



Air Sector: Looking Forward

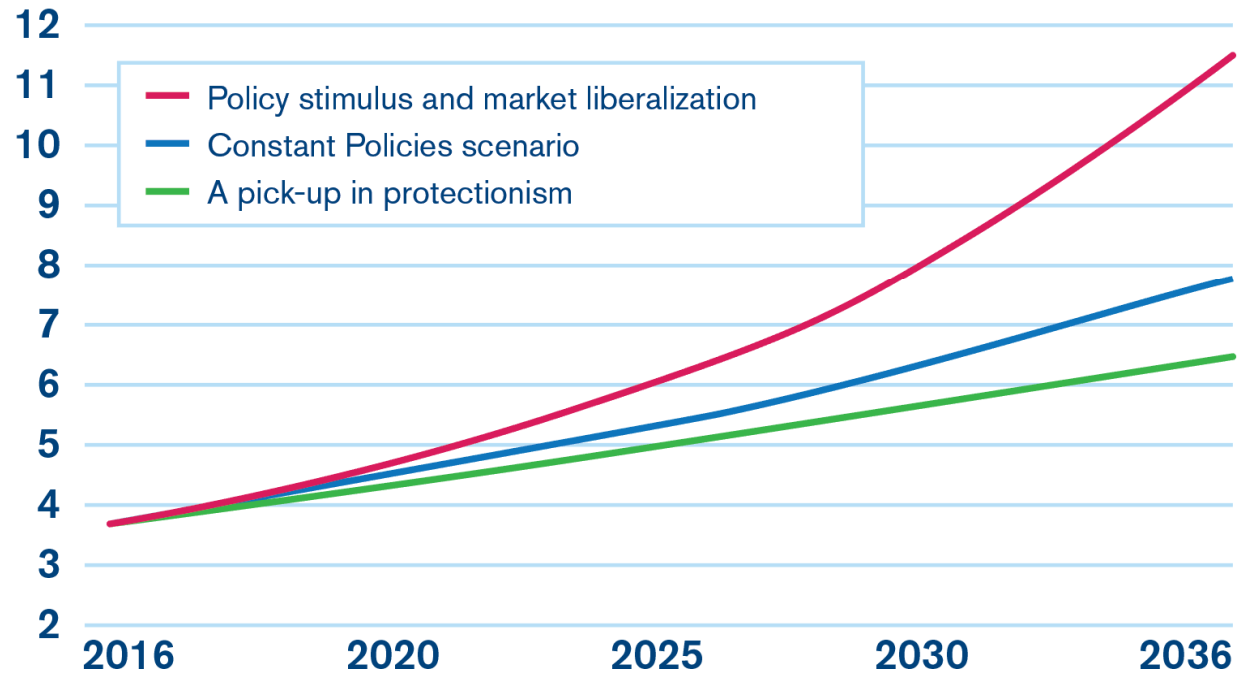
Marc Rioux

Executive Director, Air Policy (International)

Transport Canada

Long-term trend

Global Passengers (billion, segment basis)



Doubling of number of passengers from 2017 to 2036 (4B to 7.8B)



1st emerging issue: bottlenecks in the supply chain

“European Air Travel Becomes More Dysfunctional”

“Eurocontrol DG: Europe Faces Major Capacity Challenge”

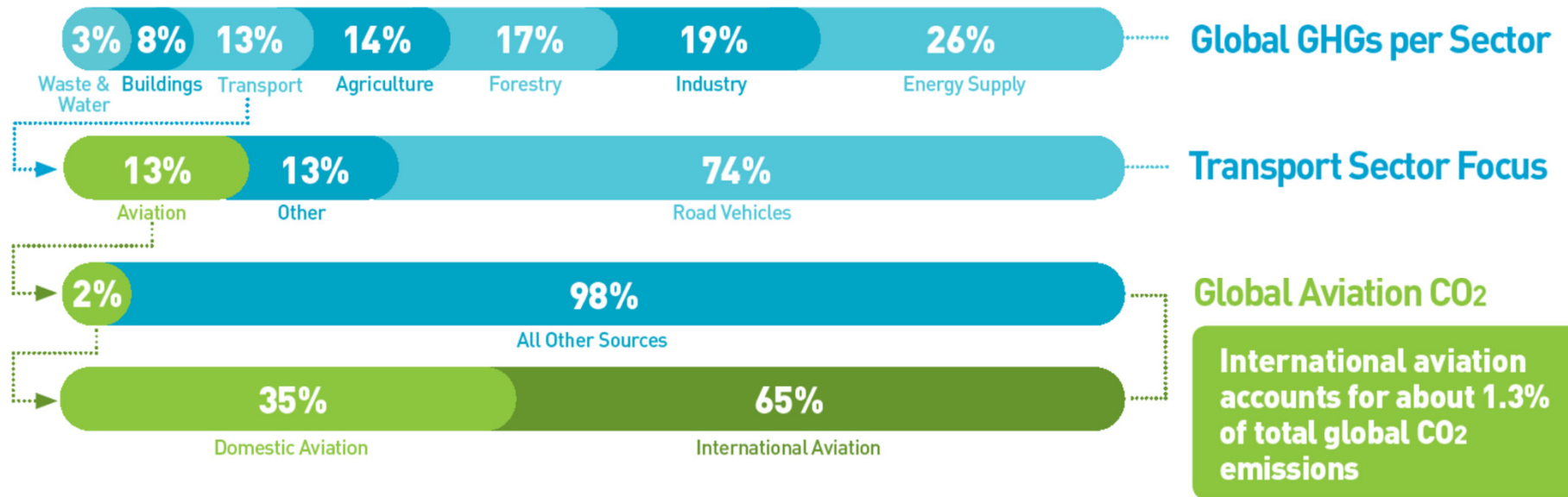
“Pilot Shortage Is Real And Getting Worse”

“Boeing Sees Soaring Need For Asia-Pacific Aviation Workers”

“We are headed for an infrastructure crisis, and that includes Latin America” (IATA CEO and DG)

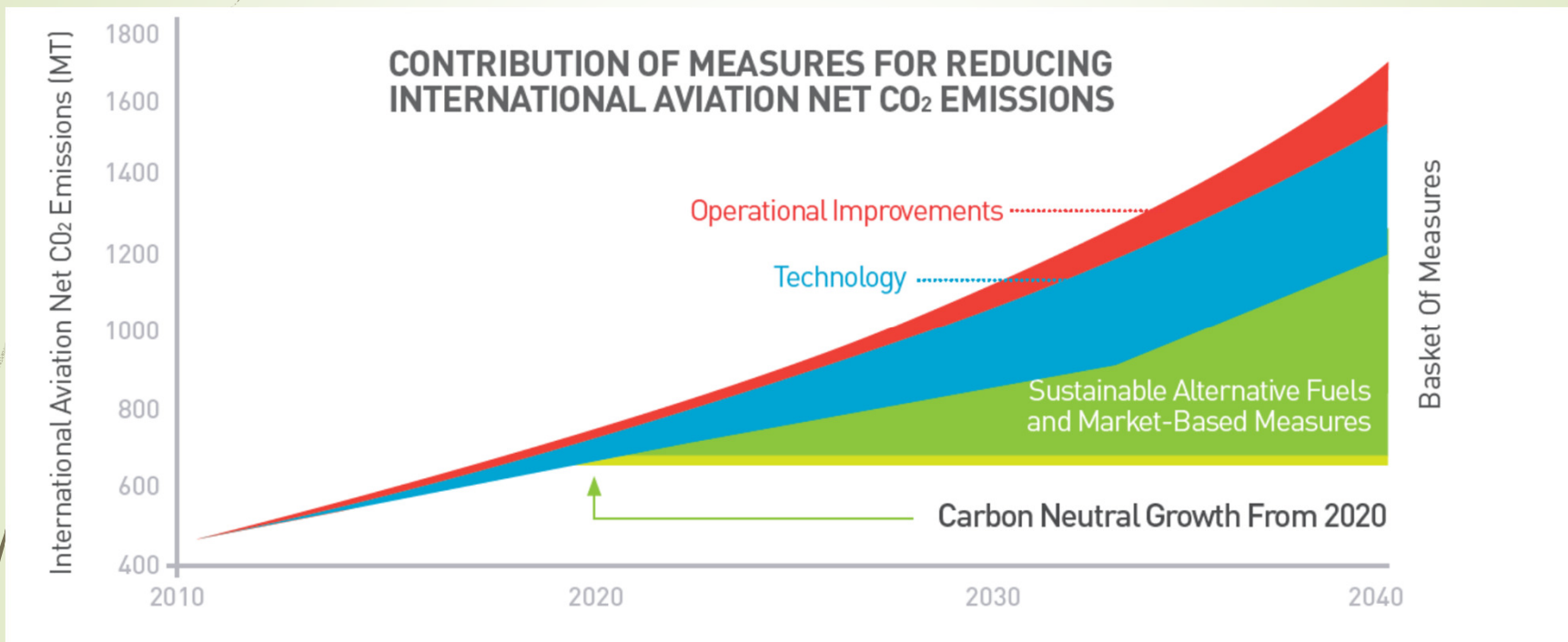
“U.S. Airlines 1H Profits Fall on Fuel, Infrastructure Challenges”

2nd emerging issue: growing environmental footprint



Source: International Civil Aviation Organization

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3rd emerging issue: pace of technological developments

- ▶ Difficult for governments to maintain an adequate regulatory framework to govern disruptive technology due to the speed of development and deployment:
 - ▶ For instance:
 - ▶ Electric VTOL Air-Taxi Service to be launched before 2025;
 - ▶ Flying cars available for purchase now;
 - ▶ Drones to be used for home delivery currently being tested.
- ▶ Risk associated with cyber threats:
 - ▶ Digital technology is at the heart of civil aviation operations (aircraft, airports, air traffic management);
 - ▶ Civil aviation remains an appealing target to terrorists;
 - ▶ Still no uniform minimum cybersecurity standards.