FAA FACTS

FAA Harnesses the Sun to Save Energy and Lower Expenses

The Federal Aviation Administration is succeeding where Icarus and Daedalus failed by benefiting from the power of the sun to lower its energy expenses and reduce its usage of fossil fuels. The FAA is installing solar arrays to provide energy to runways, control towers and other aviation facilities across the country as part of its mission to rely on sustainable energy for its operations. FAA solar initiatives include:

Runway Power

Major airports generally have airfield lighting powered by expensive, centralized electrical systems, while many smaller airports only have non-illuminated signs, markings, windsocks, and other pilot aids. Can solar-powered lighting and signs along runways and taxiways improve airfield visibility at smaller and general aviation airports?

The FAA is using solar panels and battery supplies at Penn Yan Airport in New York on 23 lighting safety systems — including runway and taxiway edge lights, obstruction lights, elevated runway guard lights, windsocks, and signs.

The next locations for “solar runways” are airports in Arizona and Washington.
Sunny Great Plains

The FAA’s largest solar project to date is coming to the Mike Monroney Aeronautical Centre in Oklahoma City, where air traffic controllers, technical operations professionals and aviation inspectors are trained. The clean electricity generated from the solar panels on FAA property will help serve the Center’s power needs.

The panels are expected to produce 2,600 megawatt hours annually, the equivalent needed to power 260 average homes. The project will reduce the Center’s electric bill by an estimated $170,000 – $200,000 annually.

Desert Energy

One of the earliest solar projects used by the FAA is a 1,600-panel solar farm adjacent to the Tucson, Ariz., air traffic control tower. The panels generate enough power to support all of that facility’s electrical needs for several hours a day and help cool the building at night.
Aloha Sunshine

The success of the renewable solar energy system in Tucson has been a model for the installation of new arrays at FAA air traffic facilities from coast to coast. During 2023, we will be using the light of the sun to power control towers in Honolulu, Hilo and Kona in Hawaii, and at the Guam Combined Center-Radar Approach Control (CERAP). The FAA also plans to install a solar array for air traffic facilities in Boston.