each other with friendliness, caring, and genuine concern. We believe our lives are enriched by individual acts of kindness and compassion.

### **PROFESSIONALISM**

As proven professionals, we each bring a high level of individual skills, expertise, and commitment to our work. We take great pride in the fact that our individual and collective accomplishments have earned broad respect and a reputation for safe, reliable, quality service.

### **RESOURCEFULNESS**

Our bias toward action and our readiness to adapt to change and to master difficult challenges exemplify the

"can-do" heritage of Alaska Airlines. We embrace an atmosphere where hard work, initiative, and teamwork are a tradition, and where creativity and innovation flourish.

### Horizon Air Shared Values

### HEART

"Heart" is what defines the unique spirit and character of Horizon Air—a family of energetic, optimistic, and enthusiastic people who enjoy what they do. From their heart comes the pride, commitment, and, above all, the caring that truly sets Horizon Air apart.

### **INTEGRITY**

Integrity is the cornerstone value of Horizon Air. That means we have an uncompromising commitment to honesty and fairness—to being ethical, trustworthy, and responsible in all we do.

### **PARTNERSHIP**

We value the partnership of talented individuals combining their efforts to achieve results beyond the sum of their independent contributions. Partnership at Horizon Air is built on a foundation of trust, cooperation, and mutual respect.

### INNOVATION/INITIATIVE

We encourage initiative, innovation, and creativity throughout the organization. Drive, determination, and hard work—coupled with the active pursuit of new and creative solutions—are essential to Horizon Air's continued success.

### **CONTINUOUS IMPROVEMENT**

We seek excellence in our business and are committed to an environment of continuous development, learning, and improvement. We embrace change as a means to grow, both corporately and individually.

# ALASKA AIR GROUP CORPORATE ENVIRONMENTAL POLICY

Alaska Airlines and Horizon Air believe that environmental responsibility is an essential part of being a responsible corporate citizen and a natural fit with our corporate values and our customers' expectations.

Our vision is to build cultures at both companies where we fully integrate sustainable environmental practices into our business of providing safe, reliable air transportation with best-inclass service and the best customer experience. Furthermore, we recognize that environmental responsibility can positively impact corporate profitability by minimizing operating costs through efficient use of resources, enhancing the company's image, and minimizing risk and legal liability. For these reasons, Alaska Air Group views environmental responsibility as an important part of our overall corporate culture.

In accordance with our vision and values, the management and employees of Alaska Airlines and Horizon Air shall strive to:

- Conduct business with integrity, ensuring compliance with all environmental laws and regulations.
- Ensure the responsible use of energy throughout our business through improvements in energy efficiency, and building design, and the procurement of energyefficient equipment.
- Integrate environmental considerations into daily operational and decision-making processes throughout the company.
- Replace harmful chemical products with nontoxic alternatives, whenever feasible.
- Foster a culture of environmental responsibility among employees and management by promoting awareness of environmental concerns, actions, and responsibilities.
- Improve employee environmental performance through procedures, awareness, training, and recognition of excellence.

### **ENVIRONMENTAL LEADERSHIP**

In 2009, the Alaska Air Group leadership team made a strategic commitment to measurably reducing its impact on the environment and becoming an environmental leader in the domestic airline industry.

In July 2009, Alaska Air Group executives chartered a Green Initiative with three specific goals as a core element of our strategic business plan:

- 1. Reducing emissions from fuel consumption.
- 2. Reducing emissions from heating and electricity consumption in buildings.
- 3. Reducing use of nonsustainable resources, and recycling inflight and building waste materials.
- Maintain strict internal environmental practices and policies everywhere we do business.
- Reduce, reuse, and recycle our materials to the greatest extent feasible and procure recycled supplies wherever appropriate.
- Collaborate with our suppliers and vendors to adopt effective environmental practices.

- Endeavor to exceed required levels of compliance wherever possible.
- Maintain an open and honest dialogue with our employees and stakeholders about the environmental performance of our operations.
- Continually improve environmental policies, programs, and performance, based on the results of an internal environmental audit program.

# OUR ENVIRONMENT

Call us fuel-efficiency trailblazers



# OUR ENVIRONMENT

# Call us fuel-efficiency trailblazers

### IN THIS SECTION

Overview of Environmental Issues

**Additional Environmental Topics** 

The airline industry is a tough and competitive business environment. But we never lose sight of the other environment—the one in which our families and customers live.

That's why the focus of our environmental stewardship has been on minimizing our carbon footprint and impact on the places we serve. We do this, in part, by reducing emissions from airplane engines and ground equipment, conserving energy in our buildings, and eliminating waste in all areas of our operations.

# OVERVIEW OF ENVIRONMENTAL ISSUES

Our goal at Alaska Air Group is to focus our efforts on the most important areas of environmental impact, where we have the greatest opportunity to effect positive change. Our strategy and vision emphasize improvements on the two key environmental impacts of highest concern:

Carbon Emissions The vast majority (~99%) of carbon dioxide (CO<sub>2</sub>) emissions generated by our operations are from the combustion of fossil fuel by our aircraft fleet. To a lesser extent, emissions are also released through burning of fuel to power our ground support fleet vehicles and provide heating, cooling, and lighting in our ground facilities.

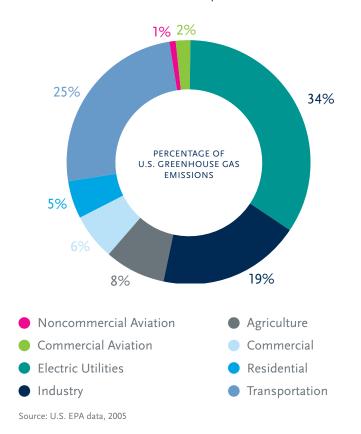
The single greatest challenge for Alaska Air Group—and the entire airline industry—is that our service relies on burning fossil fuels. This is in a business context of global and national pressures and agreements

regarding carbon footprint reductions and increasing investor concerns about financial risks of carbon exposure in corporations they are investing in. Additionally, individual consumers are increasingly concerned about the negative impacts of climate change and their personal carbon footprint; and many corporate clients proactively are working to reduce carbon emissions across the entire life cycle of their product/service delivery, including transportation of people and goods. This makes reducing greenhouse gas emissions a strategic priority for all airlines. CO2 emissions can currently be reduced in the airline industry by these two primary methods: modifying or changing the aircraft, or flying more efficiently. A third method, farther out on the horizon, is to use an alternative or more carbon-efficient fuel.

Materials and Waste A significant number of supplies are needed to serve our combined 24 million

### SOURCES OF GREENHOUSE GAS EMISSIONS IN THE UNITED STATES

Emissions from aviation make up only 2% of the total greenhouse gas emissions in the United States. Though this number may appear small, we recognize that we can and should continue to limit our impact.



passengers per year. From cocktail napkins to lubricating oil and toner cartridges, these items are used and disposed of each day at our facilities. Although individual items may seem small or inconsequential, when multiplied by 24 million passengers, materials, resource use, and waste add up. There are many opportunities to reduce, reuse, and recycle these wastes, although each presents its own unique challenges. Because of the noncentralized nature of our operations, and the differing opportunities for recycling and procurement in each location, initiating waste recycling and reduction programs can be challenging. A concerted group effort between our employees, our contractors, and the airports we serve is required to implement a successful waste reduction and/or recycling program.

We also report on our efforts to manage noise. Noise may not always be thought of as an "environmental" issue for many people, but it can be an unpleasant byproduct of air travel for surrounding communities at many airports. Upgrading to newer aircraft and U.S. Federal Aviation Administration (FAA) approval of quieter and more efficient flight paths present opportunities to reduce the noise impact of our operations.

Safe operations and FAA regulations necessitate the application of deicing fluids during icy conditions. However, these procedures can impact stormwater runoff, management of which depends on airport deicing collection systems.

We take these environmental impacts seriously and are proud of the progress we have made. We also recognize that there's more to do. In this report, we accurately describe our performance and improvement efforts regarding each of these issues. Here is our story thus far in our journey toward more sustainable aviation.

A concerted group effort between our employees, our contractors, and the airport is required to implement a successful waste reduction and/or recycling program.





Employees around the system collect and recycle a wide variety of materials, including paper, aluminum, plastics, stretch wrap, packing peanuts, toner cartridges, fluorescent light tubes, pallets, computer equipment, used oil, antifreeze, scrap metal, and batteries.

# OUR CARBON FOOTPRINT

Alaska Air Group is committed to calculating and reducing its environmental impact. As an essential first step in this commitment, Alaska Airlines and Horizon Air conducted a greenhouse gas inventory of our operations for the years 2004–2009.

Emissions evaluated in the preparation of this footprint include:

- Combustion of jet fuel during aircraft operations.
- Ground support vehicle fuel combustion.
- Electricity usage and heating/ cooling in our leased and owned buildings.

# Summary of Our Assessment Methodology

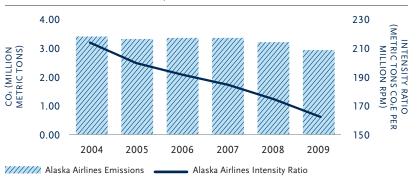
All Scope 1 and Scope 2 emissions were inventoried for our carbon footprint. (Scope 1 emissions are those from direct combustion of fossil fuels, and Scope 2 emissions are indirect

emissions generated in the production of electricity that we consume.) The inventory included all emissions for which Alaska Air Group has operational control, including both of its wholly owned subsidiaries—Alaska Airlines and Horizon Air. Activity data from selected emission sources were compiled by Alaska Air Group personnel and evaluated by a third-party environmental consultant.

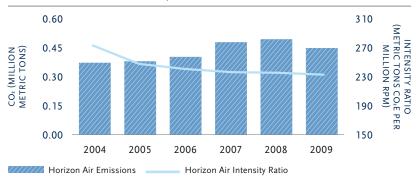
As demonstrated in the graph at right, for the past six years, Alaska Airlines and Horizon Air have consistently reduced their carbon intensity (tons of carbon dioxide per unit of productivity). Although carbon intensity decreased by 23%, the total amount of carbon was reduced by 10% from 2004–2009, due to increases in air travel demand and operational capacity.

Together, Alaska Airlines and Horizon Air have steadily reduced the intensity of their carbon emissions by 23% since 2004.

# ALASKA AIRLINES GREENHOUSE GAS EMISSIONS AND AIR EMISSIONS INTENSITY, 2004–2009



# HORIZON AIR GREENHOUSE GAS EMISSIONS AND AIR EMISSIONS INTENSITY, 2004–2009



Emissions were calculated using Tier 2 methodology for the majority (99%) of our emissions—those from the combustion of jet fuel.

# AIRCRAFT EMISSIONS

Fuel conservation has always been an important goal for Alaska Airlines and Horizon Air. Not only is it our largest cost—currently accounting for 36% of our budget—but it also accounts for approximately 99% of our carbon footprint. Over the years, our fuel reduction efforts at Alaska Airlines and Horizon Air have resulted in two of the most fuel-efficient—and carbon-efficient—aircraft fleets in the industry. Our current fuel and emission reduction programs fall into three categories aimed at the highest leverage areas for substantive improvements:

WHAT WE FLY
Fleet composition
Aerodynamic improvements

THE WAY WE FLY
Flying efficiencies and flight planning
Ground flight support

THE FUEL WE USE
Alternative fuel sources

FUEL EFFICIENCY RELATIVE TO COMPETITORS

#1

Alaska Airlines ranks #1 among the 10 largest domestic carriers in fuel efficiency per available seat mile for domestic and international travel.

(Data Source: DOT Form 41 and 298C)

### MONITORING FUEL CONSERVATION PROGRAMS

At Alaska Airlines, we have been closely tracking and monitoring fuel conservation programs for years. The fuel and financial savings we have estimated in the following pages are based upon data supplied from equipment manufacturers and Alaska Airlines' aircraft operational records. This data represents results from Alaska Airlines only. Horizon Air has also been implementing numerous fuel conservation measures; however, they were not centrally tracked and managed. In January 2010, Horizon Air joined the fuel metric reporting program, with formats that duplicate those of Alaska Airlines as part of an effort to better measure future fuel conservation programs.

We've achieved our most dramatic percentage impacts in fuel and emission reductions through our investments in fleet composition and aerodynamic improvements. These investments have reduced greenhouse gas emissions every year since we made them. While we have already taken the steps that yield the greatest fuel efficiency results, going forward, we will continue to look for every opportunity—no matter how big or small—to further conserve fuel and reduce emissions. These efforts include continuing to transition to ever more fuel-efficient fleets and implementation of enhanced flight capabilities to reduce unnecessary fuel burn.

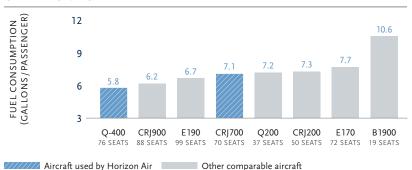
# WHAT WE FLY

Alaska Airlines and Horizon Air have invested more than \$750 million to replace their aircraft fleets with the most fuel-efficient aircraft available.

### ALASKA'S JETS MOST FUEL-EFFICIENT IN OPERATION TODAY



# HORIZON'S AIRCRAFT AMONG THE MOST FUEL-EFFICIENT IN OPERATION TODAY



With an average fleet age of only 7.5 years and 5.8 years, respectively, Alaska Airlines and Horizon Air operate two of the youngest, most fuel-efficient aircraft fleets in their class.

Petroleum-based aviation fuels are the only available fuels in today's market. There are numerous research and development projects under way on alternate sources of aviation fuels. However, there are currently no alternatives to petroleum-based fuels and none are expected to be commercially viable in the near future. The lowesthanging (but most expensive) fruit in terms of reducing fuel use and subsequent emissions is to simply buy fuel-efficient aircraft. Other opportunities include modifying the aircraft to increase aerodynamics and fuel efficiency and decreasing the weight of aircraft equipment.

### THE SUCCESSES

At Alaska Airlines and Horizon Air we've changed our fleet inventory and modified aerodynamic components to increase fuel efficiency. Fleet Transition The Boeing 737-800 jet and the Bombardier Q400 turboprop are the aircraft of our future. Beginning in 2006 and concluding in 2008, Alaska Airlines replaced its fleet of MD-80 aircraft with more fuel-efficient Boeing Next-Generation 737s. As a result of its fuselage, wing, and engine design, the 737-800 and 737-900 are two of the most fuel-efficient jet aircraft available, consuming 18% less fuel compared to an MD-80. This results in an improved fuel efficiency of hundreds of gallons per flight hour. As of December 2009, Alaska Airlines' all-737 fleet consists of 51 737-800s and 12 737-900s, 55% of the fleet. Transitioning from MD-80s has resulted in an annual fuel savings of approximately 22 million gallons per year.

At Horizon Air, we are transitioning from a combined fleet to an all-Q400 fleet. Our current fleet consists of Bombardier CRJ700 regional jets and Q400 turboprops. The 76-seat Q400 is 30% to 40% more fuel-efficient than a comparable jet. Horizon Air originally announced our fleet transition in April 2008. However, due to the recession, we renegotiated the purchase schedule for the new Bombardier Q400. The remaining 18 Bombardier 70-seat CRJ-700 jets are expected to be phased out by the end of 2012.

Winglets To further improve the aerodynamics of our aircraft, Alaska Airlines is using winglets (turned-up extensions at the tips of the wings) to increase fuel efficiency by 3% to 5%. All of our 737-800 aircraft come equipped with winglets, and we have

retrofitted all of our eligible 737-700s and 737-900s. That translates into approximately 100,000 fewer gallons of fuel consumed per aircraft each year. We estimate the total fuel savings from winglets to be 2.2 million gallons in 2009.

Weight Reduction Each pound flown has a cost in terms of fuel usage. To reduce fuel consumption, we've put our fleet on a weight-loss program. Examples of Alaska Airlines' weight-reduction efforts include using lighter catering carts, removing bilge insulation blankets, and reducing the amount of potable water that is boarded on each flight.

Through Alaska Airlines and Horizon Air's investments in modern and efficient aircraft fleets and aerodynamic upgrades, such as winglets, we save over 30 million gallons of fuel per year.





Above: Flying on a Horizon Air Bombardier Q400 turboprop, affectionately known as a "Green Machine," is roughly equivalent to driving in a car that gets 64 miles per gallon. A Q400 is 30% to 40% more efficient than a comparable-sized jet. Below: Alaska Airlines is using winglets, like the one shown here, to further increase aircraft fuel efficiency by 3% to 5%. That translates into approximately 100,000 fewer gallons of fuel consumed per aircraft each year.

# THE WAY WE FLY

We've done almost all we can in terms of fleet upgrades and aerodynamic improvements to increase our aircraft fuel efficiency. The next best way to save fuel and reduce emissions is to fly the shortest possible distance between two points. Air space modernization programs, such as those described below, currently offer our next greatest opportunity for reducing fuel use and decreasing associated emissions.

### THE CHALLENGE

Modifying existing route structures or aircraft operations requires a coordinated effort between the airline, the FAA, and/or the local airport.

### THE SUCCESSES

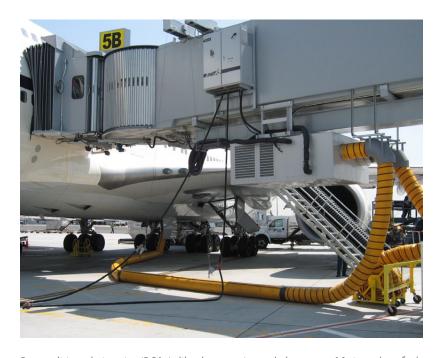
Altogether, in 2009 the aircraft fuel efficiency initiatives described in this section saved the airlines over 35 million gallons of fuel and reduced expenses by more than \$70 million. The amount of fuel conserved in 2009 also lessened Alaska Air Group's carbon dioxide emissions by nearly 335,000 metric tons. That's the

equivalent of taking 64,000 cars off the road or heating nearly 37,000 houses for a year.

### **Required Navigation Performance**

Alaska Airlines has been a leader in efficient flying since we pioneered the development of Required Navigation Performance (RNP) flight guidance technology in the mid-1990s. Alaska Airlines remains the only major domestic carrier with a 100% RNPequipped fleet and fully trained crews. RNP technology, which uses the global positioning system (GPS), allows aircraft to fly more direct routes and at lower minimum elevations with pinpoint accuracy. The use of RNP also allows more direct and efficient landing approaches and results in fewer weather-related cancellations and diversions, RNP flying conserved more than 250,000 gallons of fuel in 2008. Since 1996, we have introduced similar RNP procedures at 45% of the airports in the state of Alaska, as well as cities such as Palm Springs, Portland, and

In our five West Coast airports alone, PCA usage is expected to reduce CO<sub>2</sub> emissions by 75 million pounds per year.



Preconditioned air units (PCAs), like the one pictured above, use 10 times less fuel than a typical 737's onboard auxiliary power unit.

Washington, D.C. We are currently laying the groundwork to extend RNP technology to even more cities in 2010.

In 2006, Horizon Air became the first regional carrier to be certified for RNP approaches. On December 30, 2009, Horizon Air became the first scheduledservice passenger carrier to operate a flight using Wide Area Augmentation System (WAAS) technology. WAAS takes RNP technology a step further by using additional satellites that monitor GPS satellite signals. It then corrects for any errors in GPS satellite position. This foolproof navigation performance system reduces fuel burn by allowing pilots to fly straighter flight paths and by providing greater flexibility in choosing alternate airports in the event of a diversion.

Cost-Index Flying Cost-index flying uses onboard computer systems to calculate the cost effects of flying slow versus fast to obtain the most economical speed. Alaska Airlines used cost-index flying to lower its overall cruise speeds, reducing

average fuel consumption by 10 to 40 gallons per trip. This equated to a savings of approximately 1 million gallons in 2009. Horizon Air implemented cost-index flying in 2008 for both the CRJ and Q400.

**Single-Engine Taxi** Instead of using both jet engines while taxiing to and from the runway, Alaska Airlines has initiated single-engine taxi procedures to save fuel. In 2009, by expanding this program to many of our larger airports, we have estimated fuel savings of 260,000 gallons per year. This is now an available procedure systemwide for Alaska Airlines. This is, however, subject to conditions at the airport and contingent on taxi times. It is not feasible at smaller airports, which typically have short taxi times.

**Preconditioned Air Units** Alaska Airlines and Horizon Air are making greater use of ground power and mobile preconditioned air units (PCAs) for aircraft cabin venting, cooling, and heating while the aircraft is parked, instead of using the aircraft auxiliary power unit (APU), which is the small turbine engine on board the aircraft. A PCA burns approximately 10 times less fuel than a typical 737's onboard APU.

In 2008, Alaska Airlines started using ground power units instead of aircraft APUs at our 14 busiest airports. Approximately 80% of Alaska Airlines' gates are equipped with some sort of PCA equipment that allows them to reduce the use of the APU. Our eventual goal is to reduce APU use by 80% on the ground. We saved an estimated 740,000 gallons of fuel in 2008 and 2.7 million gallons of fuel in 2009.

O Routes In 2004, Alaska Airlines and Horizon Air partnered with the FAA to develop parallel flight routes to the San Francisco Bay and Los Angeles Basin airports. These routes, identified as "Q," follow one-way, direct flight paths from Seattle, Portland, and Vancouver to specific airports in the Bay and L.A. areas.

Compared to the previous routes, the Q routes save over 217 flight miles a day and almost 200,000 gallons of fuel per year.

**Optimized Profile Descent** Also known as Continuous Descent Approach, this is a procedure in which aircraft maintain a continuous descent angle during landing. This method, rather than the traditional step-down approach, is designed to reduce fuel consumption and noise during the landing phase of a flight. In March 2009, Alaska Airlines initiated an FAA-approved procedure to allow our planes to follow an optimized descent into the Anchorage airport. A more gradual descent approach to Anchorage will save an estimated 30,000 gallons of fuel per month.

Turboprops on Turbojet Routes In 2008, Horizon Air, working with the FAA, developed procedures to allow Q400 aircraft on traditionally turbojet arrival routes. Those procedures have reduced fuel and emissions by delaying aircraft descents and maintaining

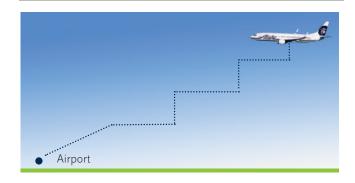
more efficient cruise speeds in congested airspace. Since that time, we've successfully implemented those procedures in Seattle, Los Angeles, and Vancouver. On some routes, the savings averages 39 miles—while also keeping the aircraft at much higher, more fuel-efficient altitudes.

**Electronic Flight Bag** The Electronic Flight Bag (EFB) is an electronic tablet-style computer device that brings information and flexibility to the flight deck. It allows flight crews to perform flight management tasks more easily and efficiently with less paper. Common EFB benefits include paper savings, weight (and therefore fuel) savings, early satellite weather detection, and efficient reporting of flight time elements. Horizon Air replaced its heavy, paper-intensive flight manuals with EFBs in 2008 in an effort to conserve paper and fuel and to enhance safety and on-time performance. A similar program is being evaluated at Alaska Airlines.

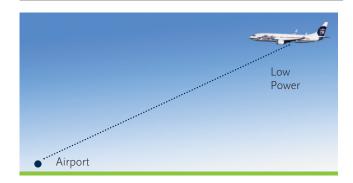
FAA Next Generation The FAA's Next Generation Air Transportation System (NextGen) is a plan to modernize the national airspace system through 2025, by replacing the current radarbased air traffic control system with satellite-based technology, enabling more efficient flight routes. These more efficient routes will use less fuel and reduce greenhouse gas emissions. According to the Air Transport Association, this more efficient air navigation system will trim fuel use and greenhouse gas emissions by 10% to 15% nationally. Under the "Greener Skies" project (see next page), we are taking a leading role in bringing NextGen operational and environmental benefits to the Seattle region. We will also work to replicate those benefits where possible in other locations throughout our system.

Optimized Profile Descent, also known as Continuous Descent Approach, is a navigation procedure that reduces both noise and carbon emissions during the landing phase of a flight.

### TRADITIONAL STEP-DOWN APPROACH



### OPTIMIZED PROFILE DESCENT



### **Greener Skies**

Alaska Airlines tested new flight procedures to reduce our environmental impact during airport approaches on the west side of Seattle-Tacoma International Airport (Sea-Tac) in summer 2009.

The project is being conducted in partnership with the Port of Seattle, the Boeing Company, and the FAA. Dubbed "Greener Skies," it is focused on using satellite-based flight guidance technology (RNP) pioneered by Alaska Airlines to operate more efficiently and reduce aircraft fuel consumption, emissions, and noise in the Puget Sound region. Alaska Airlines and Horizon Air are seeking FAA approval of the procedures, which could be used by all properly equipped carriers at Sea-Tac. This project places Sea-Tac, our primary hub, on the leading

edge of the national move to a modern, satellite-based air transportation system.

Testing began June 16, 2009, on an Alaska Airlines 737-700 during a non-commercial flight. Typically, aircraft follow a lengthy approach pattern and make a series of stair-step descents before landing. Using RNP satellite guidance technology and a continuous descent, aircraft can fly from cruise altitude to an airport runway along a shorter, more direct path at low power.

In addition to fuel and emissions savings, the new procedures will reduce overflight noise exposure for an estimated 750,000 people living within the affected flight corridors.

RNP and continuous descent procedures are part of the Next Generation Air Transportation System, the FAA's plan to modernize the National Airspace System through 2025. This initiative will increase efficiency, enhance safety, and reduce environmental impacts.

If you'd like to get involved or if you have questions about the Greener Skies initiative, contact Megan.Lawrence@alaskaair.com.



- Typical Flight Path
- RNP Flight Path

### **GREENER SKIES ANNUAL BENEFITS**

FUEL SAVED:
2.1 Million Gallons

EMISSION REDUCTION: 22,400 Metric Tons (≈ 4,100 Cars)

NOISE EXPOSURE REDUCTION: ≈ 750,000 People

# THE FUEL WE USE

Alternative jet fuels represent an opportunity for the future. There are exciting initial successes in the development of alternative, lesscarbon-intense jet fuels. Alaska Air Group is participating in various projects to support the development, testing, and commercialization of alternative fuels. Through our membership with organizations such as the Sustainable Aviation Fuel Users Group, of which we are currently the only domestic airline participating member, we have pledged to consider fuels that minimize biodiversity impacts; require minimum land, water, and energy to produce; and don't compete with food or freshwater resources. We are committed to driving sustainability practices into the global fuel supply chain. At this time, however, the technology and capacity have not been adequately developed for biofuels to fully substitute for fossil fuels.

Alaska Air Group made recent headlines based on our support of alternative fuels and our participation in related projects.

# ALASKA AIRLINES JOINS BOEING'S BIOFUEL GROUP Puget Sound Business Journal | July 13, 2009 WORLD'S LARGEST AIRLINES COMMIT TO USE BIOFUEL IN JETS Fightglobal | December 15, 2009 ALASKA AIRLINES JOINS SUSTAINABLE AVIATION FUEL USERS GROUP Biofuels Digest | July 14, 2009

# CARBON EMISSIONS FROM VEHICLES

The remaining 1% of our carbon emissions comes from two sources: fuel burned by our fleet of ground support equipment (GSE) vehicles and consumption of fuel and electricity to heat, cool, and light our buildings.

Ground Support Equipment Our GSE consists of forklifts, automobiles, and aircraft service vehicles, such as baggage tugs and belt loaders. GSE are typically powered by petroleum-based fuels and therefore contribute to our overall carbon footprint. Over the years, both Alaska Airlines and Horizon Air have initiated a variety of programs to move away from fossil-fuel-powered GSE and explore cleaner alternatives.

replacing fuel-burning vehicles with electric equipment where it makes economic, safety, and compliance sense. Horizon Air's strategy has been to methodically convert our vehicle fleet, wherever practical, from fuel-powered to electric. A large proportion of Horizon Air's vehicle fleet is located at airports where the

infrastructure is available to support its growing fleet of electric GSE. As of January 1, 2010, over 65% of Horizon Air's station-based ground support vehicle fleet consists of electric vehicles. At Alaska Airlines, the GSE fleet is approximately 10% electric. Many of the airports where Alaska Airlines operates do not currently have the capacity to recharge large fleets of electric vehicles. And at many of Alaska Airlines' airports, we do not manage any GSE at all; they are owned and operated by contracted ground service providers. Alaska Airlines has been testing and evaluating electric vehicles for our largest operation in Seattle, Washington. We look forward to working with the Port of Seattle as it upgrades airport infrastructure to accommodate the placement of vehicle recharging stations over the next three years.

Alternative Fuels in Vehicles Over the past three years, Alaska Airlines has converted or replaced a portion of our gasoline-powered GSE fleet with

### **WORK-FROM-HOME PROGRAM**

Approximately 45% of Alaska Airlines reservations agents and 75% of Horizon Air reservations agents participate in a work-from-home program. This eliminates the need for these employees to drive to work and removes more than 300 cars from our local roadways each day.

cleaner-burning propane units or hybrid GSE. In August 2009, we were one of eight airlines that signed an agreement to buy renewable synthetic diesel vehicle fuel at Los Angeles International Airport. This deal will provide our contractor's vehicle fleet with biodiesel beginning in 2012. This biodiesel will boast a carbon footprint of almost zero and will also greatly reduce particulates and sulfur emitted by GSE.

GROUND SUPPORT VEHICLE POWER SOURCE



of Horizon Air's vehicles are electric

10%

of Alaska Airlines' vehicles are electric

# CARBON EMISSIONS FROM BUILDINGS

Building Electricity, Heating, and Cooling Although small by comparison to the footprint of our aircraft fleet, our building operations contribute to overall carbon emissions through the use of energy that provides heating, cooling, and lighting. Many of our facilities are leased from local airports, where we have limited control over heating, ventilating, and air-conditioning systems; however, opportunities are available in our owned and long-term-lease buildings, such as our corporate headquarters.

Energy Consumption Our energy conservation program is still in its fledgling state. We've begun conserving energy in the buildings we own by upgrading to more efficient light fixtures, lighting systems, and airconditioning and heating systems throughout the Alaska Airlines and Horizon Air operations. We've recently adopted LEED® principles into Alaska Airlines and Horizon Air's standard facilities contract language. LEED, an acronym for Leadership in Energy and

Environmental Design, is a tool for improving the quality of buildings, minimizing their impact on the environment, and reducing operating costs. Although none of our buildings are currently LEED certified, we are in the process of obtaining LEED certification for our first construction project in 2011.

Alternative Energy We are also committed to investigating the use of alternative energy sources to heat and/or power our buildings. Our target is to complete a feasibility study and implementation plan for at least one facility by the end of 2010.

Horizon Air's strategy has been to methodically convert our vehicle and equipment fleet, wherever practical, from fuel-powered to electric. As of 2010, over 65% of Horizon Air's GSE runs on electricity instead of fossil fuel.



We're replacing our fuel-burning ground support equipment (GSE) with electric equipment (like these aircraft pushback tractors, shown above) wherever practicable.

# MATERIALS AND WASTE

Alaska Air Group has a strategic goal to reduce the use of nonsustainable resources and to recycle inflight and office waste materials. Achieving this goal depends on innovation and collaboration by employees in many functional areas, key suppliers, airport management and staff, and regulatory bodies.

Alaska Airlines and Horizon Air employees are making sure that our commitment to environmental stewardship is more than just talk—by pursuing corporate initiatives, such as collection of recyclable materials on flights, to grassroots efforts, such as the waste reduction initiatives

launched by individual station employees in offices, at airports, and in maintenance facilities around our system. Throughout the company, employees challenge themselves and each other to find ways to reduce, reuse, and recycle resources. The following describes some of our recycling and waste reduction programs along with some of our challenges.

### **DID YOU KNOW**

An estimated 7.5 million pounds of trash is generated by the U.S. aviation industry every day.

Natural Resources Defense Council 2006 research found that 75% of that trash is recyclable, but only 20% reaches a recycling center.

# WHY ARE ALASKA AIRLINES AND HORIZON AIR'S RECYCLING PROGRAMS DIFFERENT?

Horizon Air owns and operates catering facilities in Seattle, Portland, and Boise, where the majority of waste is deplaned. This gives Horizon Air tighter control of how the waste is managed, and ultimately, recycled. Additionally, due to the shorter duration of Horizon Air flights, the waste stream is more consistent and contains less food and food packaging wastes. About 92% of the materials used in service are made from recyclable materials, such as plastic, aluminum, or paper.

At Alaska Airlines, approximately 60% to 70% of our waste is deplaned and disposed of at contract flight kitchens. Alaska Airlines' flights are longer, with a more complex food and beverage service than a typical Horizon Air flight. First-class meals, buy-on-board meals, and multiple beverage services increase the overall waste totals and decrease the percentage of reclaimable materials.

# IN THE AIR

### Materials

We have recently committed to replacing our current inflight serviceware (materials used during cabin food and beverage service) and other products with more sustainably sourced alternatives. For years, our inflight cocktail napkins have been printed on 100% recycled content. Now, we are looking for more sustainably sourced and biodegradable hot beverage cups and main cabin cutlery. Additionally, we are working with our bottled water supplier (Athena) to provide water in 50% recycled-content bottles.

### Waste

Most of our flying public is conscious of the volume of waste that is generated in a single flight, and many ask what and how much is recycled. In this area, we have some great success stories—and some great challenges.

### THE SUCCESS

At Horizon Air, we have had a long and successful history of collecting and recycling inflight waste, with focused attention since the mid-1980s. Horizon Air currently recycles 69% (by weight) of all waste generated during inflight service. Flight attendants collect newspapers, magazines, aluminum cans, plastic cups, and plastic and glass bottles from passengers for recycling. Wine corks, cardboard, shrink wrap, coffee grounds, and aluminum and plastic pop rings associated with inflight service are recycled at Horizon Air's main food and beverage locations in Seattle, Portland, and Boise.

# Horizon Air recognized for recycling efforts



On May 14, 2008, the Port of Portland honored Horizon Air with an Aviation Environmental Excellence Award for its efforts in recycling items used during inflight service.



Horizon Air's flight attendants capture 83% of all recyclable materials (plastic, aluminum, and glass) generated during inflight service.

### THE CHALLENGE

Alaska Airlines is no less concerned about inflight waste reduction. In 2008, we began our co-mingled inflight recycling program. We originally focused on collecting and recycling inflight waste at Seattle-Tacoma International Airport, in support of our broader goal of increasing the recycling recovery rate of all Alaska Airlines food service waste. We chose our Seattle kitchen as our starting point for monitoring and implementing our inflight recycling program for two reasons: Our Seattle contract catering kitchen is our largest and busiest and manages the majority of Alaska Airlines inflight waste and catering materials, and the Seattle area has a well-developed foundation and marketplace for co-mingled recyclable

materials. In 2009 in Seattle, flight attendants captured 32% by weight of recyclable materials generated in flight. This fell off significantly from the 60% collection rate we measured in 2008, the first year we implemented the program. One of the key contributors to the decline in our collection efforts occurred in summer of 2009, when we temporarily suspended our recycling program in response to H1N1 virus concerns. Unfortunately the recycling program was not fully resumed as planned.

We are committed to fixing this problem and increasing our recovery rate. In 2010, we're setting an ambitious target of 100% collection and recovery of all inflight recyclable materials systemwide.

"Our inflight recycling efforts have been among our greatest points of pride for as long as I can remember—through them, we've helped care for the planet while giving countless customers yet another reason to think favorably of us."

 $\label{eq:JEFFPINNEO} \mbox{ JEFF PINNEO, }$  President and CEO, Horizon Air Another challenge remains in improving the percentage of collected material that is, in fact, recycled by our catering kitchens. Alaska Airlines contracts with food service kitchens in 23 locations. Food service waste is deplaned and managed at all contract catering kitchens, but currently only seven of these facilities recycle the materials generated by Alaska Airlines. Our analysis shows four key contributing factors to this lack of buy-in:

- 1. Limited ability at the local level to collect and handle recyclable materials. Not all states and municipalities have the infrastructure to support robust recycling programs.
- 2. Limited staff on short turnaround timelines.

### **HOW DO WE MEASURE OUR WASTE?**

Alaska Airlines has an "Onboard Waste Green Team" composed of members from the Flight Attendant Group, Catering, and Fleet Service. The team works with assistance from local airports, such as Portland and Seattle, to perform periodic waste assessments. During a waste assessment, the team dons disposable coveralls, gloves, and boots to gather waste from the aircraft and beverage carts, then sorts the waste by type (aluminum, paper, nonrecoverable, etc.) and weighs the end results. This helps us evaluate how much of the waste materials could be recycled and how much is collected for recycling by the inflight staff.

- 3. Limited dock space to place recycling compactors.
- 4. Most kitchens service international flights, which by current regulation must incinerate or autoclave all of their regulated wastes, so many kitchens do not have a practice of recycling.

Alaska Airlines will continue to advocate for and encourage contract flight kitchens and airports to set up recycling programs. We will also evaluate the feasibility of deplaning inflight waste at the airport rather than sending it back to the catering kitchens in the food service carts.

# ON THE GROUND

### Materials

As two of the early leaders in e-ticketing and ticketless travel, Alaska Airlines and Horizon Air have eliminated thousands of tons of excess paper. In December 2008, both Alaska Airlines and Horizon Air eliminated paper ticket jackets. This saves approximately 10 million ticket jackets, or roughly 850 pulp trees, per year. We have also continued to reduce printed material through the condensing or co-branding of required forms and converting to electronic format, such as electronic

By eliminating paper ticket jackets, Alaska Airlines and Horizon Air save 10 million ticket jackets, or about 850 pulp trees, a year. airway bills. In the past five years, we've eliminated over 30% of the paper forms we use to conduct business. There are many opportunities to further expand these paper-saving initiatives throughout the company—for example, many of our operational programs currently rely heavily on paper. We look forward to future progress in transitioning to paperless systems.

We also have taken steps toward incorporating sustainability criteria into our procurement process for evaluating the purchase of new products and services; however, this effort is still in the early stages of maturity.

### Waste

Office and airport buildings participate in varied recycling programs (dependent on municipal-level capabilities)—generally paper, aluminum, and plastics are collected. Other materials that we recycle around our system include stretch wrap, packing peanuts, toner cartridges, fluorescent light tubes, pallets, computer equipment, used oil, antifreeze, scrap metal, and batteries. Recycling of office and airport waste materials is currently decentralized, with program responsibility delegated to local managers. We are working on ways to evaluate and measure our efforts in order to improve the collection and recycling of these materials. Although our office facilities already participate in waste recycling programs, we will continue to identify opportunities to expand and streamline recycling capabilities throughout our system.



Alaska Airlines Line Maintenance employees in Seattle recycle approximately 4,000 steel oil cans per week.

# ADDITIONAL ENVIRONMENTAL TOPICS

# Deicing

An additional area of environmental concern is deicing fluid management. Operating in cold climates requires a plan to ensure that frost/ice buildup on aircraft wings does not compromise flight safety. Today's industry standard for ensuring safe flights during winter weather involves spraying aircraft surfaces with a diluted mixture of ethylene glycol or propylene glycol. These chemicals mix readily with water and snow. The ability of glycol to biodegrade quickly after use is both positive and negative in terms of environmental impact. On the plus side, it is relatively nontoxic and does not remain in the environment for an extended period of time. On the minus side, the quick biodegradation may remove oxygen from local waterways and harm aquatic life. Opportunities for reducing deicing fluid are restricted by FAA regulations, aircraft manufacturer procedures, and available technology. Collecting and managing runoff is constrained by

airport design and operations and available technology. At many large airports, the stormwater runoff is collected and treated; however, many smaller airports do not have deicing collection systems. In partnership with local airport authorities, Alaska Airlines and Horizon Air follow numerous best management practices aimed at reducing the volume of deicing fluid runoff—such as deicing pads, vacuum trucks, ramp scrubbers, etc. All employees who deice are given training in the local procedures and best management practices for preventing stormwater pollution at each airport we serve.

### Noise

Alaska Airlines and Horizon Air maintain a strong focus on reducing airplane noise and its impact on the communities we serve. Our noise reduction program focuses on three areas: improved technology, effective land use management, and noise-reducing operational procedures.

Examples of our actions to reduce noise levels include the following:

- Fleet modernization is a key component to noise reduction. Our oldest and noisiest planes have been retired. Our current fleet is among the youngest and quietest in the United States. Our entire fleet meets or exceeds federal noise certification standards.
- Actively pursue FAA approval of quieter landing procedures, such as Optimized Profile Decent (OPD).
- We actively participate in discussions with airports regarding land use and operating procedures to minimize noise impacts to surrounding areas.
- By working with local airport authorities and the FAA, we have helped to develop and use noisereducing takeoff procedures as our standard procedure for all flights.
- Horizon Air's Q400 aircraft has a cumulative 25.9 dB noise level

below the published EPA Stage 4 Aircraft Noise Standards.

# Compliance

Alaska Air Group recognizes that environmental compliance is fundamental to running a successful business and has structured the Corporate Compliance Office to include Environmental Affairs. The director of environmental affairs, who is supported by three environmental managers, reports directly to the chief ethics & compliance officer. The director and each manager are responsible for environmental compliance within designated regions of the United States, Canada, and Mexico. The Environmental Affairs Department ensures compliance with all federal, state, and local environmental laws and regulations. It also develops corporate environmental policy, provides technical guidance to internal operating departments, conducts environmental training, performs audits, and reports

environmental performance to upper management and the Alaska Air Group Board of Directors.

# **Employee Engagement**

No amount of corporate activity is possible without the engagement of its employees, and this report would not be complete without mention of the remarkable contributions being made by hundreds of individuals throughout the company on behalf of our planet.

# **Employee Education**

Employees who work at our airports and with chemical products complete several hours of environmental training every year. Training covers the basics of waste management, preventing water pollution, handling hazardous materials, and preventing and responding to hazardous materials spills. Selected subcontractor staff are also trained to our high standards. In 2009, both airlines

instituted sustainability training for new employees.

Additionally, through the efforts of individuals and local "Green Teams," more employees are keeping environmental issues top of mind.

# **Employee Involvement**

Alaska Airlines and Horizon Air are committed to serving our communities by developing meaningful and enduring relationships with organizations representing diverse causes and concerns, including environmental ones. In addition to our corporate giving programs, our employees give generously of their own time, talent, and treasure to a variety of organizations in the communities we serve and many do so by volunteering for environmentally focused organizations.

We encourage our employees to be involved in their communities by offering the following programs:

Under our Dollars for Doers program, our employees are given \$10 per hour by the company to be donated to the organization(s) for which they volunteer, up to \$1,000 per year, per employee. Our Matching Gift Program brings the company and individual employees together in support of organizations our employees have strong relationships with. Under this program, Alaska Airlines and Horizon Air will match employee contributions to nonprofit institutions or organizations.

# Charitable Giving

Alaska Airlines and Horizon Air Corporate Giving support health and human services, arts and cultural programs, and education and environmental organizations. We focus on communities we serve and where a significant number of our employees live or work. Alaska Airlines and Horizon Air are also proud to be associated with The Nature Conservancy of Alaska, Washington, and Oregon, the Washington Wildlife and Recreation Coalition, as well as other environmental organizations, such as the Alaska Raptor Center. We've recently added the National Forest Foundation to our charity miles donation website. For more information on how you can contribute your extra mileage plan miles to an environmental charity, please visit our website at www.alaskaair.com/as/www2/company/csr/charity-miles.asp.



The Alaska Airlines/Horizon Air Seattle Green Team held an e-Cycle event on Earth Day, April 22, 2009. Employees brought in hundreds of old computers, television sets, and other electronic waste from home that were responsibly reused or recycled.





# LOOKING FORWARD

We can see for miles and miles—and that's not good enough

### IN THIS SECTION

Goals and Commitments for 2010 and Beyond

Summary

Being good stewards of our environment is not only good business—it's the right thing to do. We're seeking to make meaningful changes to minimize any environmental impact, and our efforts are centered on reducing emissions from fuel consumption in the air and on the ground. We've already made significant improvements, but there is more to be done. Our ambitious goals for 2010 and beyond demonstrate that we're not resting on any past accomplishments. And we'll keep raising the bar as we improve our ability to monitor environmental impacts and track our progress.

# GOALS AND COMMITMENTS FOR 2010 AND BEYOND

Alaska Air Group's strategic commitments are to measurably reduce our impact on the environment and become an environmental leader in the domestic airline industry. Our Green Initiative strategic objective has three specific goals, summarized earlier in this report:

- 1. Reducing emissions from fuel consumption.
- 2. Reducing emissions from heating and electricity consumption in buildings.
- 3. Reducing use of nonsustainable resources and recycling inflight and workplace waste materials.

We will continue to develop our strategic management of environmental goals, setting explicit targets, leading initiatives, and monitoring our progress to achieve both breakthrough solutions and build continuous improvement into our operations and business processes.

Specific goals for the near future are provided in the table on the following pages.

We are committed to becoming an environmental leader in the domestic airline industry and to measurably reducing our impact on the environment.



In the future, we will continue to invest in enhancing the efficiency of our 737 fleet (such as the 737-800, shown above) as well as move to an all Q400 fleet—the most fuel-efficient aircraft in its class.

IMPACT AREA	PROJECT NAME	DESCRIPTION
Reduce emissions from fossil fuel consumption	Fly more efficiently	Greener Skies Obtain FAA approval to fly Required Navigation Performance procedures, being designed under the Seattle Greener Skies project, at least during low-traffic periods, in 2011. This project represents a partnership between Alaska Airlines/Horizon Air, the Port of Seattle, the FAA, and The Boeing Company. The purpose of the project is to bring quieter, more fuel-efficient approach paths to Seattle-Tacoma International Airport, saving equipped airlines more than 2 million gallons of fuel and 22,400 metric tons of CO <sub>2</sub> annually, as well as reducing noise exposure for hundreds of thousands of people in the Puget Sound region. ALASKA AIRLINES   HORIZON AIR
		Implement enhanced flight-planning capabilities in order to reduce the amount of additional fuel loaded on each flight, above what is required to safely conduct the flight. The below capabilities will be implemented by year-end 2010 as part of this fuel efficiency effort:
		Flight Plan Review Implement a system by year-end 2010 to provide closer estimates of fuel boarded and used for each flight. Improved fuel planning can mean less fuel burned and emissions produced to carry additional fuel. Safety always remains the paramount consideration when deciding how much fuel to board. ALASKA AIRLINES
		<b>Aircraft Performance Monitoring</b> Implement a program by year-end 2010 to track aircraft performance as it relates to fuel consumption and efficiency. The program allows staff to be alerted if an aircraft's fuel efficiency changes. <b>ALASKA AIRLINES</b>
		Improved Plan Takeoff Weight Prediction Implement by year-end 2010 a system to review the variability of bag counts for weekly and seasonal fluctuations to improve estimated planned takeoff weights. More accurate planning can reduce the amount of unnecessary fuel loaded. Safety always remains the paramount consideration when deciding how much fuel to board. ALASKA AIRLINES
		Flight Planning Implement by year-end 2010 the new flight-planning features for Alaska Airlines to optimize the fuel efficiency of flight routes. The flight-planning system can dynamically calculate routes that utilize wind direction and speed to determine the most fuel-efficient flight path. ALASKA AIRLINES

IMPACT AREA	PROJECT NAME	DESCRIPTION
	Promote the development and adoption of sustainable aviation fuels	Lead Northwest regional effort to identify best practices related to the responsible development and commercialization of sustainable aviation fuels. ALASKA AIRLINES   HORIZON AIR
		Continue negotiations regarding the purchase of renewable jet fuel and diesel derived from camelina. ALASKA AIRLINES   HORIZON AIR
	Address emissions on the ground	Participate in the Port of Seattle GSE Consortium. Seattle-Tacoma International Airport (SEA) has a goal of adapting and upgrading infrastructure to accommodate electric vehicle charging stations by second quarter 2012. Alaska Air Group will increase the percentage of its electric GSE in SEA, including bag tractors, gate pushbacks, and belt-loaders, as this infrastructure becomes available.  ALASKA AIRLINES   HORIZON AIR
Reduce emissions from heating and electricity consumption in buildings	LAX Board Room	Obtain LEED certification on LAX Board Room by year-end 2011. ALASKA AIRLINES   HORIZON AIR
	Corporate Headquarters HVAC upgrades	Upgrade and install more efficient heating/cooling systems at Alaska Airlines Corporate Headquarters by year-end 2010. ALASKA AIRLINES
Reduce use of nonsustainable resources and recycle inflight waste	Inflight recycling	Increase the recycling rate of inflight waste with a target of 100% by year-end 2010. The focus is on both the collection of recyclable materials inflight and the recycling of such materials once deplaned. ALASKA AIRLINES
	Inflight serviceware	Identify inflight serviceware products that can be replaced with organic, sustainable, recyclable, or compostable alternatives and initiate a replacement plan by year-end 2010. ALASKA AIRLINES

# SUMMARY

At Alaska Air Group, we're committed to proactively applying our pioneering spirit of innovation and our deep caring for customers and the environment to the continual pursuit of more sustainable air transportation. Environmental performance and leadership are priorities for Alaska Air Group.

We have always cared about the environment and living up to our corporate responsibility, but in light of emerging global issues and higher expectations of business, we are taking it to the next level.

Moving toward more sustainable air transportation will require intensive focus and the creative solutions of Alaska Air Group leadership, our environmental specialists, all employees, and our suppliers, partners, and other stakeholders. We hope that communicating our commitment, challenges, and progress unleashes the creativity and innovation of everyone touched by Alaska Airlines and Horizon Air. We are proud of what we have accomplished, but fully acknowledge that we are at the beginning of a journey. Please join us!

# INVITATION FOR FEEDBACK

We greatly appreciate your comments and suggestions regarding this report. Please contact us at

www.alaskaair.com/consumeraffairs

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