

## CASE STUDY 13

### Reduce, reuse, recycle at PHX

**Who:** Phoenix Sky Harbor International Airport

**Where:** United States of America

**What:** Airport staff recycling programme

**When:** Ongoing

**Why:** Reducing the amount of waste from airport staff

#### Project

All City of Phoenix employees have recycling available either by their desk or in common areas, including those working in the Aviation Department.

The airport has been actively recycling in one way or another for over 15 years and is currently engaged in a pilot programme to increase recycling. The airport is also looking to assist airlines and tenants in their recycling efforts.

Last year, airport staff recycled:

- 10 tonnes of cardboard per month
- 1 tonne of 'mixed office recyclables'
- Over 790 lead-acid batteries; 80 used tires; 2,495 gallons of used oils and transmission fluids; 660 gallons of anti-freeze from airport fleet, including crushed oil filters to reduce amount of hazardous waste produced
- Refrigerants from HVAC mechanical systems
- Fluorescent lamps
- Asphalt from construction projects

A new mulching programme has also been instituted which recycles about 80 yards of plant material each month as well as an average of 63 pallets each week that are sold and reconditioned for future use. Phoenix holds an annual 'Tenant Cleanup Day' to increase steel and aluminum recycling around the airport.

#### Compressed Natural Gas fuel programme

Compressed Natural Gas (CNG) fuel is a substitute for petrol or diesel. It is considered to be an environmentally "clean" alternative to those fuels. It is made by compressing methane (CH<sub>4</sub>) extracted from natural gas. The airport has converted the following to run on CNG:

- Taxis, vans, inter-terminal buses
- 62 buses to rental car facilities
- 186 airport vehicles: (72 CNG-only and 114 bi-fuel)

#### Two degrees can make a difference

The summer in Arizona sees temperatures during July averaging 104°F (around 40°C), but often reaching over 110°F. This necessitates significant use of air conditioning. A programme currently underway introduces energy conservation practices, including raising the temperature by two degrees when parts of the terminal are unoccupied. This is automatically controlled along with motion sensor lights that illuminate only when needed.



#### Company profile:

*The City of Phoenix owns and operates the Phoenix Airport System which consists of Sky Harbor International Airport, Deer Valley and Goodyear airports.*

*Sky Harbor Airport has three terminals and serves around 41.5 million passengers per annum. It is served by 23 major air carriers, several commuter and cargo carriers, and is home to the 161st Air Refueling Group of the Arizona Air National Guard.*

[www.phxskyharbor.com](http://www.phxskyharbor.com)



*The PHX compressed natural gas filling station.*



*The landscaping at PHX is planned with water conservation in mind.*