



Sustainability In Aviation

Presenters & Acknowledgements

Today's Panel:

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Primary Sources:

Gemmer, Elizabeth, "Aviation Sustainability" (2019). Honors Projects. 425.

Sustainable Aviation Resource Guide, Sustainable Aviation Guidance Alliance

Various Airport & Government Sustainability Plans and Initiatives

Why Be Sustainable?

- federal, state and local mandates
- To keep aviation as a viable mode of transport
- Because it is the right thing to do



Why Sustainability is Important for Airports



The Pillars of Sustainability

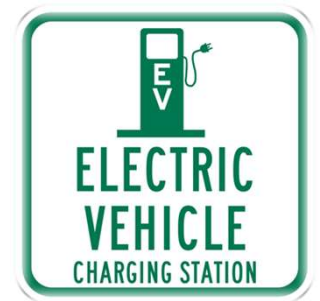
Sustainability Defined

- The three pillars of sustainability are often recognized as environmental, financial, and social responsibility
- Operational efficiency is recognized as the fourth pillar of sustainability in the aviation industry
- Operational efficiency is **critical** to the Department's mission
- Therefore, the Department embraces the "EONS" definition of sustainability
 - Economic Vitality
 - Operational Efficiency
 - Natural Resources
 - Social Responsibility



Additional Opportunities for Leadership

- County facilities/operations
- Tenant facilities/operations
- Passengers/ground transportation
- Aircraft operations
- Concessions / Organic Waste Recycling



Alternative Fuel is Industry's Future

14 JULY 2021 NEWS

United Airlines signs deal to acquire 100 Heart Aerospace ES-19 aircraft

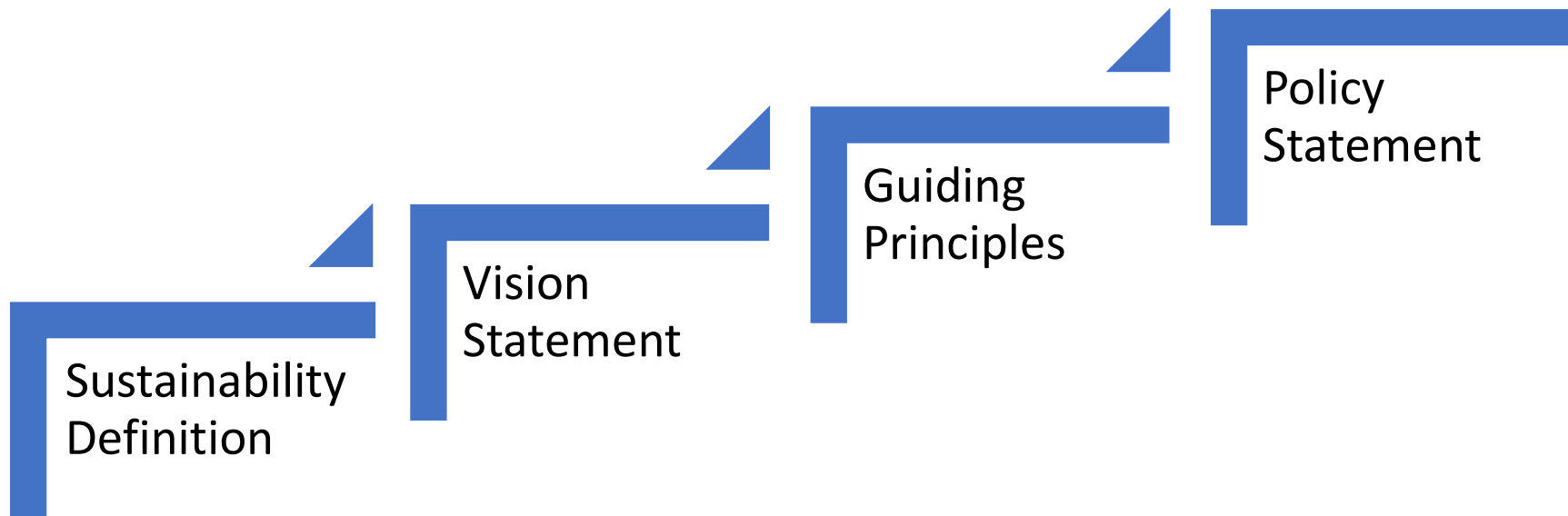


- Aviation industry committed to zero net by 2050
- Electric and alternative fuel aircraft are path to achieving that goal



Planning,
Implementing,
Improving
and/or
Maintaining a
Sustainability
Program

First Steps to Creating your Sustainability Plan



Sustainability Definition - Samples

ACI-NA Definition of Sustainability

A holistic approach to managing an airport so as to ensure the integrity of the **Economic viability, Operational efficiency, Natural Resource Conservation, and Social responsibility (EONS)** of the Airport.

County of San Diego Board Letter Sustainability Impact Statement Guidance



SFO Sustainability and Social Equity Plan

SFO has adopted the airport-specific definition of sustainability created by the Airports Council International (ACI) – North America. This definition is known as EONS: “A holistic approach to managing an airport so as to ensure the integrity of the **Economic viability, Operational efficiency, Natural Resource conservation, and Social responsibility** of the airport.” This template was applied to the present and historic social and environmental outcomes of SFO’s programs and projects through the release of four Sustainability Reports*.

Clay Lacy Sustainability Strategy

Sustainability is about the value creation for the many people who depend on us, the world we all share and the thriving company we continue to build.



Vision - Samples

SD City CAP

Our vision is to be a sustainable and resilient city with opportunity in every community.

FAA

Net-Zero GHG Emissions from the U.S. Aviation Sector by 2050

LAX Sustainability Action Plan

LAWA is committed to setting the gold standard in sustainability for the people of Los Angeles and the world.

SAN

The San Diego County Regional Airport Authority is committed to building an enduring and resilient enterprise by effectively managing our financial, social, and environmental risks, obligations, and opportunities.

It is essential for the Authority to become a known benchmark and respected role model for best sustainable practices in the San Diego region and the aviation industry.

Guiding Principles - Samples

SMP Core Elements



SD County CAP

Environment: conserving air, water, land, soils, minerals, natural habitat, energy, and aesthetic resources; while protecting life and property from the risks of wildfires, flooding, and other hazards.

Economy: creating good jobs, income, and financial resources.

Equity and Social Well Being: providing library, park and recreations facilities, along with programs that contribute to improvements in education, income, health, safety, arts, and cultural attainment for all.

FAA

- Reduce environmental impacts.
- Help maintain high, stable levels of economic growth.
- Help achieve "social progress", a broad set of actions that ensure organizational goals are achieved in a way that's consistent with the needs and values of the local community.



Policy Statement - Samples

2021 United States Aviation Climate Action Plan

Our vision is that emissions will be decreased through:

- The introduction of new, more efficient aircraft by airlines into their operational fleets and retirement of older, less efficient aircraft.
- Development of new, more energy efficient aircraft and engine technologies by the original equipment manufacturers (OEMs).
- Improvements in aircraft operations throughout the National Airspace System (NAS) by the U.S. Government (USG) and by airlines flying more optimal trajectories for reduced fuel use and contrail impacts.
- Production of Sustainable Aviation Fuels (SAF) by the energy sector.
- Electrification and potentially hydrogen as solutions for short-haul aviation.
- **Advancements in airport operations across the United States.**
- International initiatives such as the airplane CO2 standard and the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).
- Domestic policies and measures to help meet emissions targets.

NBAA

On behalf of the more than 11,000 members across the country, NBAA works to develop reasonable and balanced policies that support the industry's **twin objectives of promoting mobility while minimizing environmental impact**. At the same time, the association's professional staff have undertaken a variety of initiatives aimed at supporting environmental stewardship.

Centennial Colorado Airport's Sustainability Management Plan

This Airport Sustainability Plan is a management tool to comprehensively **integrate sustainability** concepts into airport planning, management, operations, and development. The plan is structured in a way to allow airport management to capture sustainability practices that can enhance financial viability, improve operational efficiency, conserve natural resources, and express social responsibility. In creating and adopting this Airport Sustainability Plan, the staff of Centennial Airport demonstrate their commitment to integrating sustainability into management decisions at the airport. Airport staff intend to use this plan as a roadmap for implementing sustainability initiatives that are tailored to the airport's size, service, location, and characteristics. This Airport Sustainability Plan provides the structure to ensure a balanced and sustainable approach to managing its operations and facilities.

Other Resources

- 2021 United States Aviation Climate Action Plan
- Airports Council International (ACI) Sustainability Strategy for Airports Worldwide
- California Aviation System Plan study of 2020 (CASP 2020)
- City of San Diego Climate Action Plan (CAP)
- Clay Lacy Aviation 2021 Sustainability Vision and Strategy
- Colorado Airport Sustainability Program (website)
- County of San Diego Climate Action Plan (CAP)
- County of San Diego General Management System (GMS)
- County of San Diego Sustainability Plan Board Letter, Attachment A County San Diego Sustainability Vision and Goals [March 1, 22]
- Federal Aviation Administration (FAA) Airport Sustainability (website)
- Los Angeles World Airports (LAWA) 2019 Sustainability Action Plan (SAP)
- San Diego County Regional Airport Authority Policies, Section 8.31 Sustainability
- San Diego International Airport (SAN) Sustainability Management Program (June 2020)
- San Francisco International Airport (SFO) Sustainability and Social Equity Plan
- SFO's Interim Strategic Plan: COVID-19 Recovery to Resilience Framework 2020-2023
- [Sustainable Aviation Guidance Alliance \(SAGA\) Sustainable Aviation Resource Guide](#)
- Gemmer, Elizabeth, "Aviation Sustainability" (2019). Honors Projects. 425.