



U.S. Climate Change Legislative Proposals: The Wrong Approach for Aviation

Airneth Conference
November 12, 2009

Nancy N. Young
Vice President, Environmental Affairs
Air Transport Association of America, Inc.

The Air Transport Association of America, Inc.

Oldest and Largest U.S. Airline Association, Representing Leading U.S. Carriers

ATA Airlines and Affiliates Transport 90% of U.S. Passengers and Cargo

<i>Combination Services</i>	<i>All-Cargo Services</i>	<i>Associate Members</i>
AirTran Airways Alaska Airlines American Airlines Continental Airlines Delta Air Lines Hawaiian Airlines JetBlue Airways Midwest Airlines Southwest Airlines United Airlines US Airways	ABX Air ASTAR Air Cargo Atlas Air Worldwide Holdings Evergreen Int'l Airlines FedEx Corporation UPS Airlines	Air Canada Air Jamaica Mexicana



Overview

- Background on U.S. Environmental Regulation
- Proposed Overlay of New Climate Change Legislation
- Why the Proposals Are Inappropriate for Aviation
- The Way Forward: The Global, Sectoral Approach





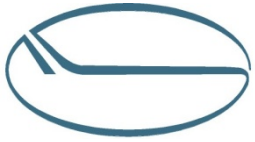
Key US Evt. Laws that Apply to Airlines

- **Clean Air Act – FOCUS FOR CLIMATE CHANGE**
 - Aircraft standards
 - Requirements for ground service equipment (GSE)
 - Permitting and standards for stationary sources, fuel operations, maintenance bases, new construction, etc.
- **Airport Noise & Capacity Act (ANCA)**
 - Requires noise studies around airports
 - Implements the balanced approach
 - Aircraft noise standards, land use control, mitigation, operations, access restrictions only after required assessments
- **Clean Water Act**
 - Regulates run-off from deicing; includes spill prevention and control for jet fuel



Key US Evt. Laws (cont.)

- Safe Drinking Water Act
 - Standards for water on-board aircraft
- National Environmental Policy Act
 - Comprehensive environmental review of any action requiring federal approval
- Resource Conservation & Recovery Act (RCRA)
 - Management of solid and hazardous waste
- And More ...



Clean Air Act & Climate Change

- U.S. Supreme Court Determined the Existing Act Applies to Greenhouse Gas Emissions
 - Massachusetts v. EPA (2007)
- U.S. Environmental Protection Agency Is Developing Climate Regulations
 - Final rule for mandatory greenhouse gas inventory reporting beginning in 2010
 - Proposed rule for GHG permitting of stationary sources
 - Proposed rule for new automobile fuel efficiency
 - Advance notice of rules for aircraft
 - More rules under development



Aircraft-Specific Authority

- EPA Can Set Aircraft Emission Standards Consulting with FAA (Section 231)
- “Conditions” Generally Consistent with International Standard-Setting Criteria
 - Technologically feasible
 - Consider cost
 - Not compromise safety
 - Not pose undue tradeoff with noise
 - Pollutant must pose endangerment
- U.S. Participating in ICAO Work on Possible CO₂ Standard

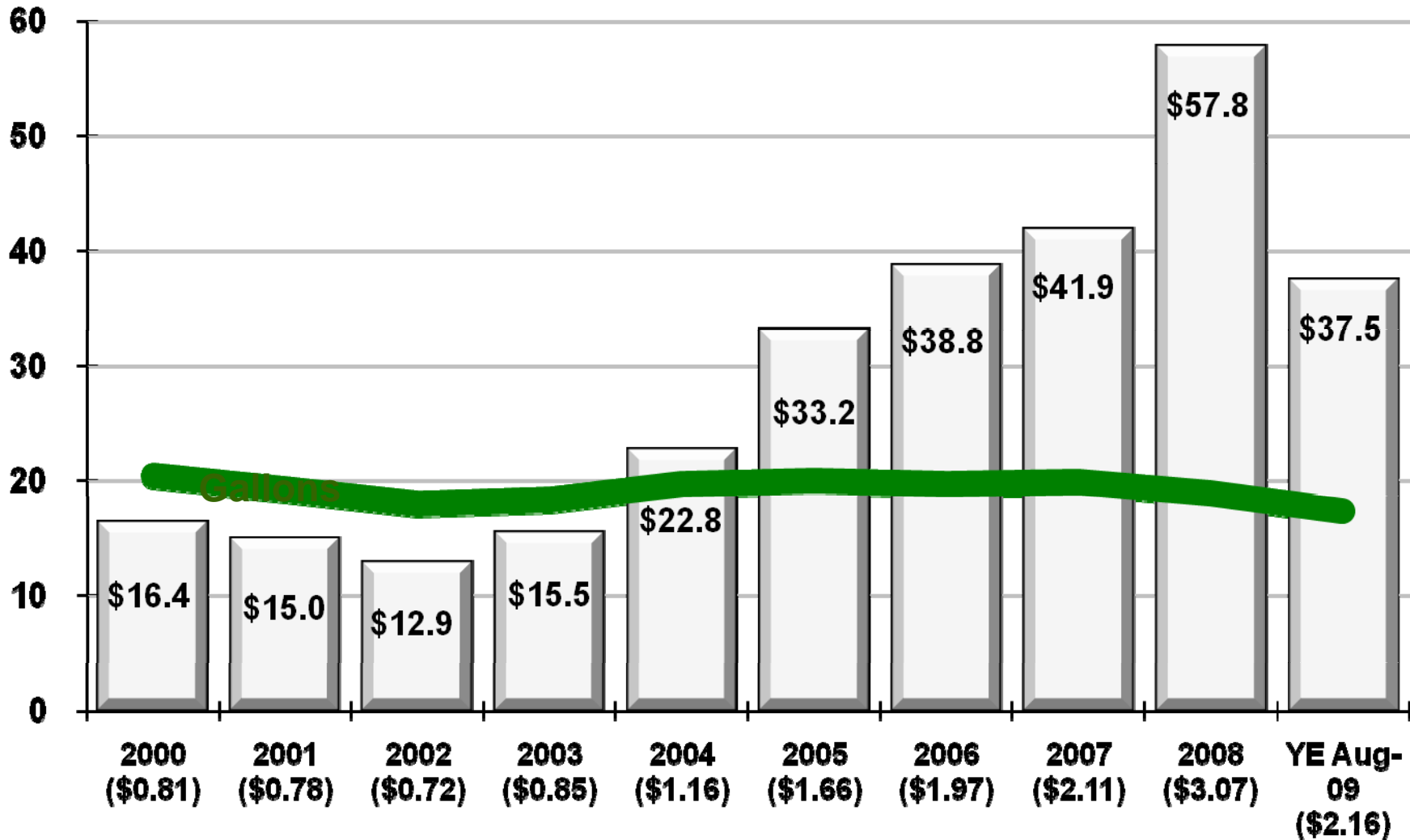


Self Determination Versus Regulation

- Four Means of Reducing Greenhouse Gas Emissions from Aviation
 - Technology
 - Operations
 - Infrastructure Improvements
 - Economic Regulation (“Market-Based Measures”)
 - Taxes/charges
 - Emissions trading
- Commercial Airlines Already Are Motivated to Get as Much Reduction as Possible from the First Three
 - Airlines are Driven to Be Extremely Fuel Efficient
 - Fuel is our #1 cost center

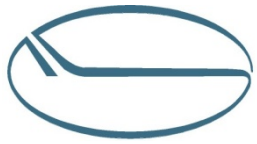


In 2008, U.S. Pax and All-Cargo Airlines Spent \$16B More on Fuel Than in 2007 and \$42B More Than in 2003



Note: Value in parentheses below year is average price paid per gallon excluding taxes, into-plane fees, pipeline tariffs and hedging costs

Sources: ATA, Energy Information Administration, Department of Transportation



Fuel Efficiency = Emissions Efficiency

- Airlines' Excellent Fuel Efficiency Record
 - US airlines improved fuel efficiency ~110% between 1978 and 2008*
 - 2.7 billion metric tons of CO₂ savings = taking ~19.5 million cars off the road each of those years*
 - From 2000 to 2008
 - **Reduced** absolute fuel burn and emissions ~ 5.5%*
 - **Increased** passengers and cargo 17%*
 - To Continue to Improve, Must Be Able to Invest

*Fuel/savings/traffic source: U.S. DOT Form 41; automobile equivalent calculations from www.epa.gov/cleanenergy/energy-resources/calculator.html





Technology, Operations and Infrastructure

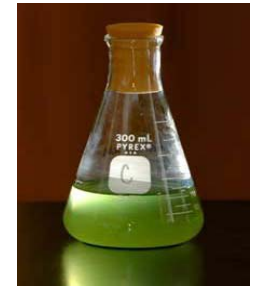
- Technology

- Enhance existing fleet (e.g., winglets)
- Invest in newer aircraft
- R&D for engines & airframes (50% cut in USG funding past 10 years)
- Invest in alternative fuels



- Operations

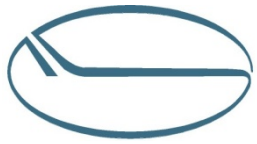
- Weight reduction
- Maintenance (like engine wash)
- Operational procedures within existing ATM



- Infrastructure

- Invest in equipage for U.S. NextGen & Single European Sky/SESAR
- We need “NowGen!”





Positive Financial Incentives Can Help

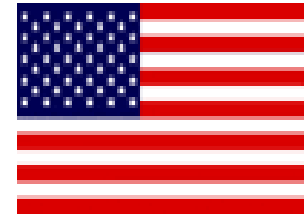
- Stimulate R&D and Technology Deployment . . .
- But Harmful, Punitive Economic Measures Are Proliferating ...
 - EU Emissions Trading Scheme (ETS)
 - Emissions Taxes
 - US Legislative Proposals

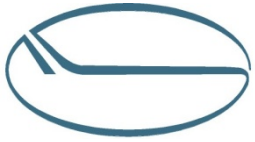




U.S. Legislative Proposals

- Waxman-Markey Legislation Approved by House of Representatives
 - Economy-wide cap-and-trade program
 - Many industries covered directly
 - Aviation covered indirectly, but fully
 - All emissions from the eventual burning of jet fuel must be covered “upstream” by fuel producers and importers = significant tax/surcharge
 - Significant cost exposure, e.g., @ \$25/ton carbon dioxide “charge” = \$0.24 additional cost per gallon of jet fuel (costs per ton of CO₂ could be much higher)
 - No free allowances; no opportunity to limit costs
 - No reinvestment of funds into aviation
 - Includes “Sense of Congress” statement that it would be better if could be addressed globally through ICAO
 - But only expressed as a thought





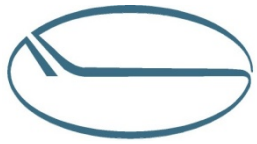
U.S. Senate Legislative Proposal

- Kerry-Boxer Bill
 - Draft legislation would cover aviation the same way as Waxman-Markey
 - Although potential amendment to defer to a global approach under an ICAO framework
 - Approved by Senate Environment & Public Works Committee on November 5
 - Still must be considered by other committees
 - While U.S. leadership seeking approval, timing for full Senate consideration is unclear
 - U.S. Congress embroiled in health care legislation
 - Economic recession has raised concerns about cap-and-trade
 - U.S. Congressional elections in 2010 could delay full consideration



Policy Concerns

- Siphons Money Out of Aviation = Negative Impacts on the Airline Industry's Ability to Invest in Improvements within the Industry
 - Airlines already are very fuel efficient
 - Additional intra-industry abatement very costly (e.g., cost of a new aircraft)
 - Can't sequester carbon at 36,000 feet
 - Safety mandate (rigorous engine and fuel standards)
 - Airlines limited ability to pass on costs (demonstrated by historic losses in the industry with fuel price spikes)
- Without Coordination, Multiple and Overlapping Charges for the Same Ton of Emissions



Policy Concerns (cont.)

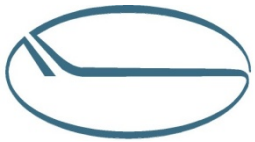
- Policies That Discourage Flying Can Shift Customers to Other Modes, With Bad Results
- How Best to Split up Carbon Pie?
 - Aviation is an extremely fuel- and GHG-efficient economic engine
- Legal Issues
 - Can one country unilaterally cover fuel uplifted for international flights?





The Way Forward . . .

- Global, Sectoral Approach for Aviation
 - Proposal put forward by the airlines (IATA), manufacturers (ICCAIA), airports (ACI) and air navigation service providers (CANSO)
- Context: International Negotiations with Domestic Acceptance or “Mirroring”
 - Countries are working on a post-Kyoto deal
 - International negotiations - originally slated to culminate in Copenhagen in December 2009 with a deal
 - Negotiations now expected to extend into 2010
 - ICAO working on “Program of Action”
 - ICAO “High Level Meeting” Oct. 7-9, 2009
 - ▶ Showed ICAO States want to continue to address
 - ▶ Endorsed fuel efficiency goals and work on goals of further ambition
 - ▶ Support ICAO work on CO2 standard for new type design aircraft
 - ▶ Will work on framework for market-based measures
 - Work ongoing through ICAO Assembly, Autumn 2010



The Way Forward (cont.)

- What Is the Approach?
 - Framework set by ICAO & accepted within larger climate change treaty negotiations
 - International and domestic under framework
 - Countries work to make domestic policy consistent with international framework
 - Collective aviation-specific emissions targets
 - Fuel efficiency improvements that result in annual average improvement of 1.5% through 2020
 - Make the growth of the industry's emissions “carbon neutral” beginning in 2021
 - Aspirational goal of 50% reduction in emissions in 2050, relative to 2005 levels
 - All subject to government investment and “do no harm” so technology, operations & infrastructure improvements flourish



The Way Forward (cont.)

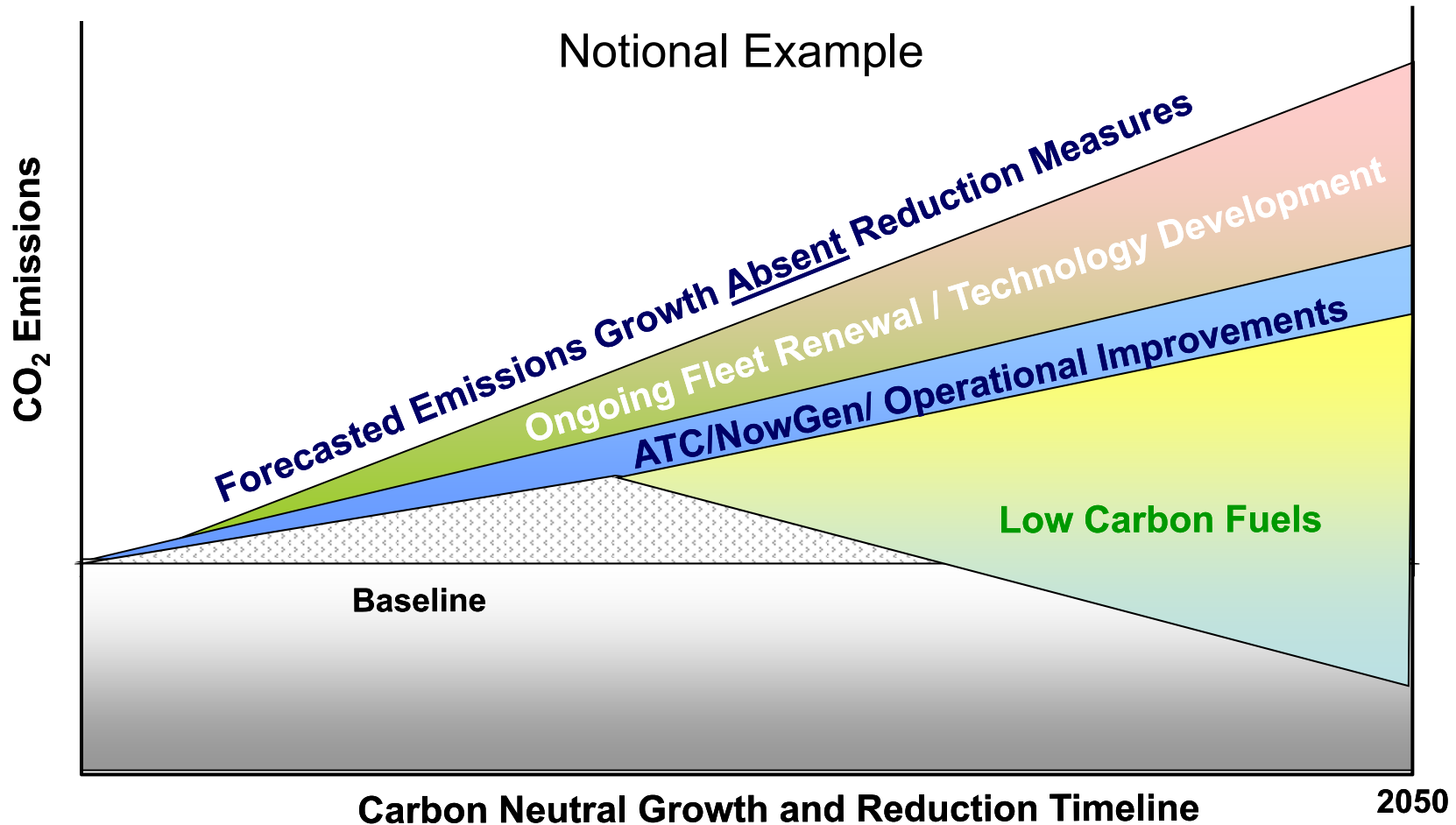
- Why These Targets?
 - They address the key concern . . . growth ...
 - While global aviation currently contributes only 2% of the world's manmade carbon dioxide (CO₂), the concern is that growth in demand will result in growth in emissions
 - The industry proposal addresses this head-on
 - While seeking to keep sufficient resources within the industry to allow it to continue its strong record of continuous environmental improvement



How Do We Meet Our Targets?

Technology, Operations & Infrastructure

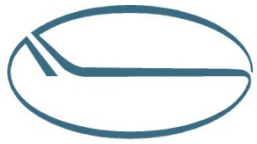
Potential Role for Carbon Offsets to Bridge





The Way Forward (cont.)

- Reflecting the Global, Sectoral Approach in Domestic Policy
 - Any domestic climate legislation should accept this as the approach for aviation
 - Not a “carve out,” but a “carve in”
 - Countries must
 - Implement accelerated ATC modernization, including federal funding for aircraft equipage, training, etc.
 - Fully support development and deployment of aviation alternative fuels
 - Reinstate (and increase) research and development and investment for aircraft technology
 - Do in context of solid energy policy, including stable fuel supplies and appropriate control of commodity futures speculation



If You Want to Feel Good About the Future,

- Look Up!



Air Transport Association

**We Are America's Airlines
Connecting and Protecting Our PlanetSM**