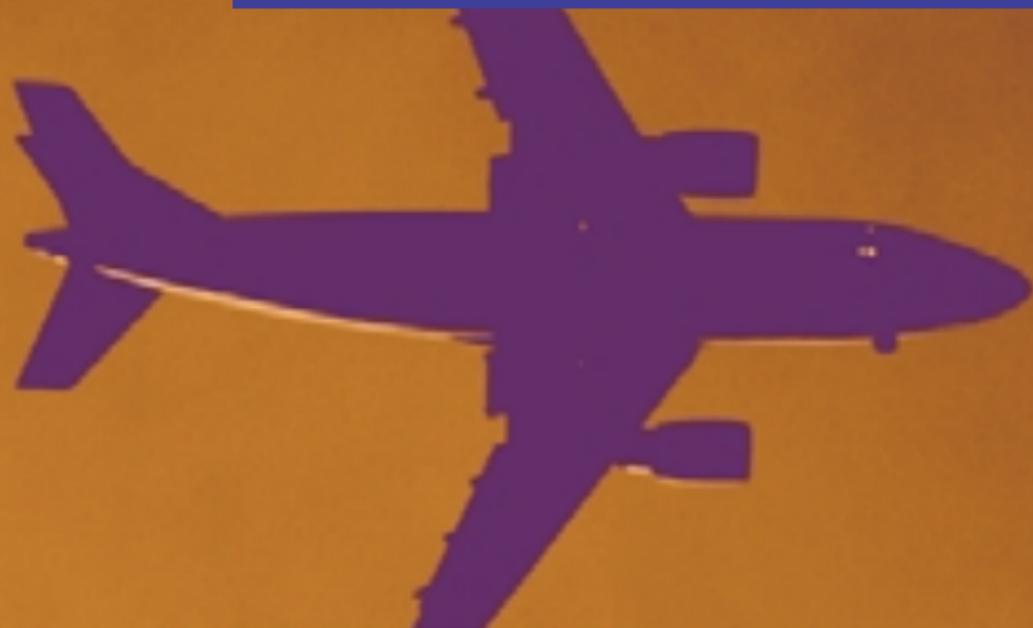


Facts about flying you shouldn't miss



Flying is...



...shopping in London

...carnival in Rio

...business as usual

...cappuccino in Rome

...Christmas under palm trees

...bananas the whole year round



Flying is the most climate-damaging way to travel

...unfortunately climate-damaging

Why is flying so climate-damaging?

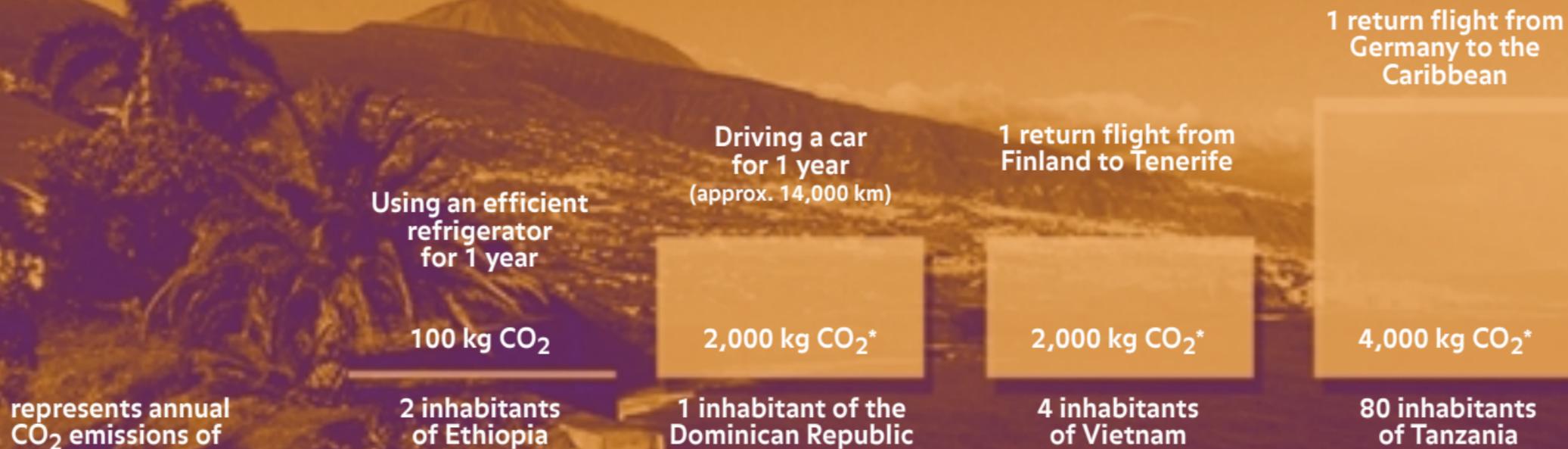
To keep climate warming and thus climate change within tolerable limits we must drastically reduce worldwide greenhouse gas emissions.

The average human being is responsible for the emission of approximately 4 tonnes of carbon dioxide (CO₂) per year.

- Carbon dioxide is not the only climate-damaging emission caused by modern-day aviation. Among other things, condensation trails and cirrus clouds that build up at higher altitudes can also affect the regional climate. Cirrus clouds account for about half of the air traffic's contribution to climate warming.
- One single tourist flying from Germany to the Caribbean and back causes the short-term equivalent warming effect of approximately 4 tonnes of CO₂.



One return flight to Tenerife is as climate-damaging as driving a car for one year



* Emissions from airplanes and cars do not only consist of CO₂. The various emissions have been converted to show the actual warming effect of the corresponding equivalents of CO₂ emissions. (Source: Own calculations; IEA, 2002)

Developing countries suffer the most from climate change

Only about five per cent of all people in the world have ever travelled by airplane. But this minority, most of them living in developed countries, travels more often every year. Affected by the consequences of climate change are especially those who have hardly contributed to it until now – people in developing countries:

- About 2.4 billion people live in rural areas and depend directly on agriculture – and therefore on climatic conditions. Climatic changes, such as the increasing occurrence of droughts and storms, directly threaten their existence.
- Every 30 seconds a child dies of malaria. Malaria is the second-highest cause of death of all infectious dis-

eases worldwide. Due to increasing global temperatures, mosquitoes transmitting the disease can spread to new regions.

- Rising sea levels do not only threaten spectacular tourist beaches, but the environment of many people living in coastal regions too. In the Philippines, 17 million people are facing the risks of disastrous floods and salt-water intrusion. In Bangladesh, permanent land losses due to additional storm floods and river floods are predicted. Small island states like Tuvalu in the Pacific Ocean are even in danger of disappearing entirely into the sea in the long run.



60 % of all greenhouse gas emissions are caused by developed countries

Annual CO₂ emissions in tonnes per capita



(Source: IEA, 2002)

Flying is the most climate-damaging way to travel

If you don't want to warm the planet with more than one tonne of CO₂* in order to be mobile, you won't get very far with flying. Because:

- You can either fly approximately 3000 kilometres, drive 7000 kilometres in a medium-sized car or go 17,000 kilometres by train.
- You will burden the climate with 300 kilograms of CO₂* if you fly from Berlin to Brussels and back – but with only 30 kilograms of CO₂* if you take the bus.



A flight of 3,000 km corresponds to a rail journey of 17,000 km

Travelling in an airplane is the quickest way to generate the climate effects of one tonne of CO₂*



* Emissions of airplanes and cars do not only consist of CO₂. The various emissions have been converted into the actual warming effect of the corresponding equivalents of CO₂ emissions.

The increase in air traffic...

... cancels out technical progress: Between 1970 and 2000 the fuel consumption per passenger and kilometre were halved worldwide. During the same period the kilometres travelled by plane increased almost fivefold.

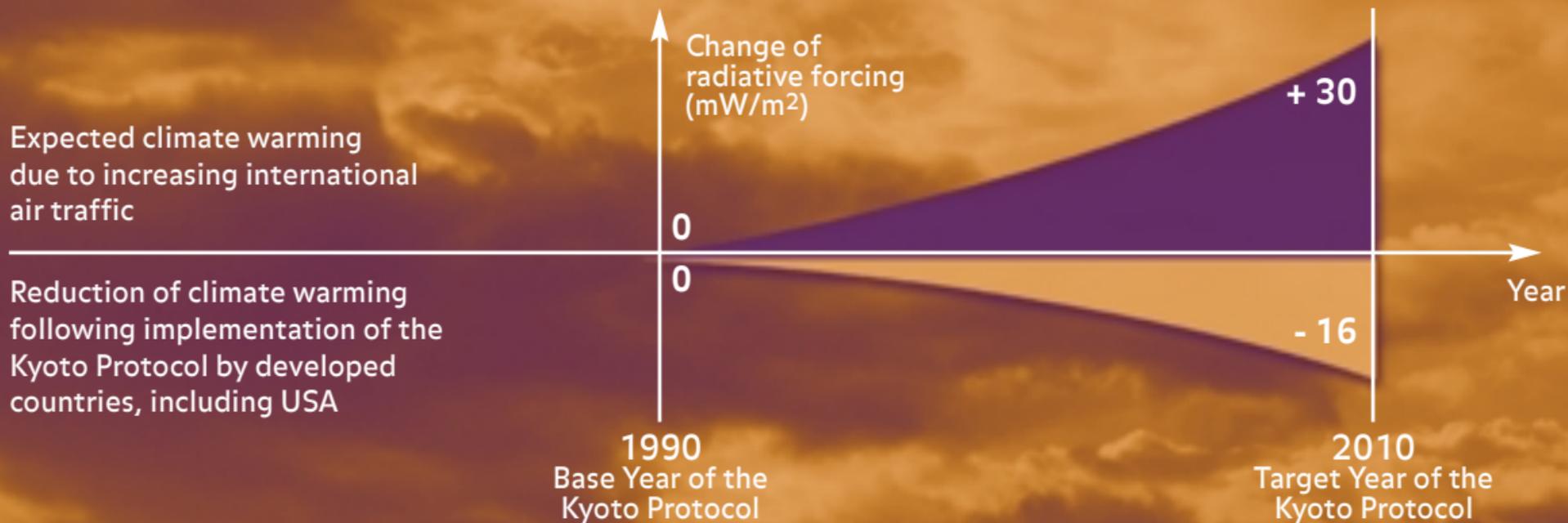
Thus, the increase in air traffic has always outstripped technical progress and is projected to continue to do so in the future.

... destroys political achievements with regard to climate protection: Due to the increase in international air traffic, global warming has increased at a greater rate than the reductions agreed upon by all the developed countries (including the USA) on the basis of the Kyoto Protocol*.

* Kyoto Protocol: Adopted in 1997 during the Third UN Climate Summit, requires that industrial countries reduce their CO₂ emissions. International air traffic does not fall under these reduction obligations.



Increased air traffic cancels out the emission reductions gained through the Kyoto Protocol



(Source: Worldwatch Institute 2004)

At present, the greenhouse gas emissions caused by international air traffic are not regulated

Until now, political attempts to reduce the climate-damaging effects of air traffic have failed at both the international and the national level. Among the proposals already submitted is the long overdue introduction of a tax on kerosene or the introduction of an emission fee for every flight that takes the ecological costs into account. To achieve this, we need an international initiative.

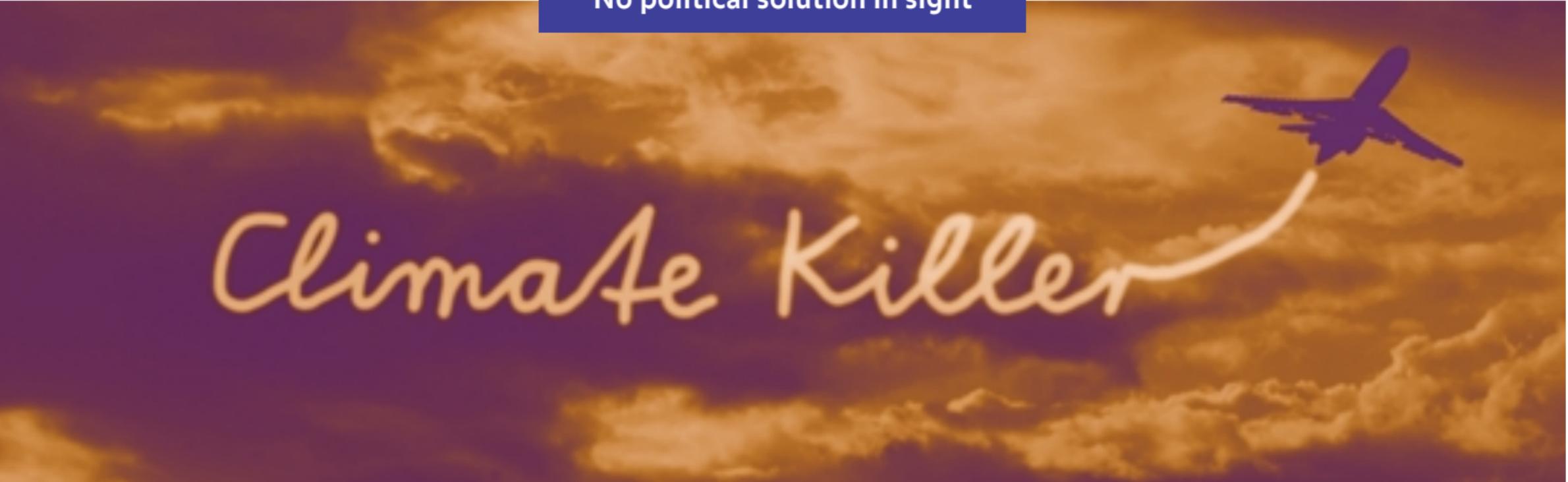
Act now: You can't undo the climate impact of your flight. If you can't avoid flying or circumvent it by going by train for example, you can still partially mitigate the climate effects caused by your flight emissions by supporting a selected and monitored project in another region of the world.

At the following Internet websites you will find a calculator for the incurred costs (e.g., 41 EUR for Finland-Tenerife and back) and the equivalent emissions caused by your flight: www.atmosfair.de or www.myclimate.ch



No political solution in sight

Climate Killer



Would you like to know more?

- About the climate-damaging impact of air traffic and the negative consequences of climate change on developing countries?
- How you can introduce your "own private emission fee"?
- How much emission is caused by your flight?
- What are attractive alternatives to flying for private and business travel?
- How much it costs to reduce emissions with a comparable warming effect elsewhere?
- Which projects are available to reduce emissions elsewhere?

You will find answers to these questions at
www.atmosfair.de
www.atmosfair.info



Interesting Literature

- European Commission (2003): Air pollution research report 83: Aviation, Atmosphere and Climate (AAC). (www.pa.op.dlr.de/aac/proceedings)
 - Germanwatch: Climate Responsibility Campaign. (Case examples on climate change impacts with focus on developing countries; www.climateresponsibility.org)
 - IPCC (1999): Aviation and the Global Atmosphere. (www.ipcc.ch/pub/reports.htm)
 - Treber, M. (2001): Aviation and Climate Change. (Germanwatch). (www.germanwatch.org/rio/avia0102.htm)
 - Whitelegg, J. (2000): The social, economic and environmental impact of flying. Stockholm Environment Institute. (www.scan-uk.mmu.ac.uk/whitelegg.pdf)
- Further information on aviation and climate change (mainly in German) can be found at www.germanwatch.org

**...unfortunately extremely
bad for the climate!**

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