2% of Global CO2 Emissions
CORSIA International Plan
Offsetting Scheme
Goal: Carbon Neutral after 2020 Baseline
COVID19 Economic Downturn = Pandemic Effect
Industry “gets new, lower 2019 Baseline”!

Impact of COVID19 Pandemic On Airline Carbon Emissions
Charlotte King

CORSIA
Carbon Offsetting and Reduction Scheme for International Aviation
Policy Literature Review

Focus on Mitigation Measures
- International vs Domestic
- Regulatory = command & control
- Cap & Trade = market based
- Offsets
- Fuel Tax vs Carbon Tax
- Nationally Determined Contributions (NDCs)

Part of Paris Agreement

Biggest Emitters

1. United States
2. China - Emerging
3. United Kingdom
Action Arena – Ostrum’s Polycentric Governance

- GDP
  - Developed
  - Emerging

- United Nations + SDG 13
- 1997 Kyoto Protocol
- Intergovernmental Panel on Climate Change (IPCC)
- Reports Aviation 2% Anthropogenic Carbon
- 2013 Paris Agreement
- Limit Increase 1.5 °C
- The International Civil Aviation Organization (ICAO) establishes
  - Carbon Offsetting and Reduction Scheme CORSIA
  - Important to Certify Offsets to avoid double counting

- International Air Transport Association (IATA)
  - No Fuel Tax 1947-2006 + Subsidies
  - Fox Guarding Hen House = Lack of CSR accountability – very few disclose

- Airlines & Industry
  - GDP = Growth

- Fuel Tax begins 2003
- EU ETS – Emissions Trading Scheme = cap/EU only 2013–2020
- Linear Reduction – 2064
- Predefined CO2 levels

- Carbon Neutral Aviation CO2 Emissions By 2050
Policy Considerations

Goal: 2050
Net Zero Aviation Carbon Emissions

Policies
International
Domestic

Goal: CORSIA CO2
Goal: 2.5 billion tons
2020-2035
80 Countries
Voluntary 2021 – 2027
Mandatory - 2035

2020 Baseline

Pandemic Effect
Higher CO2 Baseline
For Emissions
CORSIA Compliance Weakened

2019 Baseline

2019 Baseline
- Airlines focus on non-fossil fuel CO2 reduction

China – could quadruple by 2050

#2 Emitter NOT in CORSIA

Launched Domestic Cap & Trade
Emissions Forecast – Source: Climate Action Tracker

Long-term global GDP optimistic and pessimistic projections

Pre-COVID-19 projections
OECD Long-term projections
Optimistic recovery scenario
(IMF Baseline scenario + return to BAU growth rates)
Pessimistic recovery scenario
(McKinsey A1 scenario + BAU growth rates reduced by 10% post 2023)
Pandemic Effect: CORSIA Calculation

1. IATA/Aviation Industry negotiated lower emissions baseline because of pandemic effect – reduces offsets required to achieve carbon neutrality
2. CORSIA can recalculate growth factor metric annually and sectoral/individual operator’s emissions = a floating metric
Comparison – Policies & Other

Possible Strategies

CORSIA Target reduction:
2.5 billion tons of CO2 emissions 2021-2035
+ Nationally Designated Contributions (NDC)
+ Sustainable Aviation Fuels (SAF)
+ 40+ Countries = Cap & Trade Programs

Best Options: Adaptation

Policy: Carbon Tax - HIGH
• BUT could also = Distributional Equity Challenges for Emerging Countries

Increasing alternative transport & subsidies
Corporate Social Responsibility (CSR)
• Carbon Reporting Transparency & Accountability

Flight Shaming – Sweden 2019