ICAO COLLOQUIUM ON AVIATION AND CLIMATE CHANGE

Emission Quantification Methods: ICAO Carbon Emissions Calculator

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Overview

- Background
- Methodology
- UN Users
- Next Steps

Background

- **Methodology Developed through CAEP**
- **23 Member States**
  - Global representation
- **13 Observers**
  - Primary aviation stakeholder representation
  - Airlines, air navigation service providers, airports, manufacturers, UN (UNFCCC, WMO), international coalition of NGOs

Methodology

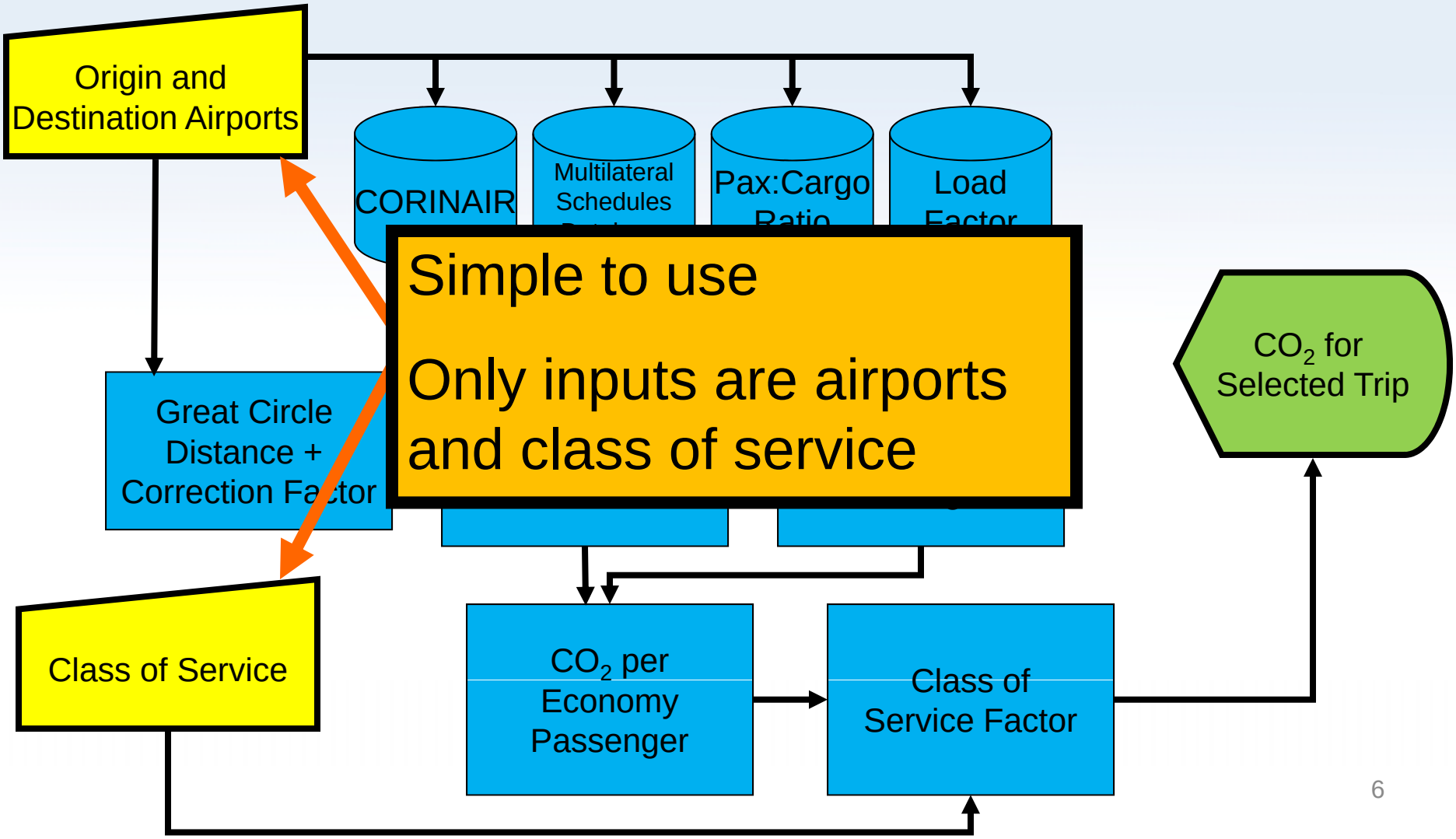
- **Objectives**
  - User-friendly, unbiased, tool to compute carbon emissions from air travel
  - Suitable for use with offset programmes
  - Best publicly available data
  - Fully documented

Methodology (cont.)

- **Developed by Experts from**
  - ICAO Secretariat
  - ICAO Member States
  - Universities
  - NGOs
  - International Air Transport Association – IATA (Airlines)
  - International Coordinating Council of Aerospace Industries Associations – ICCAIA (Manufacturers)

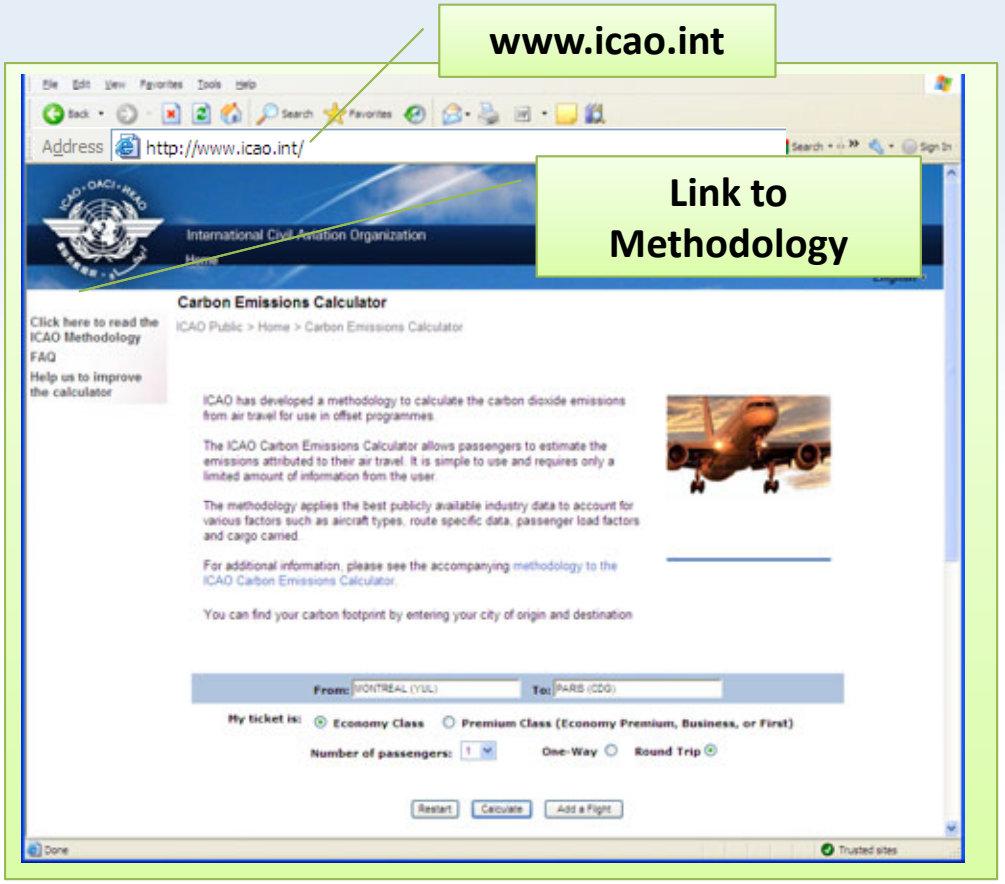
- **Methodology is internationally recognized and accepted**

Aviation Carbon Calculation Methodology (concl.)



ICAO Carbon Emissions Calculator (Public Interface)

- Transparent
- Easy-to-use
- Publicly available
- Delivers consistent estimates of CO_2 – suitable for use with offset programs
- Available since June 2008



Climate Neutral UN Initiative

- October 2007: “greening of the UN” launched
- Includes moving the UN system towards climate neutrality
- Supported by UNEP through the Environmental Management Group (EMG)

Climate Neutrality

- "Climate neutrality" is defined by the entire set of polices that an institution uses when it estimates its known GHG emissions, takes measures to reduce them, and purchases carbon offsets to "neutralize" those emissions that remain

  - UNEMG (Environmental Management Group) EMG/AM.07/05/Rev.2

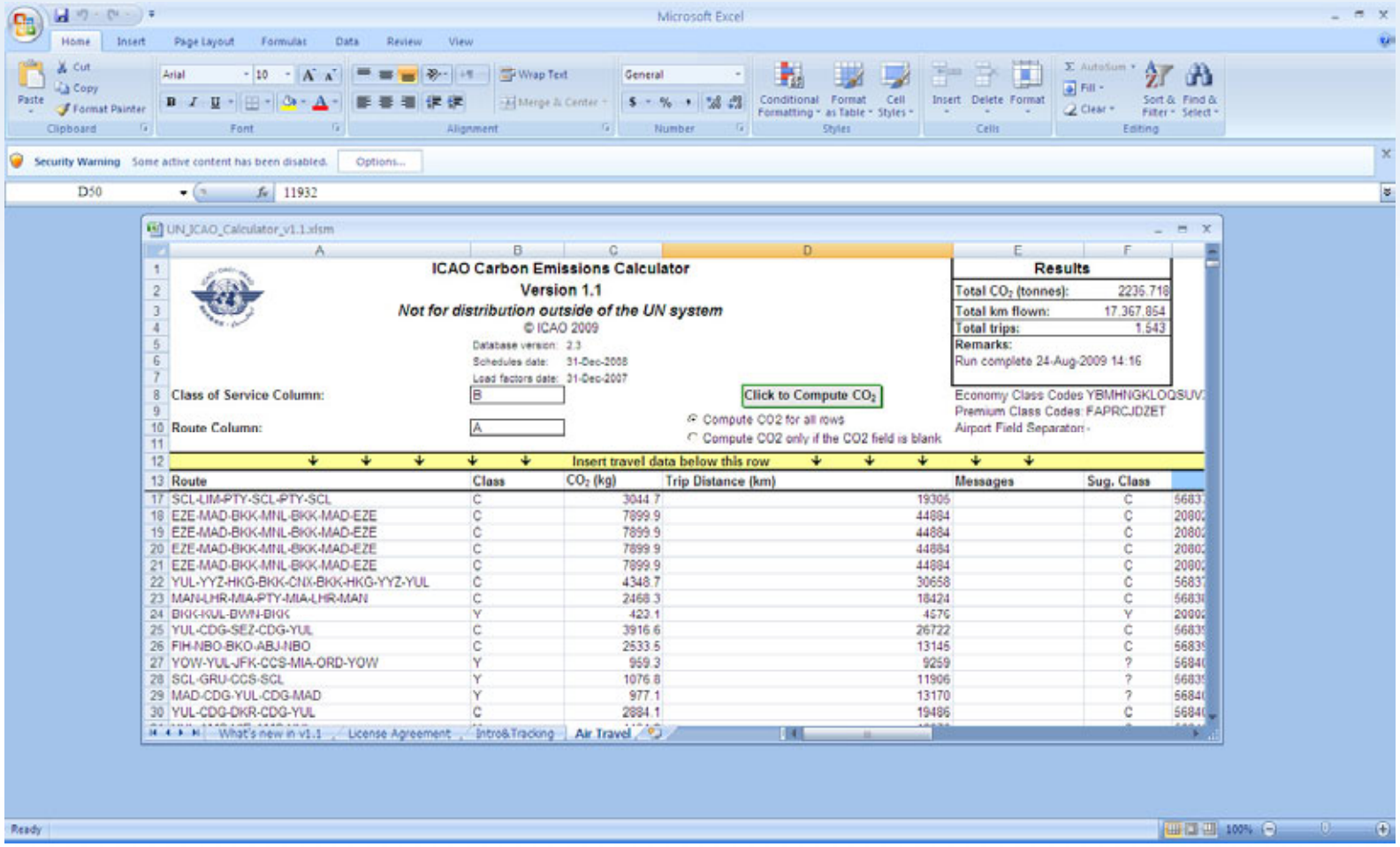
Approach to Climate Neutrality

- Develop a Strategy / Action plan
- Identify criteria necessary to guarantee a credible climate neutral footprint
- Establish specific policies on waste management, paper use, recycling, sustainable procurement, building operation

UN Interface

- Excel-based
- Designed to facilitate inventory preparation
- Accepts data from travel reservation / approval systems or travel agencies directly
- Available since April 2009

UN Interface (concl.)



UNEMG Decision

- *The UN Environment Management Group adopted the ICAO Carbon Emissions Calculator as the official tool for all UN bodies to quantify their air travel CO_2 footprint* - April 2009
- All 2008 UN air travel GHG inventories are being prepared using the ICAO Calculator

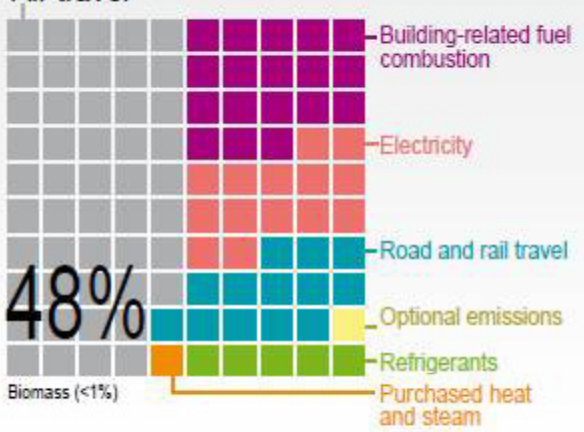
Initial Results

UN system facilities, travel and peackeeping operations

key figures 2008

Total emissions	1'741'413 t CO_2eq
Emissions per staff member	8.4 t CO_2eq
Air travel per staff member	4.0 t CO_2
Number of staff	206'954

Emissions by source

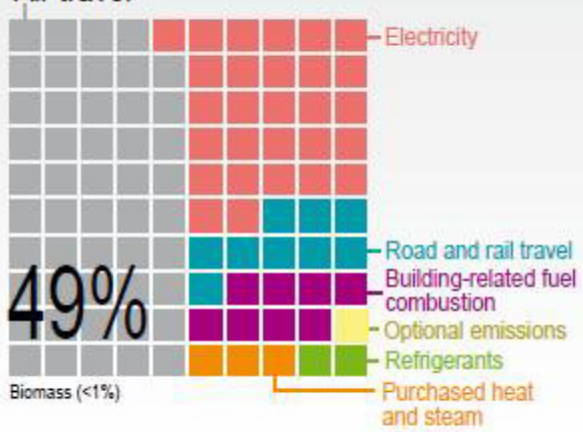


UN system facilities and travel

key figures 2008

Total emissions	769'108 t CO_2eq
Emissions per staff member	8.3 t CO_2eq
Air travel per staff member	4.0 t CO_2
Number of staff	92'748

Emissions by source



Next Steps

- Phased approach for updating methodology and data through CAEP

- Try it out for yourself!