Sustainable Travel

How to reduce greenhouse gas emissions from travel

Division of Technology, Industry and Economics
United Nations
Environment Programme

Reducing emissions from travel

- Role of travel
- Current situation
- Ways to reduce emissions
- A strategy for reducing travel emissions

Existing travel rules

Staff missions

Most direct and economical route

More than 9 hours = business class

Other travelers

Cheapest option

What is missing?

Travel planning & approval process differs between organizations
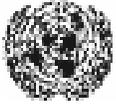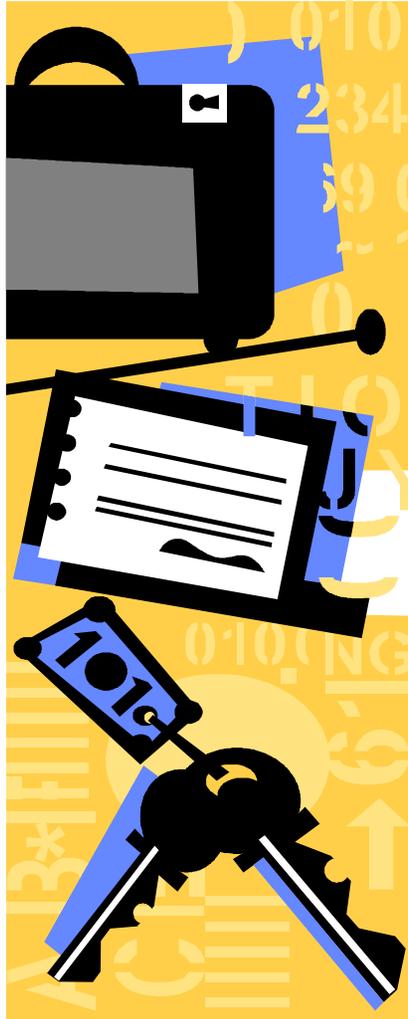
Ways to reduce travel emissions

- Avoid unnecessary travel
- Select the best mode of travel
- Coordinate missions and meetings
- Limit number of participants
- Use local staff
- From missions to e-missions
- Inform and motivate staff

= Adopt Sustainable Travel Policy
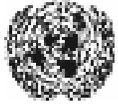
Avoid unnecessary travel

- **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 207)

UN travel approval process is geared at adherence with UN travel policy (…*most direct and economic route*). It does not ask:
"Could this mission be reasonably avoided, conducted in a more efficient manner, or replaced with other means of communication?"

The no-nonsense way: Just cut it by XX%
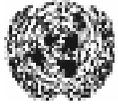
Select the best mode of travel

- Train better than road
- Road better than air
- Hybrid/fuel efficient cars better than SUV
- Economy air better than business air
- Business air better than first class air
- Modern aircrafts better than older ones*
- Direct flights better than the ones with stopovers

Air travel factors

- Economy   1,0
- Business   2,1
- First class 3,4

Distance / aircraft
- Boeing 737-800
- Airbus 320
- Airbus 380
- Boeing 787

- Passenger load

- Not all factors included in GHG calculator.
- BUT mode of air travel still has a climate impact

Road Travel Opportunities

SUN
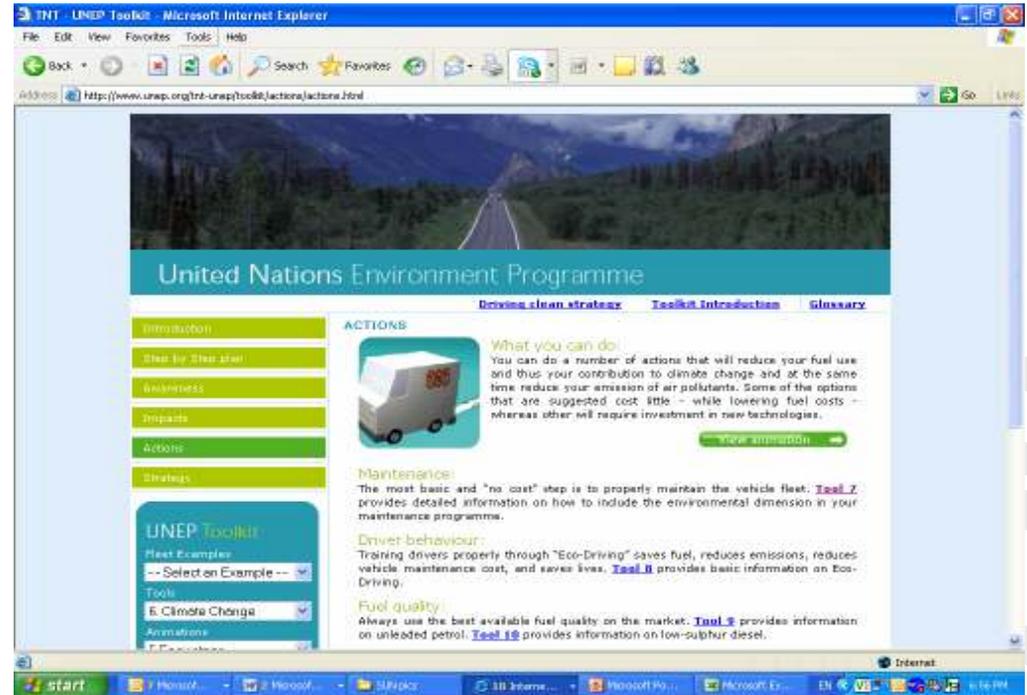
- **Maintenance**
- **Driver behaviour**
- **Fuel quality**
- **Emission control technologies**
- **Advanced vehicles & fuels**

www.unep.org/tnt-unep/toolkit.htm

Coordinate missions and meetings

OR

Limit number of staff

OR

OR
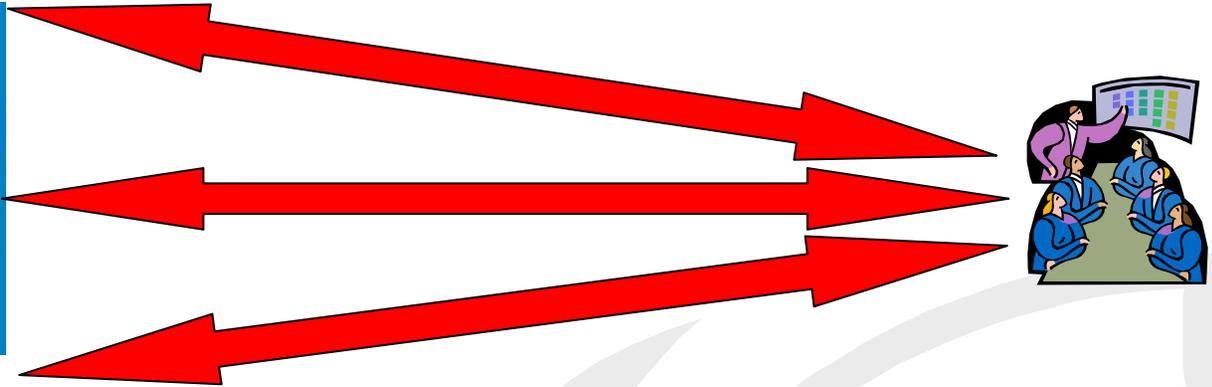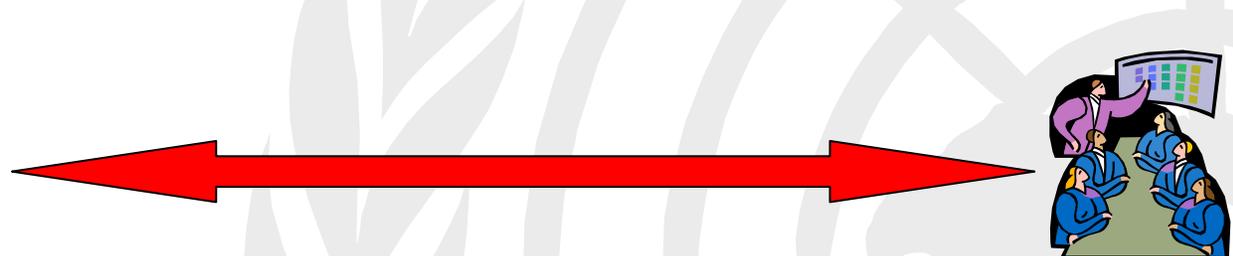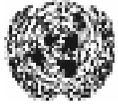
From missions to e-missions

Outgoing

✓ Telex, telefax, land lines (?)...

Already here

✓ Phone conferencing

✓ e-mail & direct scanning

✓ Video conferencing

✓ Personalized video links

✓ On-line class rooms

Incoming

✓ Virtual presence

✓ Avatars

"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)**
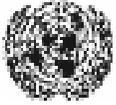
- ✓ Connects several participants to the same phone conversation.
- ✓ Limited by quality of phone lines and time differences between locations.
- ✓ Sometimes unclear who talks (max number of participants <10)
- ✓ Moderation becoming more sophisticated
- ✓ Can be complemented with Internet sites where participants can display documents, pictures etc.

e-mail

E-mail provides a way to exchange information between two or more people with minimal costs and in a way that is generally far less expensive than physical meetings or phone calls.

Global Message Volume
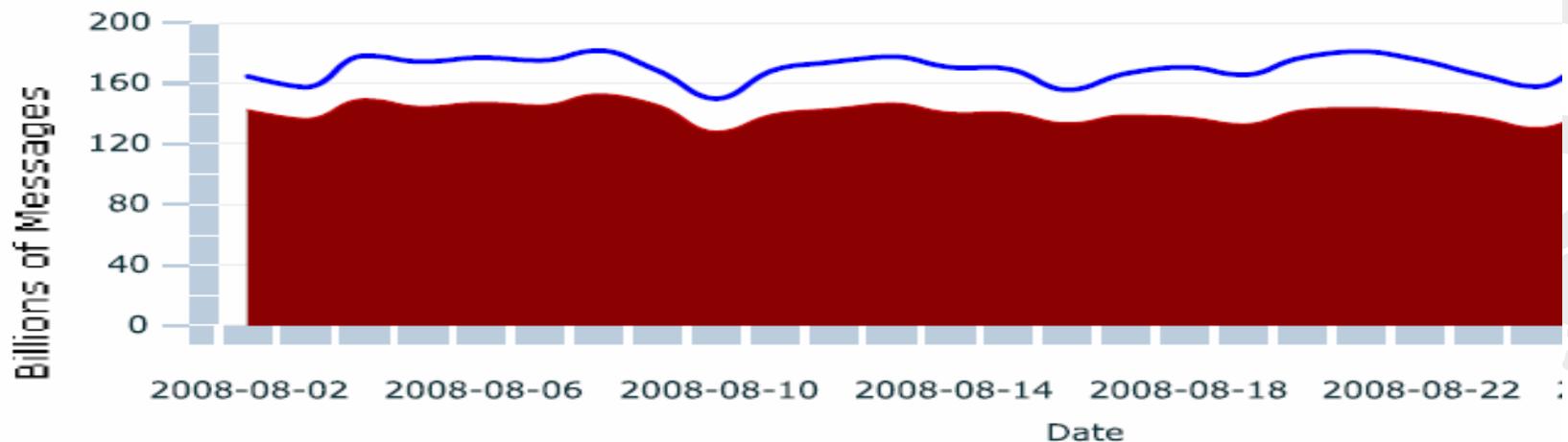
Video conferencing

- ✓ Provides real-time picture and sound connections between one or several locations
- ✓ Works best with only two locations. Quality deteriorates with increasing number of locations and participants
- ✓ Additional screen/camera may be added to share documents/powerpoints
- ✓ Can be expensive
- ✓ Often present – seldom used

Personalised video link

Personalised video link is an Internet based sound & picture system, providing the same services as video conferencing but between computers/laptops

- ✓ Software usually free (e.g. Skype)
- ✓ No additional costs for connection time
- ✓ Connection between two or several users
- ✓ Sharing of documents, movies, pictures
- ✓ Requires band width and approval of ICT administrator
- ✓ Large share of UN staff are already users
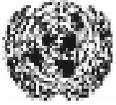
On-line class rooms

Group conferencing / group learning provided through an Internet site connected to by participants.
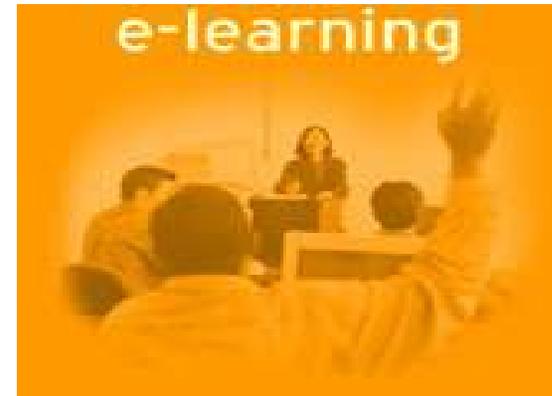
On-line class rooms

✓ Good replacement for lecture style meetings

✓ Allows Q&A and sharing of presentations/documents

✓ Can be combined with web-casts to connect remote participants to real meetings

✓ Internet based makes it cheaper and more reliable than phone or video conferencing

✓ Restricted use if participants are from different time zones

Virtual presence

High-quality real-life simulation video conferencing between custom built rooms

- ✓ High quality video and sound links to simulate real-life meetings.
- ✓ Custom built rooms ensure identical environment, direction of sound, and lighting, seamless pictures etc
- ✓ Number of participants limited
- ✓ Cost for one room about US$ 350.000. Predicted to go below 50.000 within a few years time.

Two- or three dimensional representation of a person, used to interact in virtual worlds such as Second Life.

- ✓ Avatars and virtual worlds are today used for entertainment, dating services, discussions, product development, PR, research cooperation etc.
- ✓ Allows sharing and modeling of concepts and projects, and visualization of ideas
- ✓ Basic use is plug-and-play. More advanced use requires more skills
- ✓ Based on high capacity Internet links

Inform and motivate staff

Most staff receive little or no information about the impact of their travel. Likewise, there are few incentives for staff to seek to travel less, or to travel in more efficient ways. Making this issue personal is perhaps one of the most effective ways to reduce travel related emissions

Make it personal by

- ✓ Awareness and information campaigns
- ✓ Provide GHG emission info on each ticket
- ✓ Provide incentives for effective travel habits
- ✓ Make it easy for the staff to be suatainable (admin & technology)
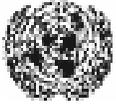
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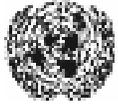
A sustainable travel strategy

1. Quantify emissions

2. Identify modes of travel, reasons for travel, verify actual travel approval processes, and travel purchase requirements.

3. Identify current access to, and use of, alternative communication equipment. Identify needs for upgrades, training, awareness

4. Establish sustainable travel policy, including time bound goals, and responsibility for action in each area.

5. Implement, monitor & report: Ensure resource allocation if needed BUT also calculate savings from reduced travel and emissions.
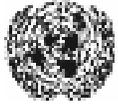
➢ Provide the air travel calculator

➢ Develop the Sustainable Travel Guide, providing guidance on:

  ▪ Case studies and examples of how travel can be managed in a more sustainable way
  ▪ Standard templates for travel processes, policies, requirements on travel agents etc.
  ▪ Information about requirements and costs of communication systems that can reduce the need for travel.

➢ Assist SUN clients to develop action plans to reduce travel related emissions

➢ Explore opportunities for a update of UN travel policies.

1. Travel is often a major source of GHG emissions

2. Emissions can be reduced by travelling more effective and by travelling less.

3. Technically there are significant opportunities for reducing travel related emissions

4. Current UN rules provide little incentive for improved travel behaviour

5. Implementation of **a coherent policy towards sustainable travel** would include revision of travel approval procedures, improved access to alternatives to face-to-face meetings, and information and incentives to staff to travel more sustainably.

6. There are always more than one way to do things – keep an open mind!