Inter-American Development Bank

Managing Business Travel Emissions

EPA Climate Leaders Partners Meeting, Chicago

6th October 2008

Managing Travel Emissions
Presentation Outline

- Who we are & why we travel
- Policies & programs
- Calculating travel emissions
- Reducing travel emissions
- Offsetting travel emissions
- Conclusions

Who Are We?
& Why is travel important to us?

Argentina	Honduras
Bahamas	Jamaica
Barbados	Mexico
Brazil	Nicaragua
Belize	Panama,
Bolivia	Paraguay
Chile	Peru
Colombia	Suriname
Costa Rica	Trinidad & Tobago
Dom. Republic	Uruguay
Ecuador	Venezuela
El Salvador	Washington - HQ
Guatemala	Paris - Europe
Guyana	Tokyo - Asia
Haiti	

- Founded in 1959, the IDB is oldest & largest of regional multilateral development banks.
- Main source of multilateral financing for sustainable economic, social and institutional development in Latin America & Caribbean
- Provides loans, grants, guarantees, policy advice & technical assistance to public & private sectors of borrowing member countries.
- IDB has just over 1,800 staff & consultants working in Washington DC HQ, plus staff located in 28 regional/non-regional offices.
- IDB staff travel an average of 39 million miles by air per year & is significant when looking at our carbon footprint.
- Impact of IDB staff commuting also considered as part of our carbon footprint.

Policy and Programs
Environmental & travel directives & commitments

- Environmental & Safeguards Compliance Policy includes principles of environmental responsibility: *The Bank will seek to adopt the principle of corporate environmental responsibility.*

- Two programs: Greening the IDB & Carbon Neutral Initiative to ensure that this directive implemented.

- Public commitment to manage environmental impacts & carbon emissions: EPA Climate Leaders, EPA Green Power Partnership, EPA Energy Star.

- Travel Policy: *Travel to official destinations is by the most direct route. If the use of indirect routes at the personal preference of the traveler causes additional cost to the Bank, this cost must be absorbed by the traveler. Staff are encouraged to book early to ensure most economical fare.* And *Business class will be authorized (for flights over) nine hours flying time (excluding connecting time) on direct routes.*

- This is our departure point …

Calculating Travel Emissions
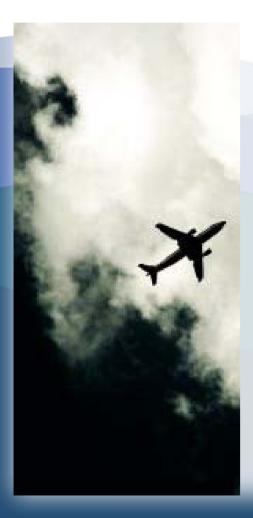## *Collecting air travel & hotel data*

Establishing a Data Partnership
- IDB outsources travel management.
- Greening team partners with travel agency to ensure availability of necessary leg & mileage & hotel data reports to draw analysis & calculate emissions (contractually agreed).

Understanding the Data
- More than 900 different routes flown.
- Total miles flown: 38,563,107.
- Footprint: 7,434 tCO2eq.

Calculating Travel Emissions
Defining air travel & hotel emissions factors

Air Travel Factors

Short: : 2,116,024 miles x 0.277kg/pgr-mile ÷1000 = 586 tCO2eq

Medium: 2,390,853 miles x 0.29kg/pgr-mile ÷1000 = 548 tCO2eq

Long: 34,056,230 miles x 0.185kg/pgr-mile ÷1000 = 6300 tCO2eq

Total: 7,434 tCO2eq

Hotel Night Factors

DC: 3,500 nights x 30KWH per guest night x 0.4995 kg CO2/kWh (DC area) = 52 tCO2eq

LAC: 12,617 nights x 30KWH per guest night x 0.201 kg CO2/kWh (LAC Region) = 76 tCO2eq

Total: 128 tCO2eq
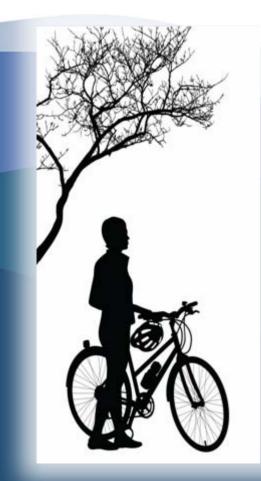
Issues to consider moving forward

- Economy (1.0) vs. Business (2.1) vs. First (3.4)
- RFI

Calculating Travel Emissions
Collecting staff commuting data

- IDB Employees use a variety of modes of transportation to travel to work.
- IDB's HQ central location is accessible by public transportation including metro & bus. Employees also commute to by private vehicle, bicycle & walking.
- In May 2008, IDB partnered with Urban Trans to carry out a commuter survey to
  - *understand the commuting patterns of its employees*
  - *obtain data on mileage & mode of travel to calculate carbon emissions, &*
  - *to establish opportunities for incentivizing more sustainable commuting behaviour.*
- Survey completed by 592 people (30% of HQ employees). Average response rate for comparable organizations in DC area 20-25%.

Calculating Travel Emissions
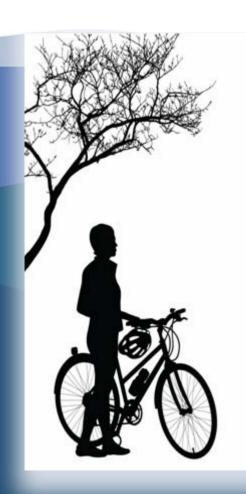## *Collecting staff commuting data*

Question: How did you travel to work yesterday?

Answer	Count	Percentage
Walked (as my only mode from home to work	46	8%
Drove alone (including motorcycle/moped)	103	19%
Carpool (includes being dropped off)	59	11%
Vanpool	3	1%
Bus, metro etc.	304	54%
Bicycle (as my only mode from home to work)	29	5%
Casual Carpool/Slug	12	2%

Other questions included:

- identification of zip code
- gender, age
- willingness to change

Calculating Travel Emissions
Defining Staff Commuting Emission Factors

Tabulating Emissions

- Survey asked for:
  - Home zip code
  - Mode of transportation
- With this calculated approx. distances for each respondent (approx.30%)

Emission Calculation

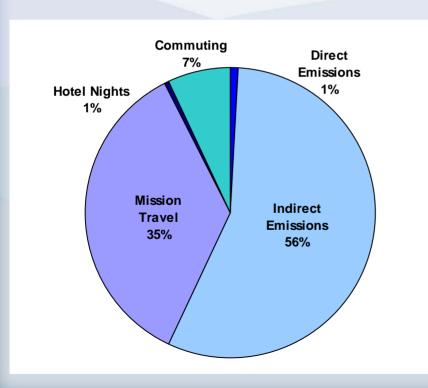| Mode	CO2 Emission Factor (kgCO2)
Walked	0
Drove alone	0.4415
Carpool	0.22075
Vanpool	0.053
Bus, Metro, etc.	0.163
Bicycle	0
Slug	0.22075

- Multiplied each distance by the appropriate emission factor for CO2, CH4 and N2O
- Divided results by no. of respondents to get a per person emission factor for commuting.
- Result: 0.801 tCO2eq per person per year
- 1,826 (employees at HQ) x 0.801 tCO2eq. = **TOTAL 1,463 tCO2eq**

Calculating Travel Emissions
IDB HQ GHG Inventory 2007

Emission source description	Quantity reported	Unit	CO2 Emmissions (kg)	CH4 Emissions (kg)	N2O Emissions (kg)	tCO2eq
DIRECT SOURCES						
Stationary Combustion Sources						
Diesel generators (NYA 1300, 1330, 1350 and BCDR, Ashburn, VA)	238	gallons	2,414.6	0.4	0.0	2
Natural gas for kitchen and heating use (boilers)	28,092	CCF	153,378.8	14.5	0.3	154
Mobile Combustion Sources						
HQ vehicles	50,968	miles	32,690	817	1,002	33
Refrigeration / AC Equip. Use						
4 chillers with HFC 134a per chiller*	0	lb	0			0.0
Process / Fugitive (specify source)						
SUB-TOTAL DIRECT						189
INDIRECT SOURCES						
Purchased and Used Electricity						
Electricity consumption (NYA 1300)	17,201,021	kWh	8,547,767	215	135	8,594
Electricity consumption (NYA 1330)	1,248,900	kWh	620,621	16	10	624
Electricity consumption (NYA 1350)	3,045,818	kWh	1,513,570	38	24	1,522
Electricity consumtion in owned or leased off site facilities (BCDR, Ashburn, VA)	2,104,200	kWh	1,045,648	26	16	1,051
SUB-TOTAL INDIRECT						11,791
OPTIONAL EMISSIONS						
Transport-related						
Air travel originating in Washington DC -Short-haul	2,116,024	miles	586,139			586
Air travel originating in Washington DC -Medium-haul	2,390,853	miles	547,505			548
Air travel originating in Washington DC -Long-haul	34,056,230	miles	6,300,402			6,300
Others						
Hotel nights by staff, consultants and guests in DC area (booked by BCD)	3,500	guestnight	52,448			52
Hotel nights by staff, consultants and guests in Countries in Region (booked by BCD)	12,617	guestnight	76,081			76
Commuting						
Distance and mode of transportation used by staff at headquarters	1,848,748	miles				1,463
SUB-TOTAL OPTIONAL						7,563
TOTAL						21,005

Calculating Travel Emissions
How significant is travel in our inventory?

2007 Total: 21,006 tCO2eq

Direct Emissions

Stationary, Mobile: 189 tCO2eq (1%)

Indirect Emissions

Purchased electricity: 11,791 tCO2eq (56%)

Optional Emissions

Mission Travel: 7,434 tCO2eq

Hotel Nights: 129 tCO2eq

Commuting: 1,463 tCO2eq

Total Travel: 43% = Significant

Reducing Travel Emissions
The Role of the Travel Agency

Role of travel agency

- Online bookings & e-ticketing.
- Messaging about emissions – raising awareness among travelers.
- Select the best mode of travel (train vs. air for short distances).
- Selects direct over indirect.
- Selects economic efficiency.

Status

- Early stages.
- Policy review recently conducted.
- Need to look at options for incorporating cost of carbon into each ticket.

Reducing Travel Emissions
Avoiding Unnecessary Travel

<u>Is Travel Necessary?</u>

- Some travel will always be necessary in our work, but room for reduction:
55% of travelers think that their missions are not always productive,
38% consider them first and foremost great ways for socializing,
19% feels travel makes them less productive, and
41% think it disrupts work-life balance.
(UK Business Traveller 2007)

<u>Status</u>

- Reorganization sees more project staff re-located in region, reducing travel.
- IDB travel approval process is geared at adherence with IDB travel policy (most direct & economic route).
- What is missing? Does not ask: *"Could this mission be reasonably avoided, conducted in a more efficient manner, or replaced with other means of communication?"*
- Need for a no-nonsense approach: limit number of participants & travel per project & promote alternatives (happening on a dept. by dept. basis).

Reducing Travel Emissions
From missions to e-missions

With today's "virtual meeting" technologies, it is possible to boost productivity, avoid extended trips & avoid unnecessary travel costs.

Comparison of carbon emissions impact with and without virtual mission alternative

Financial Cost to IDB	**$20,072**

2 return air fares Washington DC – Asuncion ($7,000 per flight)

2 staff, 10 nights each in Hotel ($110 p/p p/n)

2 staff, 11 days per diem ($176)

Carbon Emissions from Travel	**2 tonnes**

2 Washington DC – Asuncion (9,200 miles return trip)

Personal Cost to Staff	**High**

2 staff, 11 nights away from home, including 1 weekend

Financial Cost to IDB	**0***

Events previous to the Virtual mission itself (4 VC = 12 hrs)

Virtual mission (5 VC = 18 hrs)

After mission, adjustments meetings (2 VC = 6 hrs)

Carbon Emissions from travel	**0**
Personal Cost to Staff	**0**

An environmentally responsible and economically efficient alternative

*VCs with COFs use IP lines at no additional unit cost. VCs with external institutions use ISDN lines at an approximate cost of a long distance call.

Reducing Travel Emissions
Promoting Videoconferencing

Facilities

- In 2007 IDB upgraded its videoconference facilities
- 73 facilities in HQ & in every country office.
- Online booking facility.

Status

- Some divisions & departments are promoting internally.
- Requires more promotion as a means to replace travel on Bank wide basis.
- Reticence by many to use.

Need to look at new alternatives …?

Reducing Travel Emissions
Promoting internet technologies

Rationale

- As IDB decentralizes, need for new technologies to facilitate work & reduce travel times (improved efficiencies).

Technologies

- Personal video links (e.g. skype).

- Online messengers (Neos).

- Intranet communities.

- Webinars: online classrooms.

Status

- Ad-hoc/pilot usage.

- Proposal for ***Virtual Team Collaborative Environment*** to be submitted internally for consolidated approach.

Reducing Travel Emissions
Moving to a Virtual Workspace

Virtual Team Collaborative Environment

- facilitate work of operational staff when collaborating on project &/or product development, in recognition of decentralizing & geographic distribution of Bank operations as result of new business operating model.

Communications: IM + Video (like Skype)		
Social Networking (similar to Facebook)	Communities of Interest	Projects (document sharing & shared desktops)

- **Expected results**: increased efficiency & reduced travel ($, time, carbon).

Status

- In planning

- Trials of certain components (i.e. "e-cafeteria")
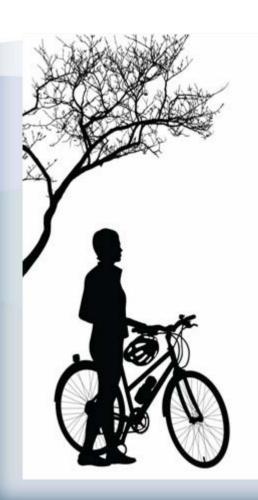
- This is just the start …..

Reducing Travel Emissions
Keeping up with technological advances

- *"ICT develops with a pace of about 1000 times faster than other technology sectors. What was science fiction ten years ago is old news today"* (Bill Gates).

- **Virtual Presence:** High quality real life simulation video conferencing between custom built rooms.

- **Avatars:** Two or three dimensional representation of a person, used to interact in virtual worlds.

Reducing Travel Emissions
Encouraging Sustainable Commuting

Strategy

- Internal discussion now focused on generating buy-in for a possible sustainable commuting strategy. Could include:
    - Promoting ridesharing;
    - Providing subsidized transit benefits;
    - Promoting biking;
    - Promoting guaranteed ride home program;
    - Becoming corporate zipcar member;
    - Introducing tele-commuting;
    - Promoting alternate work schedule;
    - Developing commuting intranet site.

Status:

- Early stage in discussion …..

Reducing Travel Emissions:
Changing behaviour & attitudes towards travel

Need to get people interested & excited

Some Ideas:
- Information on alternatives.
- Dialogue (making friends & cultivating champions i.e. in depts. with high travel mileage & with travel agency).
- Know your allies.
- Praise where praise is due (departments setting goals to reduce travel).
- Praise where praise is not due (shaming into doing).
- Incentives & give-aways (particularly for commuting).
- Consistency in message.

Status
- Early days ….

Offsetting Travel Emissions
IDB Carbon Neutral Initiative

1. Calculating Emissions

By conducting an annual Greenhouse Gas Inventory of Headquarters facilities (energy, business travel), country offices & the annual meeting.

2. Reducing Emissions

Through the implementation of eco-efficiency measures & greening programs, as well as the purchase of Renewable Energy Certificates (RECs).

3. Offsetting Emissions

With the purchase of VERs sourced from renewable energy & energy efficiency projects in Latin America & the Caribbean.

4. Leading by Example

Communicating the IDBs efforts to calculate & manage its carbon footprint (website, print materials) & promoting the initiative in the Region.

Offsetting Travel Emissions
Carbon Neutral Materials Online

- Carbon Neutral website

- Fact sheets on offset projects

- Event calculator (under development)

Inter-American Development Bank

Questions?

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