

Headquarters U.S. Air Force

Integrity - Service - Excellence

U.S. Air Force Energy Program



**Mr. Mike McGhee
Acting SAF/IEE
11 August 2009**

U.S. AIR FORCE

***The United States Air Force Exists to DOMINATE
Air, Space, and Cyberspace for America***

***The mission of the
United States Air Force is
to fly, fight and win...
in air, space, and cyberspace***



Global Vigilance, Global Reach and Global Power



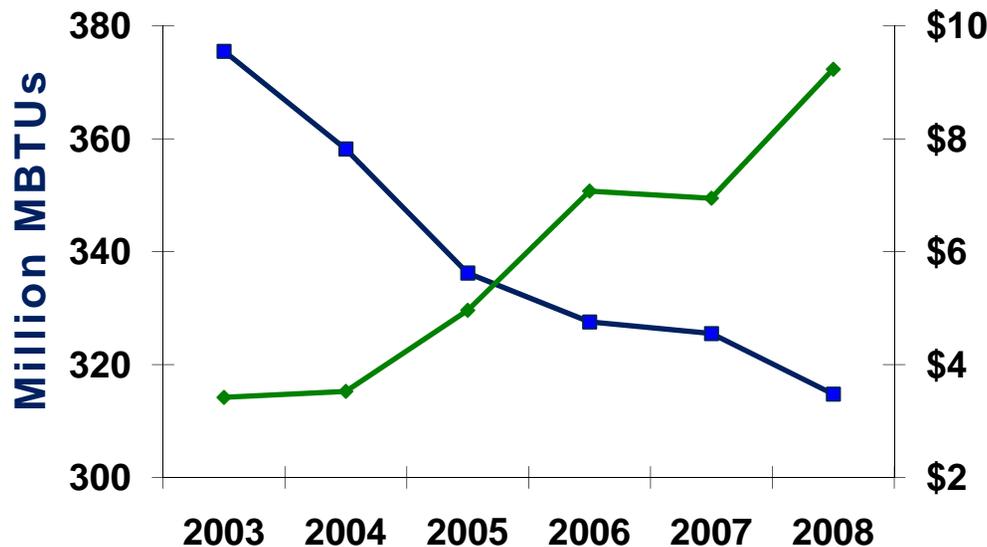


Air Force 2008 Energy Use

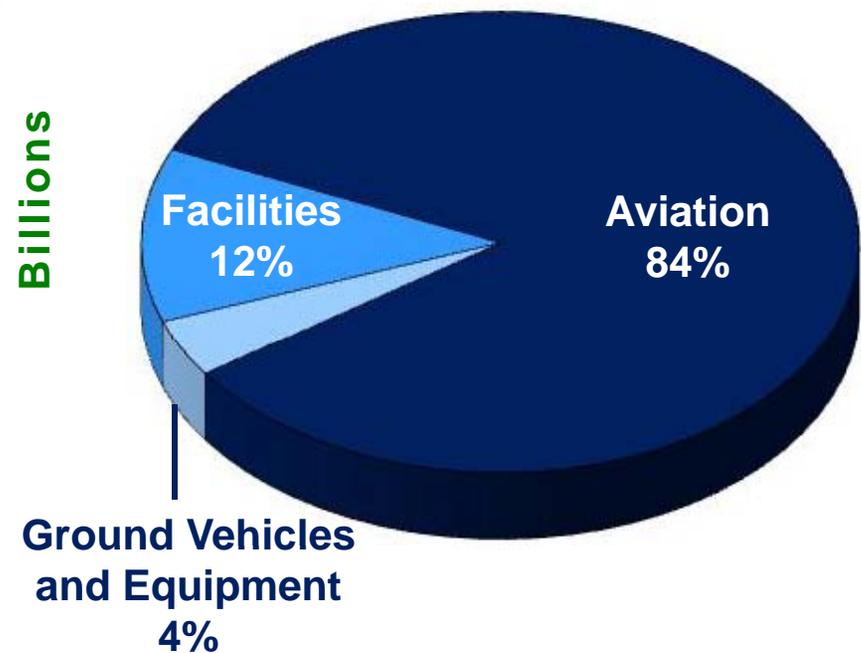
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Over \$9 billion spent for energy in 2008

Energy Cost and Consumption Trends



Energy Cost Breakdown



***Energy Consumption is Decreasing
While Costs are Increasing***

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Energy is a Priority



We can't rest until we harness the renewable energy that can create millions of new jobs and new industries. ...That's how we can grow our economy, enhance our security, and protect our planet at the same time.

- President Obama, 29 Apr 2009

The Air Force energy strategy furthers an energy future that is secure, efficient, and environmentally sound.

- Michael Donley, Secretary of the Air Force, Jan 2009



We must continue to identify innovative ways to conserve energy and take actions to build upon our success. Let's be passionate energy advocates, set the example, and remind those around us that our individual actions can make a significant difference in creating a more energy-efficient Air Force.

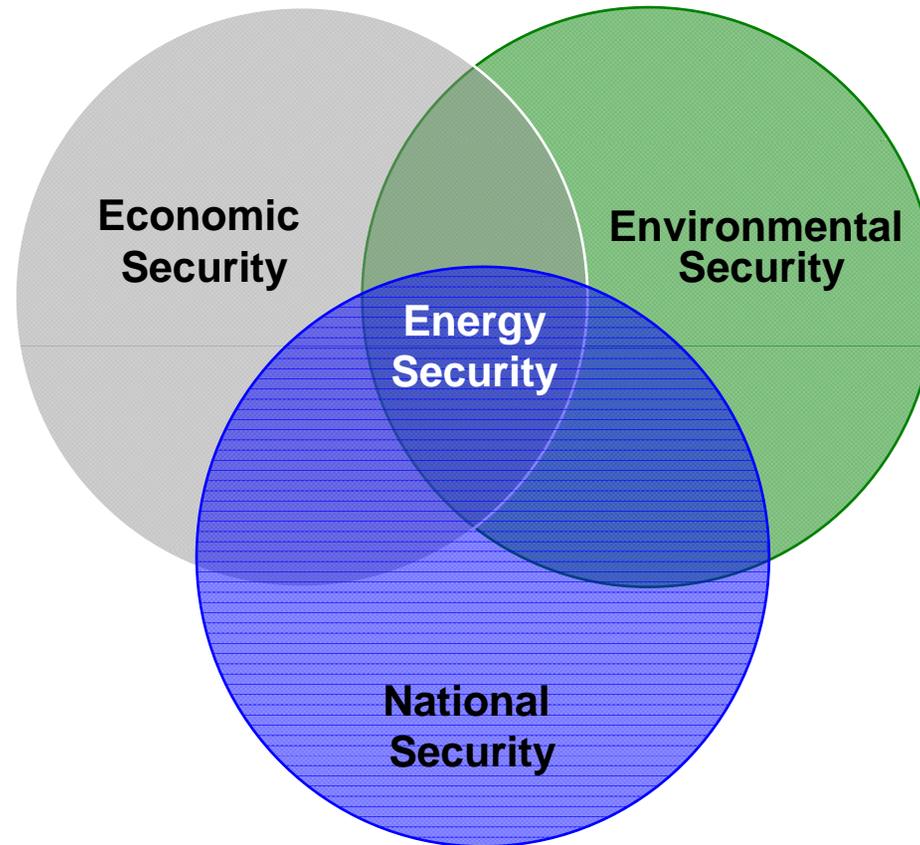
- General Norton Schwartz, USAF Chief of Staff, Jan 2009

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Air Force Energy Security



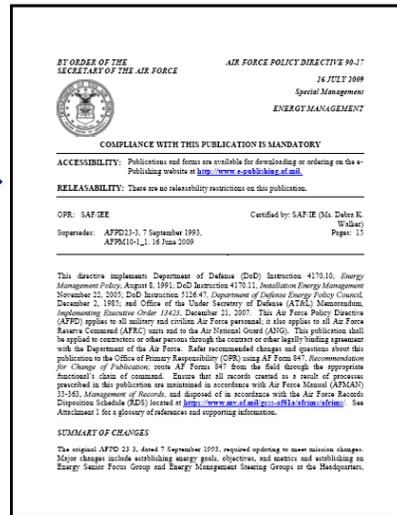
The AF Energy Program Supports More Than Energy Security

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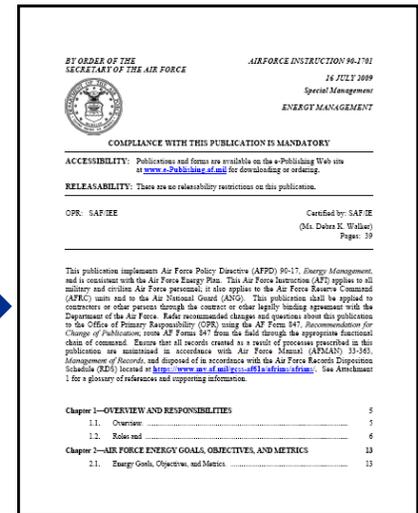


Air Force Energy Policy

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AFPD 90-17



AFI 90-1701

**Formally Established the AF Energy Program:
Strategy, Goals, Objectives And Metrics**

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Air Force Energy Plan

3-Part Strategy

Reduce Demand

Increase Supply

Change the Culture



Vision

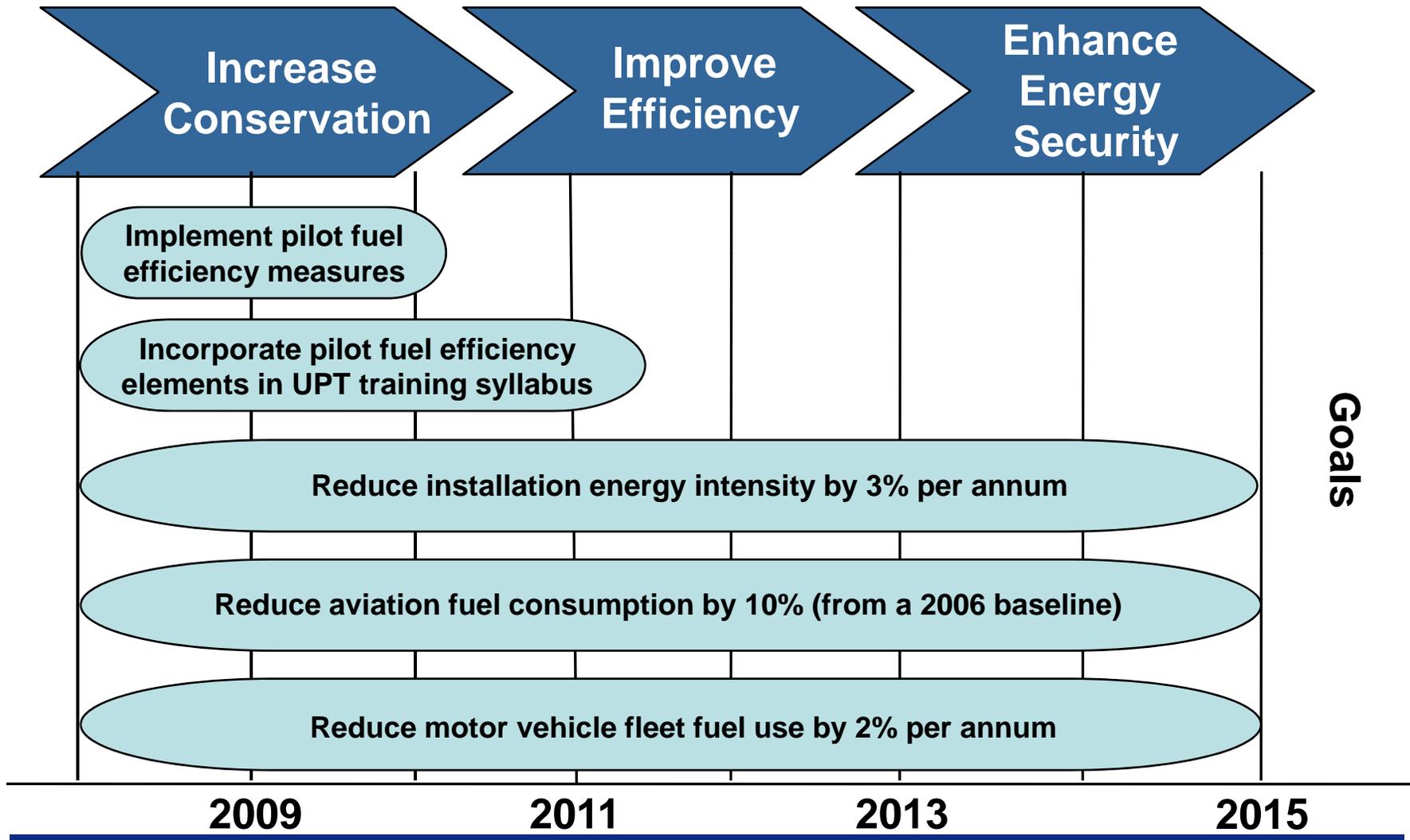
Make Energy A Consideration In All We Do

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Air Force Energy Program: “Reduce Demand” Goals

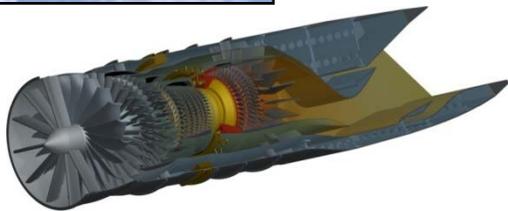


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Reduce Demand: Focus Area Initiatives



Aviation

- Reducing aircraft weight
- Optimizing flight routes
- Evaluating training fuel loads

Infrastructure

- Decreasing energy use
- Purchasing energy efficient supplies and low-speed vehicles
- Reducing vehicle fossil fuel use

Acquisition & Technology

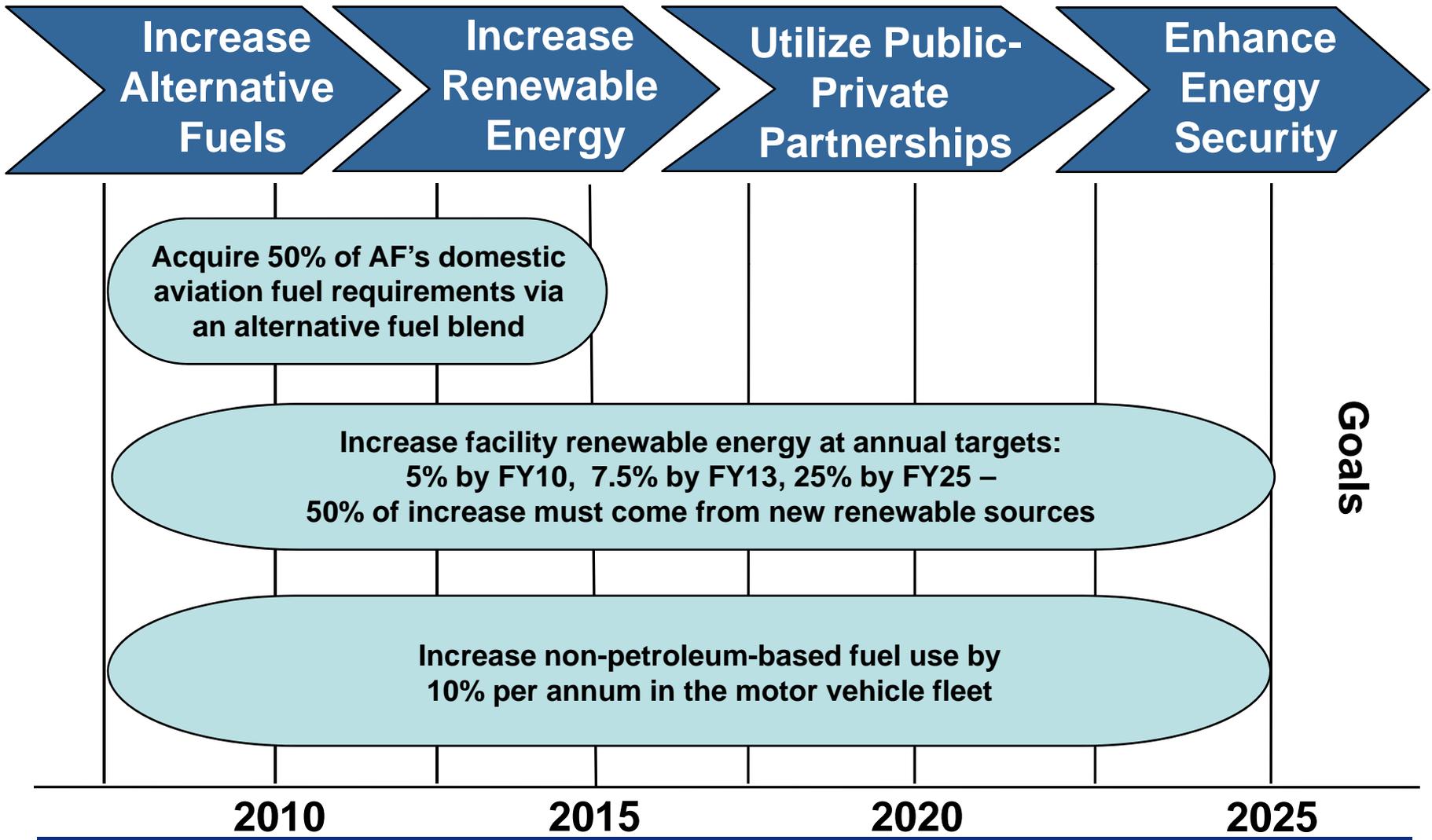
- Designing more efficient and adaptive engines
- Pursuing more energy efficient aircraft

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Air Force Energy Program: “Increase Supply” Goals



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Increase Supply: Focus Area Initiatives



Infrastructure

- Largest Federal green power purchaser and 8th largest in US
- Exploring commercial-scale energy projects
- Using ethanol and biodiesel flex-fuel vehicles
- Testing deployable alternative fuel stations

Acquisition & Technology

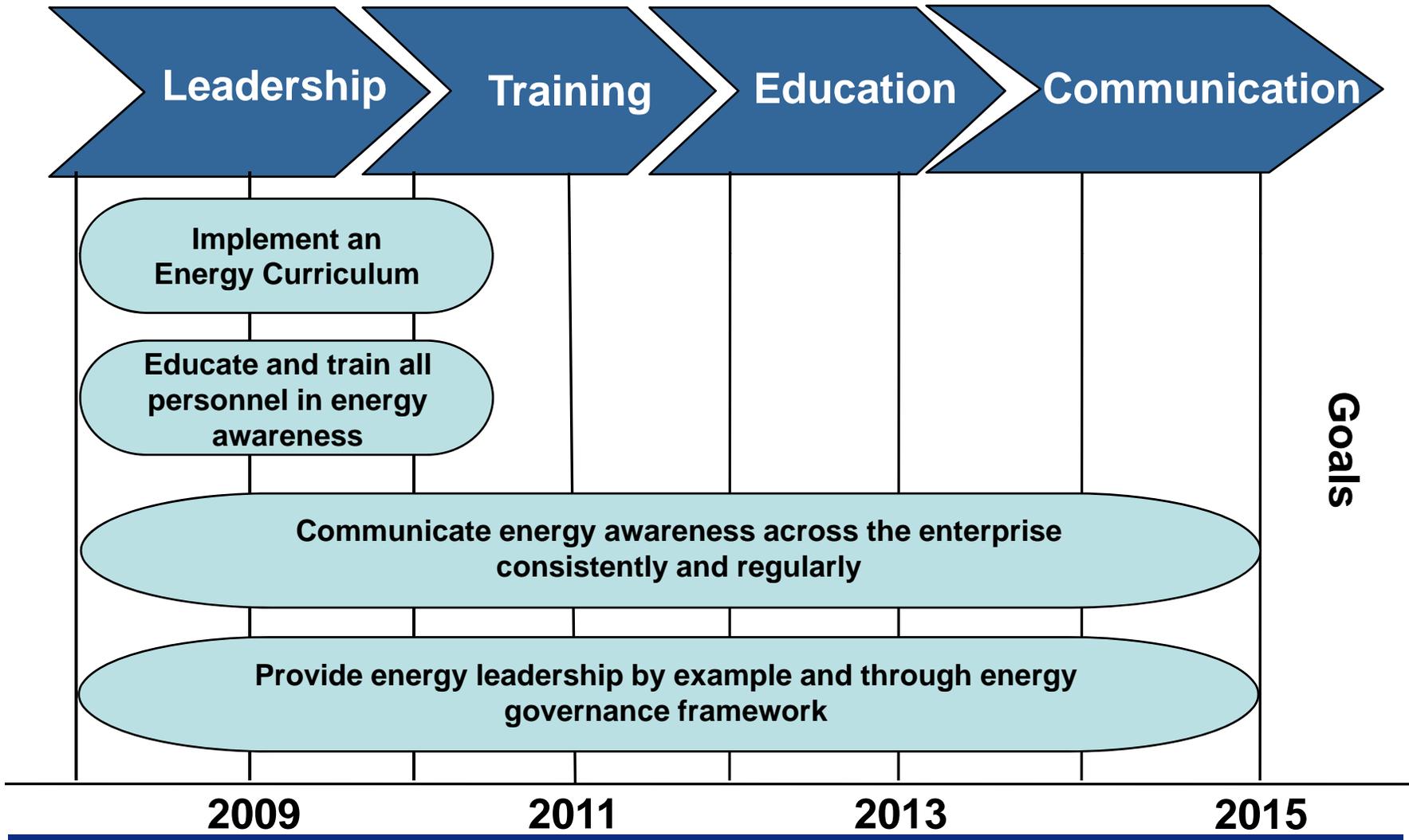
- Testing and certifying alternative aviation fuels
- Design energy conversion systems to be fuel-flexible

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Air Force Energy Program: “Change the Culture” Goals



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Change the Culture: Focus Area Initiatives

- Make Energy A Consideration In All We Do
- Lead by example, build a movement
- Train & Educate
 - Basic Training, Air University, USAFA, Technical and Leadership Schools
- Communicate
 - Measure & publish progress constantly
 - Celebrate success vigorously
- Collaborate with Allies, sister services, agencies, on energy best practices



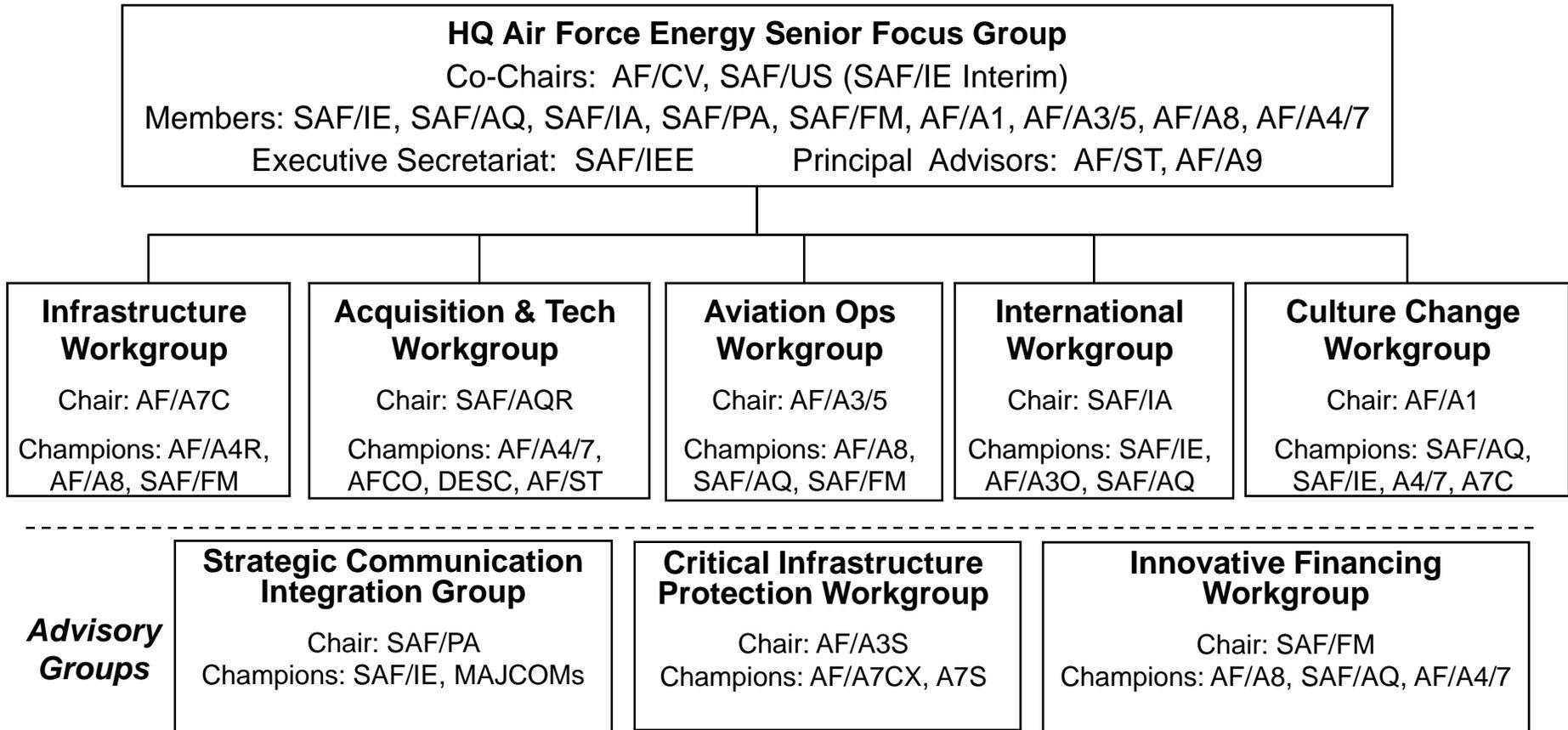
Lead, Educate, Train, Communicate

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Air Force Energy Governance

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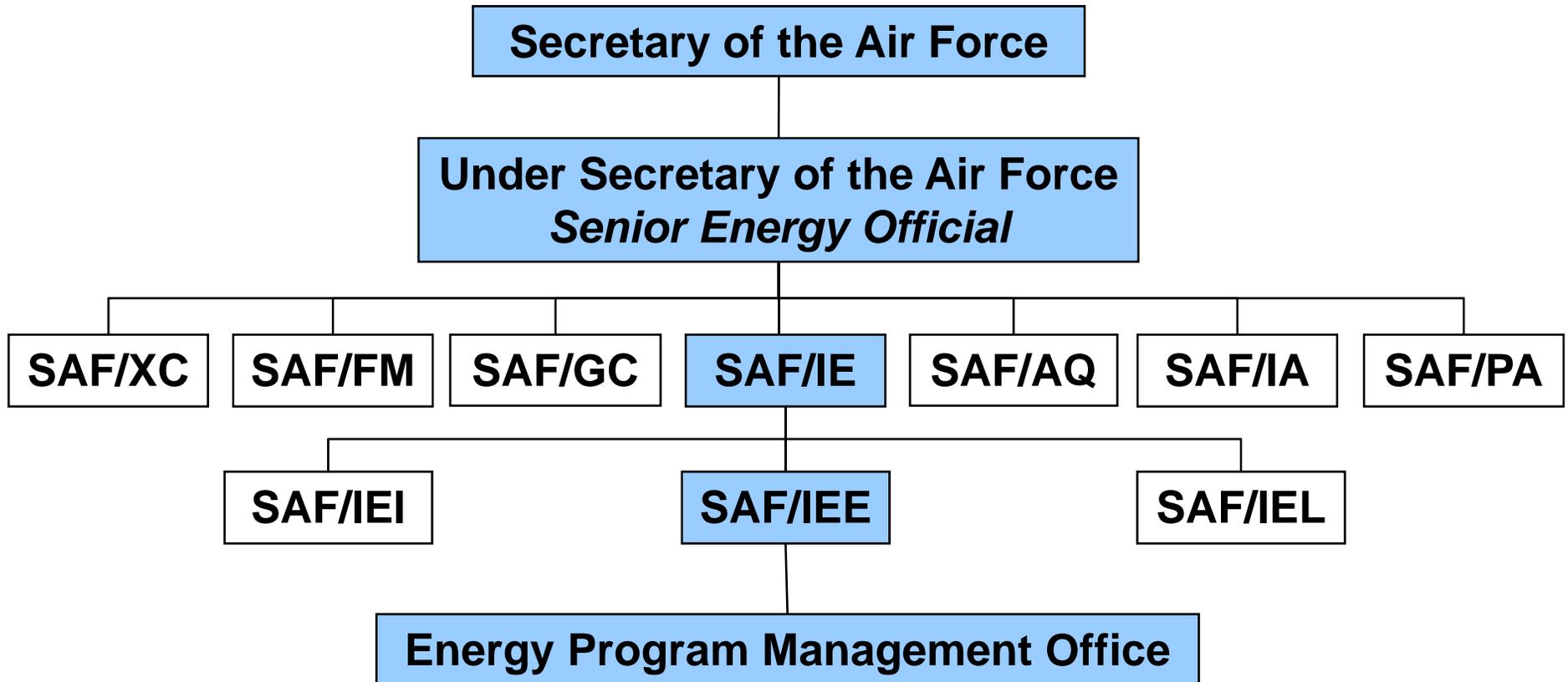
Similar Energy Governance Structures Exist at the MAJCOMs and Wings

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Air Force Energy Program Management Office



***Provides Policy Guidance on
Cross-Functional Energy Issues***

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Air Force Energy Initiatives are Many and Varied



 Solar
  Geothermal
  Biomass
  Wind
  Other Initiatives

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Achieving Air Force Energy Security

Energy Strategy

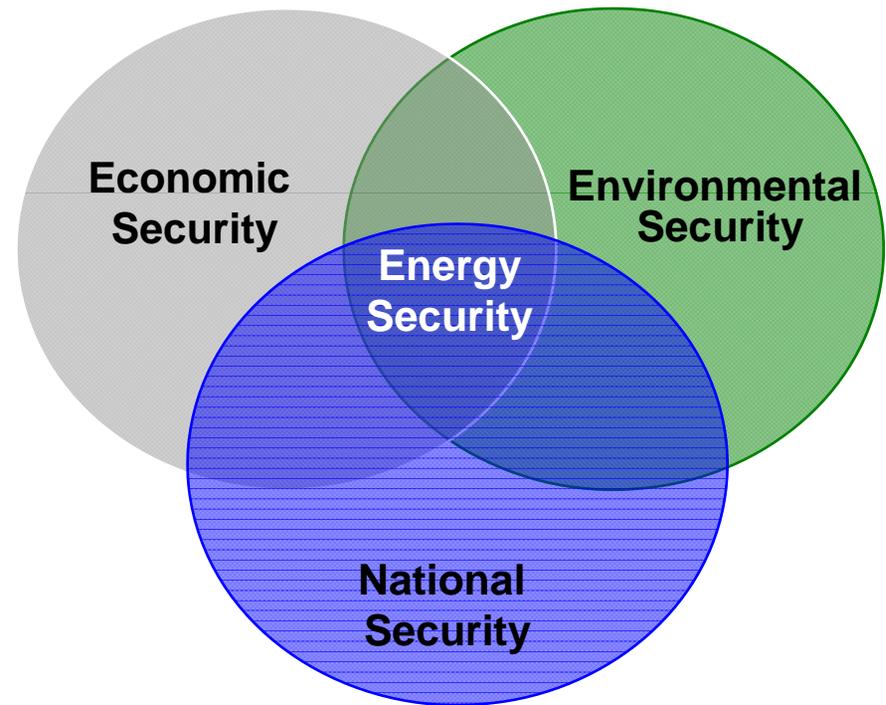
Reduce Demand

Increase Supply

Change the Culture



Energy Security



***Executing the AF Energy Program Increases
Our Energy Security***

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<http://www.safie.hq.af.mil/>

