FAA FACTS

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How Your Airport and Your Skies are Getting Greener

The FAA and the aviation community are working to shrink their environmental footprint in areas that air travelers may not have seen from their seats on the plane. These are some of the ways that energy and fuel are being saved, waste is being reused, and noise is being reduced.

In the Tower

We're letting jets slide in - What gets you down faster and more efficiently: a staircase or a slide? The FAA is "sliding" aircraft into airports with smooth arrival slopes instead of stair-step procedures. Optimized descents will save millions of gallons of fuel and reduce CO2 and other emissions by hundreds of thousands of tons. Find more information here and watch the video here.

We're rolling to the runway – The FAA and NASA recently completed research and testing on a software capability that calculates gate pushbacks at busy hub airports so that each plane can roll directly to the runway and to take off. The new system, which the FAA plans to deploy at 27 major airports, will minimize taxi delay and ramp congestion, and will reduce fuel burn and CO2 emissions. Find more information here and watch the video here.

The green roofs are here – Vegetative coverings on airport building roofs have proved to be a successful way to decrease energy use through a reduction in the overall heat island effect, reduce storm water runoff, and provide acoustical buffering and air quality protection. You can find them in Seattle, Portland, Chicago and other locations. Find an example of a green airport roof here. Plus, there is something different about the south air traffic control tower at Chicago O'Hare International Airport. Watch here.

And we're building more green towers – The FAA has launched a nationwide initiative to find a new design for control towers that can be built and operated sustainably. The goal of the nationwide solicitation is to develop a standardized design for towers at regional and municipal airports that will: 1) Meet operational and cost requirements, 2) Maximize energy efficiency, 3) Be easy to modify according to height needs, and 4) Be rapidly constructed. Find more information here.

On the Plane

Cleaner jet engines - Modern jet engines emit far fewer soot particles than earlier engines, reducing their contribution to the black exhaust typical of jet aircraft decades ago. New engine technologies also have reduced the amount of greenhouse gasses emitted per flight. The FAA just invested another \$100 million to help reduce fuel use and emissions. Find more information here.

Top it off with seaweed? - More planes will be using aviation fuels produced from renewable materials such as cooking oil, grease, wood waste, cornhusks, sugar cane and seaweed. Many planes won't use fuel at all, as they switch to advanced electrical power. More details can be found in the <u>U.S. Aviation Climate Action Plan</u>.

At the Airport

Challenge accepted – The FAA and U.S. airports have launched an Airport Climate Challenge to help achieve the Biden-Harris Administration goal of net-zero emissions by 2050. The FAA will provide funding for comprehensive airport sustainability planning and will develop a tool for airports to voluntarily estimate, track and report on the emissions reduction achieved when implementing projects supported by the airport programs. Find more information here.

We're rockin' down to electric avenue – The FAA has awarded millions of dollars in grants to airports to fund zero-emission airport vehicles, including their electric charging infrastructure, and will electrify the ramp equipment used to service planes at the gate. Through this support, airports are expected to reduce ozone emissions by more than 1,700 tons annually. Find more information here.

Harnessing the sun – Airports such as Tucson International used FAA funding to install a field of solar panels that offsets about 50 percent of the energy needs for the airport's terminal. The environmental benefits are equal to a reduction of 25,000 gallons of gas burned and 245 tons of carbon dioxide released per month. Find more information on this video.

We're talking with our neighbors – The FAA is committed to engagement and open dialogue with those affected by airspace changes and aviation noise. Our current engagement strategy includes working with airports and community leadership through roundtables, ad hoc committees, and task forces. We also routinely engage the public through Community Engagement initiatives, such as our Noise Complaint Initiative (NCI), to understand specific challenges and propose solutions to alleviate concerns. We're also available via a new chatbot on our community engagement page.

Understanding aircraft noise - This aircraft noise simulation illustrates the perceived noise on the ground during an aircraft fly-by. Noise is generated by the interaction of the airframe with air flow and by the engines. Watch here for insight into the topic.

Want more info? - Find more information about the FAA and its sustainability efforts at its Sustainability Gateway Page.