Increasing mitigation & financing ambitions through action on international transport

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Panel:

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This presentation is available from: http://imers.org/bonn13

Agenda

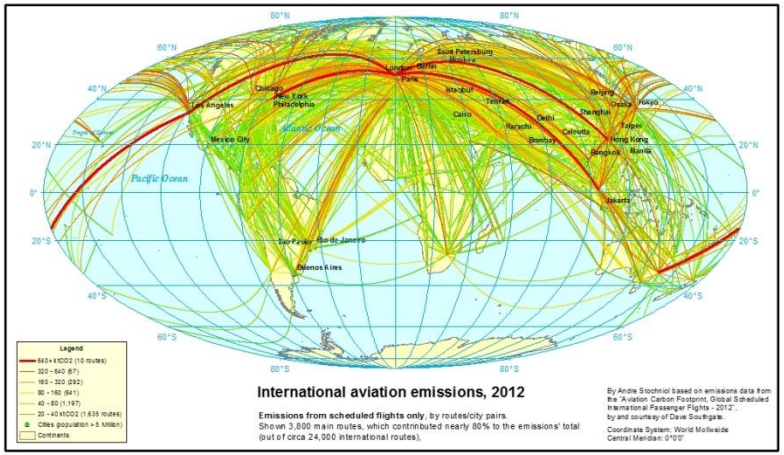
- Background
- Fair and effective carbon pricing
  - Equity as a gateway to increased ambition
    - Greater focus on aviation this time round
- Summary and Conclusions
- Panel Views, and Debate

Two multilateral issues ...

1. **Whether and how to mobilize climate financing,** including from the environmentally under-charged international transport?
   - International aviation and maritime transport are exempt from various taxes, while climate financing mechanisms are inadequate, both in scale and design
   - "The writing is on the wall" regarding a contribution from international transport:
     - Practically every independent report on the topic highlights carbon pricing of emissions from international aviation and shipping as an important and/or promising source of public finance; the costs would be marginal

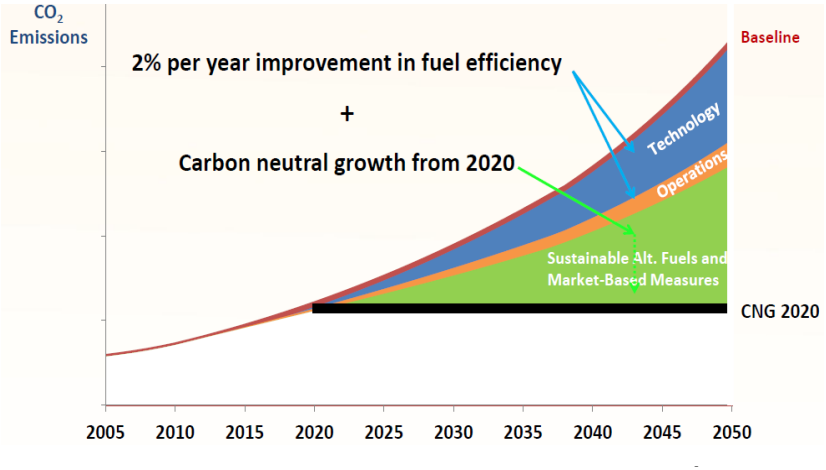
2. **How to address CO2 emissions from international transport?**

   - Global and complex
   - Outside the national regimes
   - Significant (circa 5%) & rapidly growing
   - The IMO & ICAO technical, operational and infrastructure measures will only slow their growth
   - All uniform market-based proposals are unacceptable to certain developing countries (as not taking into account the UNFCCC principles)



Deadlock on carbon pricing ... and low ambition

- Market-Based Measures (**MBMs**) discussed at both ICAO and IMO
- Slow pace, no agreed roadmap, low ambition, aviation industry calls for:
  - Fuel efficiency improvements and “carbon-neutral growth” (CNG) from 2020” (see graphic)



ICAO’s CNG2020 approach (source SB 38/MISC.15)

- **Focus on emission** offsetting/reductions, not adaptation financing
  - Industry wary of becoming “cash cow”, thus talk about “proportionality” of effort, “carbon neutral growth”, and wants to keep any potential money raised in the sector
  - The simpler the better attitude to avoid bureaucracy (thus offsetting or a levy is supported more than ETS; issues on potential sharing of burden between airlines)

- **The deadlock between developed & developing countries remains!**
  - Namely, whether and how to relate the UNFCCC principle of common but differentiated responsibilities and respective capabilities (CBDRRC) to a global MBM for inherently international aviation and shipping
  - Proven by the different perspectives on the recent IMO MEPC technology resolution!

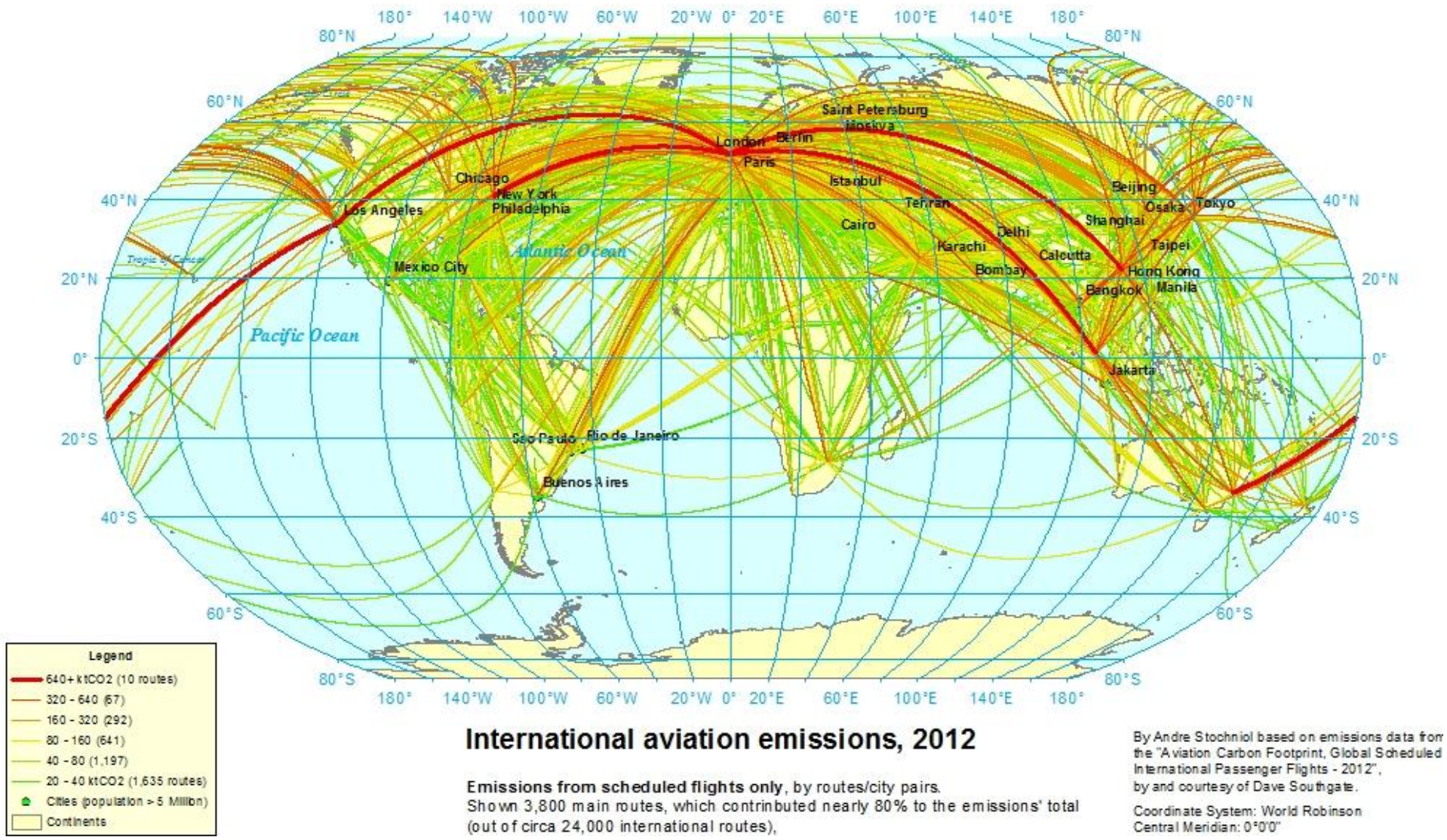
Rationale for the Rebate Mechanism (RM)

- **Not whether, but how to relate**
  - Differentiated climate principles and provisions (CBDRRC), to
  - Uniform carbon pricing for international transport
    - i.e. a global approach, as a regional/national, even at the framework level is unlikely to work

- **Furthermore, carbon price/MBM would be regressive**, impacting less developed countries most, as they often disproportionally rely on international transport (as % of GDP)

View 1: CO2 footprint of international aviation

(largest on routes to/from certain high-income countries)



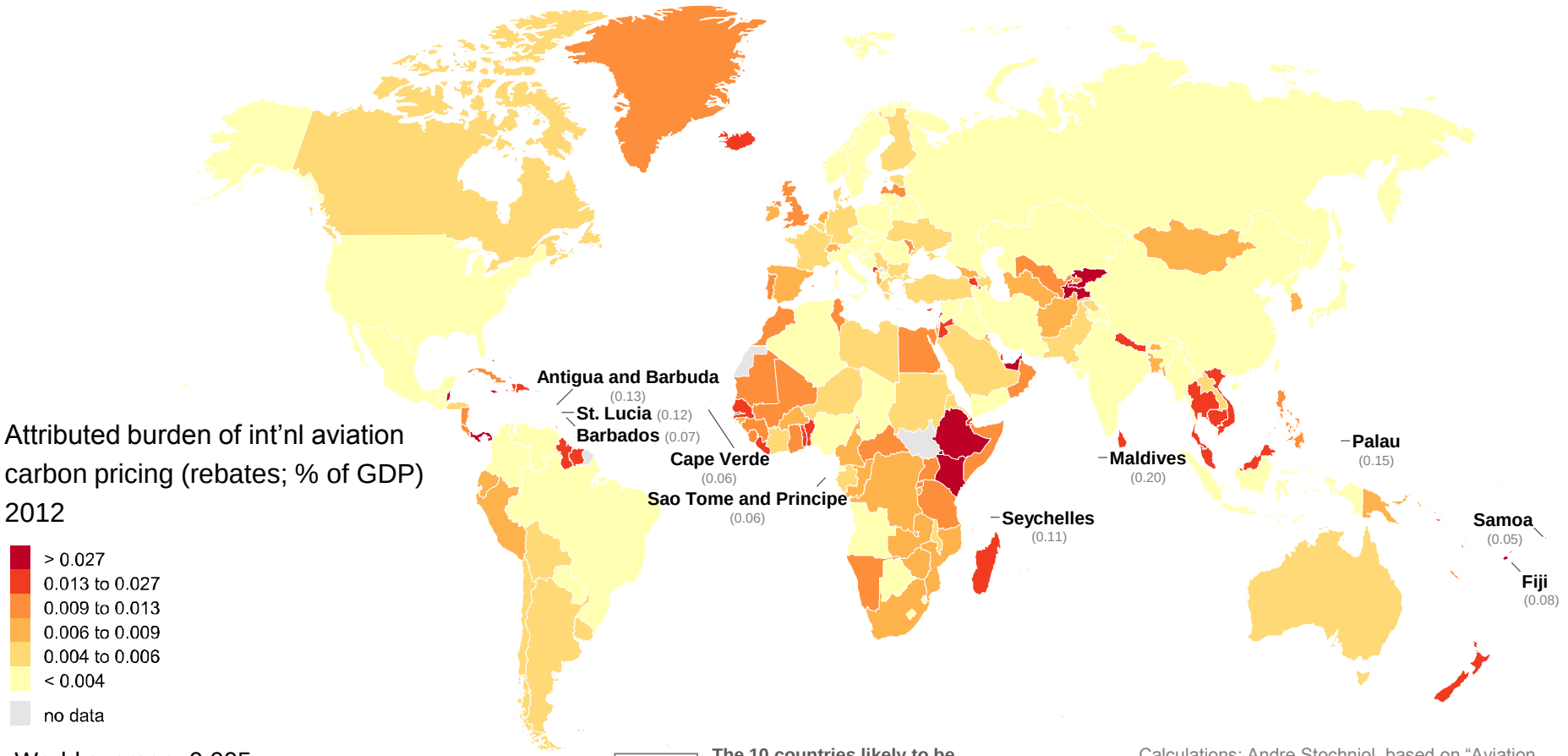
International aviation emissions, 2012

Emissions from scheduled flights only, by routes/city pairs.
Shown 3,800 main routes, which contrinbuted nearly 80% to the emissions' total (out of circa 24,000 international routes),

By Andre Stochniol based on emissions data from the "Aviation Carbon Footprint, Global Scheduled International Passenger Flights - 2012", by and courtesy of Dave Southgate.

Coordinate System: World Robinson
Central Meridian: 0°0'0"

View 2: Burden of carbon pricing (% of GDP; the largest burden may fall on some of the poorest, unless dealt with)



World average: 0.005
(the values depend on carbon price)

Country (%GDP)

The 10 countries likely to be most impacted as %GDP (if no rebates, or similar)

Calculations: Andre Stochniol, based on "Aviation Carbon Footprint, Global Scheduled International Flights – 2012" by Dave Southgate, US$10/tCO2, and GDP data for 2011; visualisation based on eAtlas

At the world-scale's map this regressive character is not fully feasible given the small size of the most impacted countries (many SIDS) → Switching to a country-by-country view:

<< Interactive map demonstration, using **eAtlas of Global Development** >>

Rebate Mechanism (RM) (in 140 characters)

All ships/planes pay for their emissions. Certain countries obtain rebates, and the remaining revenue goes to climate change action, including in the sector.

Detailed points:

1. Ensures that countries receiving rebates are at least not worse off, with the poorest being better off
2. **Relates a global approach**, which is required for international transport, **to** the principles of equity and **CBDRRC**
3. **Can apply to any revenue raising MBM** (such as a levy and ETS)
4. Highlighted **in the AGF** (2010)**, and the IMF/WB reports** (2011)**;** rebating mentioned in the **LTF report** (2012)
5. Rebates to developing countries may amount to 1/3 of revenue raised, the remaining 2/3 will be a **predictable and affordable source** of climate change financing and R&D for clean international transport
   - Potential for cooperative contributions from the rebate-eligible countries

RM versions and applicability

1. **RM** can apply to any **revenue raising** MBM, such as a levy or ETS, both for aviation in shipping
2. The rebate key could may be based on:
    1. A country share of fuel uplifted for international flights, for aviation (proposed for instance in the IMF/WB report for G20)
    2. A country share of seaborne trade (detailed proposals and analysis in the submissions to the IMO, in the IMF/WB report, and in the RM Study)
3. **RM integrated** (aka IMERS) is a complete proposal with the RM built-in at the IMO

- RM seems the only differentiation option being currently considered to address potential adverse & disproportionate impacts of a global MBM scheme on the poor countries
  - An alternative option based on exempting routes to the less developed countries, could have negative consequences anyway, distort competition and is too complex, especially for container ships
  - RM with climate financing would make the poor countries better off, and also could help build modern infrastructure benefiting all (e.g. in Africa)

How would it work in shipping?

Direct/global approach proposed (IMERS)

1. Reporting (of fuel bunkered)

Flag & Port States

EMISSIONS REGISTRY

4. Enforcement & 5. Certification

3. Status Check

Commercial Agreement (Who pays)

BANK (Fund)

2. Payment (of the levy)

*2.1 Optional national collection

(may be unused as in the IOPC Funds)

LEVY

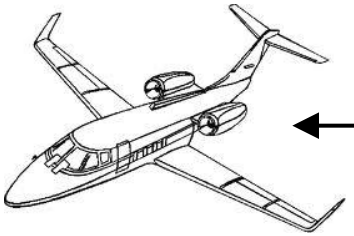
6. Disbursement

6.1 Rebates to developing countries

6.2 Climate and R&D financing

How may it work for aviation?
(fuel/emission levy illustration; IAFund)

1. Reporting (of fuel use per period)



Air traffic control

EMISSIONS REGISTRY

4. Enforcement

3. Status Check

Commercial Agreement (Who pays)

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LEVY

5. Disbursement
5.1 Rebates to developing countries
5.2 Climate and R&D financing

Compliance with UNFCCC Convention

- Disbursement of MBM revenue is to comprise two steps:
  - Cost burden incurred by a developing country Party participating in the MBM is rebated (paid) to it
  - The remaining revenue (net revenue), is disbursed by the agreed entity or entities (i.e. GCF, IMO/ICAO)

Consequently *(details):*

1. Net revenue for climate change action would come from consumers in developed countries only, complying with the UNFCCC principles
2. Developing countries would be beneficiaries of the MBM, with the most vulnerable countries to benefit most through the relevant rules and provisions applied at the 2nd step (SIDS, LDCs, African countries) – **LDCs circa tenfold**
3. The transport sector would also benefit at the 2nd step, potentially through a new global Maritime (Aviation) Technology Fund, or similar

The most frequent question: "Graduation"
(i.e. what about high income developing countries?)

1. "Voluntary" agreement: foregoing the rebate, or part of it
   (with such money potentially towards South-South collaboration)

2. Capacity-based: securing commitment based on or scaling through a capacity factor, such as GDP per capita

   – For details on options see the draft legal text, in which a developed country means a country in Annex II, or any successor annex, or arrangement (i.e. "future proof")

Burden sharing, if no rebates or similar
If rebates, how much?

- Example views on burden per country categorizations:
  - Economies (UNCTAD categorization)
    - **Shipping:** Developed 56.8%, Transition 2.3%, **Developing 40.9%**
      - Of developing: **Africa 3.4%,** Americas: 5.4%, Asia: 31.9%, Oceania: 0.1% (all 40.9%)
    - **Aviation:** Developed 54.3%, Transition 2.7%, **Developing 42.9%**
      - Of developing: **Africa 4.7%,** Americas: 7.0%, Asia: 31.0%, Oceania: 0.2% (all 42.9%)
  - Income based (World Bank categorization)
    - Shipping:
      - High Income: 70%, Upper Middle Income: **22%**
      - Lower Middle Income: 7%, Low Income: 1% ***(subtotal** 8%; **<10%)***
    - Aviation:
      - High Income: 71%, Upper Middle Income: **19%**,
      - Lower Middle Income: 7%, Low Income: 2% ***(subtotal** 9%; **<10%)***
- Thus the "real" rebates are very likely to be somewhere between **10% and 30%** of total costs *(depending on the agreement reached)*

Additional information

- Backup slides, for Q&A etc.
  - Available from http://imers.org/bonn13
- Presentation and fact sheet from Doha, focused on shipping
  - Available from http://imers.org/cop18 (and from the UNFCCC side event repository; various documents linked from the fact sheet)
- Draft legal text
  - http://imers.org/docs/mepc64-5-10.pdf (for shipping; aviation's draft is similar, available on request)
- A combined RM Fact Sheet for aviation and shipping:
  - http://imers.org/docs/RM_Fact_Sheet2.pdf (coming up)
    - Or simply contact Andre (andre@imers.org)

Conclusions

- The RM approach to equity/CBDRRC is practical and potentially transformative
  - It creatively respects the international transport and climate principles
  - It is fair and efficient
  - Thus, it may enable greater mitigation and financing ambitions

- Enough has been done on technical analysis

- **It is high time for a political decision** how to take equity into consideration in inherently global international transport
  - Doing so will very likely **enable global action, and increased ambition** for international aviation and maritime transport

Debate

Feel free to ask any questions & express your views