



CARBON FOOTPRINT

THE 3rd WORLD CONSERVATION CONGRESS 2004

VERIFICATION

This is the verification of the initial calculations and explanation of the Carbon and related greenhouse gas (GHG) Footprint on the World Conservation Congress, which was held in Bangkok, Thailand in November 2004. This is therefore deemed to be the final Carbon Footprint for the World Conservation Congress 2004.



The verification was undertaken by Urban Energy Conservation & Transportation for IUCN





INTRODUCTION

PEOPLE AND NATURE MAKING THE DIFFERENCE

The 3rd World Conservation Congress provides the global conservation community the opportunity to assess the successes and challenges of conservation, to debate solutions and from partnerships and coalitions to implement those solutions.

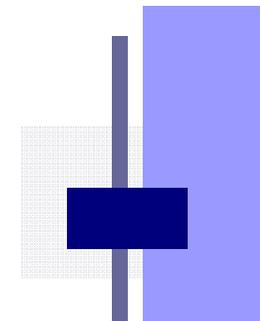


The 3rd IUCN World Conservation Congress (WCC) 2004 took place in Bangkok, Thailand, from 17-25 November 2004. It was estimated that there would be up to 3,000 delegates to the Congress from all over the World. Thailand considers it to be a great honor to host the WCC. **The final figure for attendance has now been verified and it stands at 4,899 delegates.**

The theme of the WCC, as stated above is "People and Nature Making a Difference – Only One World" and the aim is to safeguard our ecosystems. Thailand aims to also use this opportunity to present its natural and cultural heritage as well as share knowledge on managing its natural resources in a sustainable way.

The question asked in the context of the World Conservation Congress, is what will the impact be as a result of the World Conservation Congress, from an environmental and climate change perspective? This is taken from the point of view that this congress is resulting in an additional 3,000 people coming to Bangkok for the minimum of nine days, that would have not been there had it not been for the Congress.

The aim of this project has been to quantify the carbon and related greenhouse gas (GHG) emissions of each delegate, which is essentially the carbon footprint of the Congress. The financial contributions made to mitigate this impact will then go towards the implementation of carbon reducing projects in the Region.





WHAT IS A CARBON AND RELATED GHG FOOTPRINT?

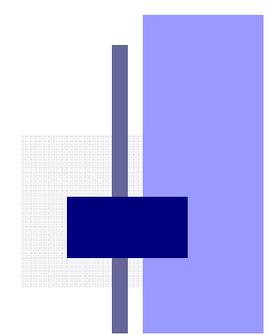
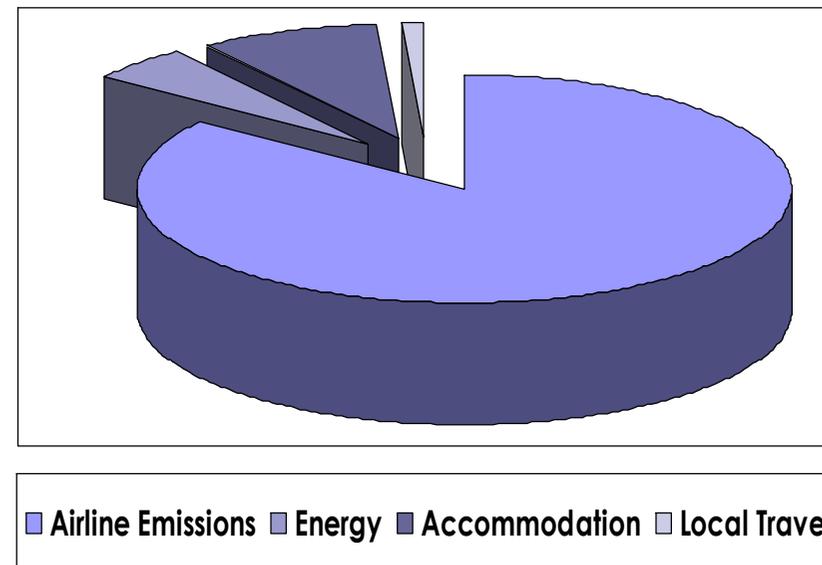
The Footprint is made up of four components namely travel to get to and from the Congress, local travel while at the Congress, energy consumed at the WCC in the form of electricity and waste at the venue and paper consumption, as well as accommodation in the form of water, waste, space heating, laundry and food preparation.

This impact will not have resulted had the WCC not taken place. Therefore, these calculations highlight the need for delegates to mitigate their impact by contributing to the mitigation of their impact in order to ensure that they come to the WCC carbon neutral. Further, governments, large organizations and corporations represented at the WCC can put forward larger donations.

All the funds collected under the banner of Carbon Footprint will be used to implement carbon and related GHG mitigating projects in Bangkok.

This will in turn ensure that this CARBON FOOTPRINT FOR THE WCC is mitigated thereby making the Congress a positive and accountable event.

Breakdown of the Carbon Footprint for The World Conservation Congress 2004



COMPONENTS OF THE WCC FOOTPRINT



Conservation / Climate Change / Pollution



ENERGY

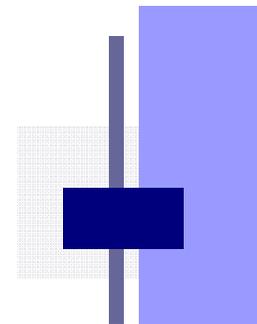
- Hotel electricity use
- Venue electricity use

TRANSPORTATION

- Participant air travel to host city (International)
- Participant air travel to host city (Local)
- Participant road travel between hotels and venues

OTHER

- Waste
- Paper Production



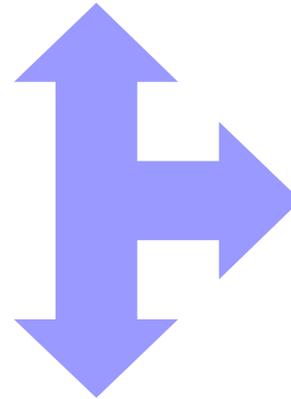
THE VENUE, ACCOMMODATION & TRIPS



The Queen Sirikit National Convention Centre (QSNCC), since its opening in 1991, has become a national landmark and a worthy newcomer to the list of top international convention centers. The QSNCC has tried to ensure that all the services provided are done internally to the Center.

ADVISED ACCOMMODATION

Hotel Plaza Athenee
JW Marriott Hotel
The Landmark Hotel
Imperial Queen's Park Hotel
Windsor Suites Hotel
Jade Pavilion
Royal Benja Hotel
The Ambassador Bangkok
The Four Wings Hotel



It should be noted that emissions are calculated by determining the amount of energy, electricity, water and waste as well as through calculating emissions from travel. Bangkok has good public transport and much is within walking distance or via the sky train. Calculations are therefore primarily for the field trips and for the use of taxi or buses.

FIELD TRIPS

The Grand Palace & Temple of the Emerald Buddha Tour
Rice Barge Cruise Tour
City and Temple Tour
Crocodile Farm and Samut Praakan
Samut Sakhon Mangrove Ecosystem
Damnoen Saduak Floating Market & Rose Garden
Ayutthaya By Cruise
Ko Kred
Khao Yai National Park

THE VENUE, ACCOMMODATION & TRIPS



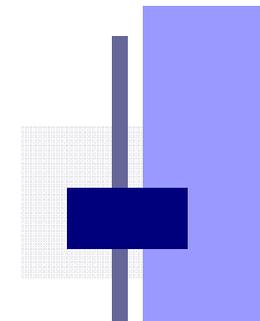
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AIR TRANSPORTATION



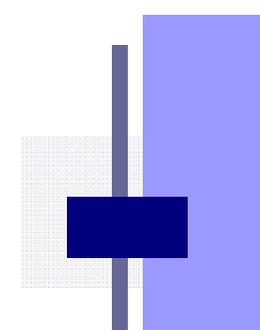
The largest source of carbon and related greenhouse gas emissions is from air travel. The World Conservation Congress (WCC) is a well attended, international event that results in the increase of passengers to Thailand.



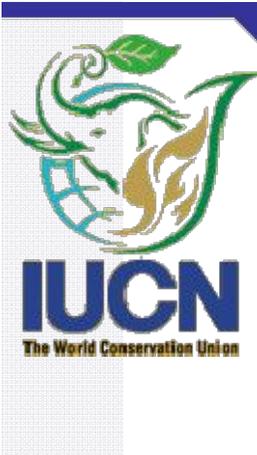
A large percentage of the outgoing flights, especially those bound for long distance international locations were scheduled for late evening or early morning departures. This was done so as to reduce traffic congestion in Bangkok during peak periods and also to allow for the reduction in the outside temperature thereby reducing emissions.



Many countries that have been experiencing high pollution levels and especially those that experience high temperatures, have adopted this policy with the aim of attempting to mitigate their pollution levels.

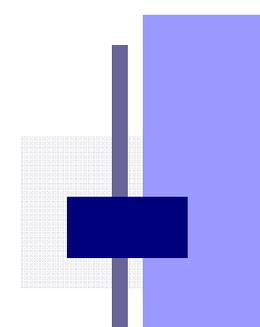


INTERNAL TRANSPORTATION



Although Bangkok has a good public transport system, there are still major traffic problems in the city. The peak periods are 4-5 hours in the morning and the same in the evenings. The photographs on the left hand side were taken at 20h00.

It should, however, be noted that 90% of the taxis and all of the three-wheelers (Tuk-Tuks) now run on clean burning LPG or CNG thereby reducing the emissions. All other vehicles use either unleaded fuel or low sulphur diesel. The numbers of vehicles still, however, result in emissions problems and pollution issues.





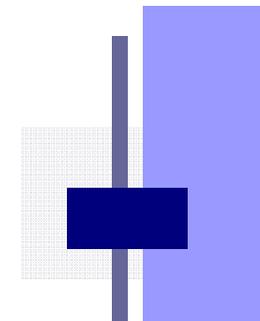
INTERNAL TRANSPORTATION....

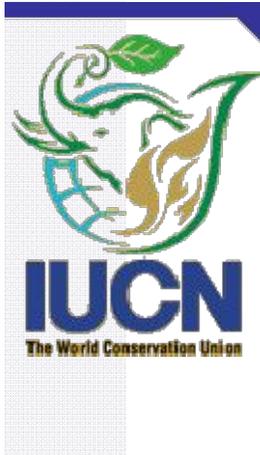
The Sky Train and the Underground in Bangkok are the most efficient form of transport in the city. There are no emissions from these forms of transport and they are well maintained, efficient and effective systems.

The Sky Train has been in operation since 2000 and has recently been extended. The Underground has been in operation since 2002 and provides access to other portions of the City. There is also a linkage between the two systems thereby providing an efficient interaction.

Not only do these means of public transport reduce the emissions but they also reduce commuter time and cost. They are between one third and one quarter the price of the three-wheelers and the taxis.

There has been a decision to phase in these systems so that there can be a gradual increase in demand and so that the infrastructure costs can be incrementally offset.





ASSUMPTIONS MADE IN CALCULATING THE FOOTPRINT

- It was estimated that 3,000 Delegates would be attending the 3rd World Conservation Congress in Bangkok, Thailand in November 2004. The final figure was higher than the original estimate and was finalized at 4, 899 delegates to the WCC.
- The World Conservation Congress will be held at the Queen Sirikit National Convention Centre (QSNCC) from 17-25 November 2004. The footprint is for the 9 day period.
- Average hotel energy consumption per participant per day = 33.23 kWh. This is taking into account that all the hotels use air conditioners due to the Bangkok climate.
- Accommodation Venues Include:
 - Hotel Plaza Athenee
 - JW Marriott Hotel
 - The Landmark Hotel
 - Imperial Queen's Park Hotel
 - Windsor Suites Hotel
 - Jade Pavilion
 - Royal Benja Hotel
 - The Ambassador Bangkok
 - The Four Wings Hotel
- An estimated 10 km average travel distance per delegate per day, much of which will be on the sky train. A further average of 100km per person in the form of fieldtrips during the Congress
- An estimated 2.04 kg waste generated per delegate per day and an estimated 450,000 sheets of paper consumed during the WCC



THE FINAL WCC CARBON FOOTPRINT

ENERGY

2,149 TONNES

Hotel electricity use

1,433 TONNES

Venue electricity use

716 TONNES

TRANSPORTATION

10,518 TONNES

Participant air travel to host city (International)

10,351 TONNES

Participant air travel to host city (Local)

131 TONNES

Participant road travel between hotels and venues

36 TONNES

OTHER

2.92 TONNES

Waste

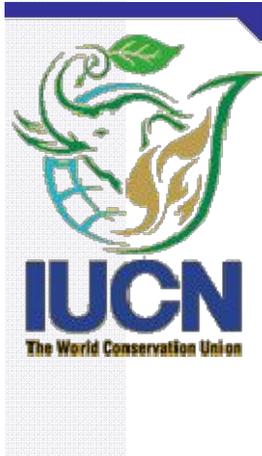
0.25 TONNES

Paper Production

2.67 TONNES

The Final Footprint for the WCC = 12,669.92 TONNES CO₂ & Related GHG Emissions

CONCLUSION



The 3rd World Conservation Congress Carbon Footprint

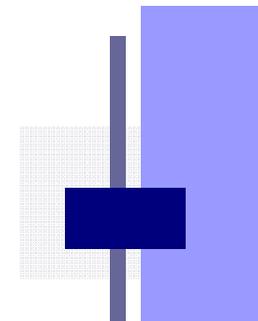
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12, 669.92 TONNES

This has been calculated at a rate of 0.18 CO₂ per km for short haul traveling (less than 500km) and at a rate of 0.11 CO₂ per km for long haul traveling

If you wish to make a contribution to the mitigation of your carbon and related GHG impact while attending the World Conservation Congress, or require further information that is not available on the internet, please contact:

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FOR FURTHER INFORMATION

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