



for a living planet



Climate Change Fact Sheet



WWF - South Pacific Programme, 2005

The Climate Change **FACTS** are:

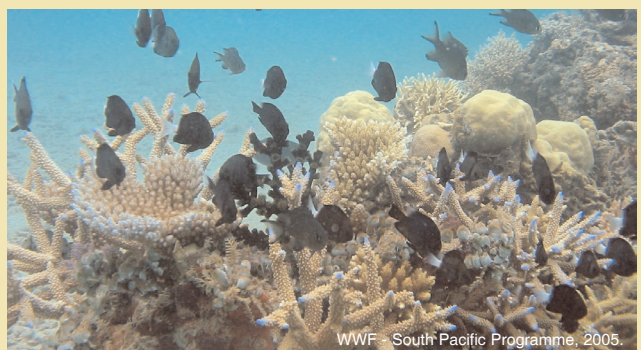
1. Scientific evidence shows that **climate change is already happening** and that most of the warming observed over the last 50 years is caused by human activity¹.
2. Global **temperatures** are expected to **rise** by 1.4 - 5.8° Celsius by 2100. Global temperatures have already risen by 0.6° C above pre-industrial temperatures².
3. Global **sea-levels** are expected to **rise** by 0.09 - 0.88 m by the year 2100³.
4. The island nations of the Pacific are amongst the **lowest emitters** of climate changing gases (and account for less than 1% of global change changing gases) but are amongst the **most vulnerable** to the potential adverse impacts of climate change and sea-level rise. Many **Pacific Islands are already experiencing climate change related impacts**⁴.
5. Pacific Island countries **lack resources** needed to address the impacts of climate change. Their capacity to adapt to climate change is also hindered by low levels of awareness of climate change issues.

1,2,3 & 4 from Intergovernmental Panel on Climate Change, 2001.

How does climate change **IMPACT** our lives in the Pacific?

Climate Change already threatens all key development sectors in the Pacific.

- There will be less land for our use due to **sea level rise**, caused by climate change flooding coastal plains. Low lying atolls are especially at risk.
- There will be less **freshwater** available for our use. Climate change increases the incidence of extreme events such as floods, droughts and cyclone which threaten freshwater supply.
- **Agriculture** will be affected. Coastal plains, where most of our agriculture is based, can be salinised due to sea-level rise and become less productive. Increased natural disasters will damage crops and warmer, wetter climate will favour the breeding of pests.
- Reefs and **Marine Resources** will be affected. Increased ocean temperatures degrade coral reefs through coral bleaching. Some migratory species, such as Tuna, will move to areas where ocean conditions are more suited to their survival.



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- **Disease** prevalence will increase as warmer, wetter conditions favour the breeding of disease carrying insects such as mosquitoes (spreading dengue and malaria) and aquatic pathogens such as giardia.
- **Tourism** will be affected by the increase in natural disasters, biodiversity loss and increased prevalence of disease.
- A less productive resource-base, increases in the severity of **natural disasters** and poor human health will affect our economies.

What is CAUSING Climate Change?

Climate Change, or global warming, is caused by an over supply of **climate changing gases** - which act like a blanket around the earth and trap heat from the sun into the earth's atmosphere.

Humans have significantly increased the amount of climate changing gases in the atmosphere since the 1850's, thickening this blanket around the earth, which has resulted in a **rise in global temperatures**.

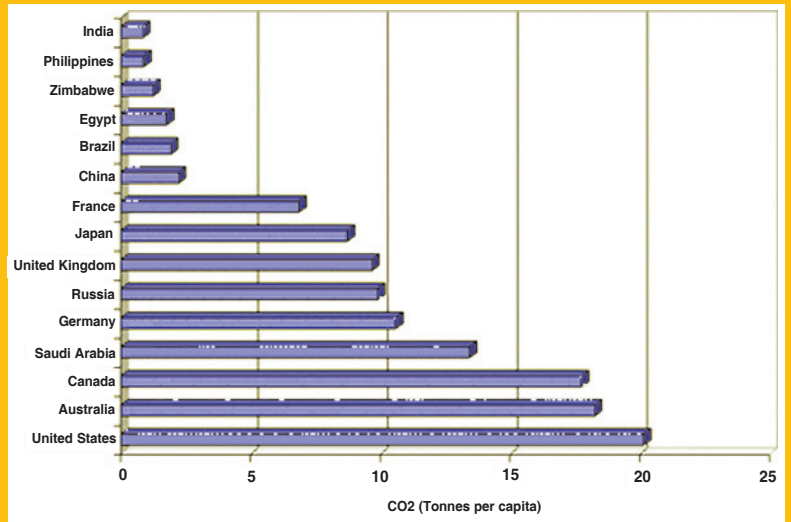
The most significant climate changing gas is Carbon Dioxide (CO₂) which comes from the burning of fossil fuels (oil and coal) for the production of energy or transport. The energy sector is the largest producer of climate changing gases, and is responsible for 60 % of global emissions of climate changing gases⁵. The transportation sector is the second largest emitter (22%), followed by the agricultural sector at 8%⁶.

5 & 6 from http://unfccc.int/files/essential_background/background_publications/htmlpdf/application/pdf/key_ghg_data_web.pdf

WHO is causing climate change?

The United States of America is the largest emitter of climate changing gases, and as a single nation is responsible for 25% of global climate changing gas emissions.

Industrialised countries have much higher emissions of climate changing gases. As a result, they should be responsible for taking the lead in addressing this global threat. In addition to reducing their own emissions, they must also assist less polluting countries such as the Pacific Islands address climate change.



Source: CO2 emissions data for 1998 from Energy Information Administration, US Department of Energy: World Carbon Dioxide Emissions from the Consumption and Flaring of Fossil Fuels, 1990-1999

How can we STOP climate change?

To stop climate change, we must reduce our emissions of climate changing gases that are causing the earth to over heat. This means reducing our use of dirty fossil fuels and making the switch to clean renewable energy sources like solar and wind.

At the political level, this should be done through the Kyoto Protocol, which sets out the first steps for countries to reduce their national climate changing gas emissions.

At the individual level, this means changing the way that each of us uses fossil fuels. We can each make changes to our individual life styles by using energy in a more efficient manner, and making use of public transport schemes, or even walking!

What's good for our health and our wallets is good for the environment, and can help save lives.

You can support WWF's on-going work to address climate change, by signing up as a supporter for our ongoing campaigns, by visiting the website below.



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