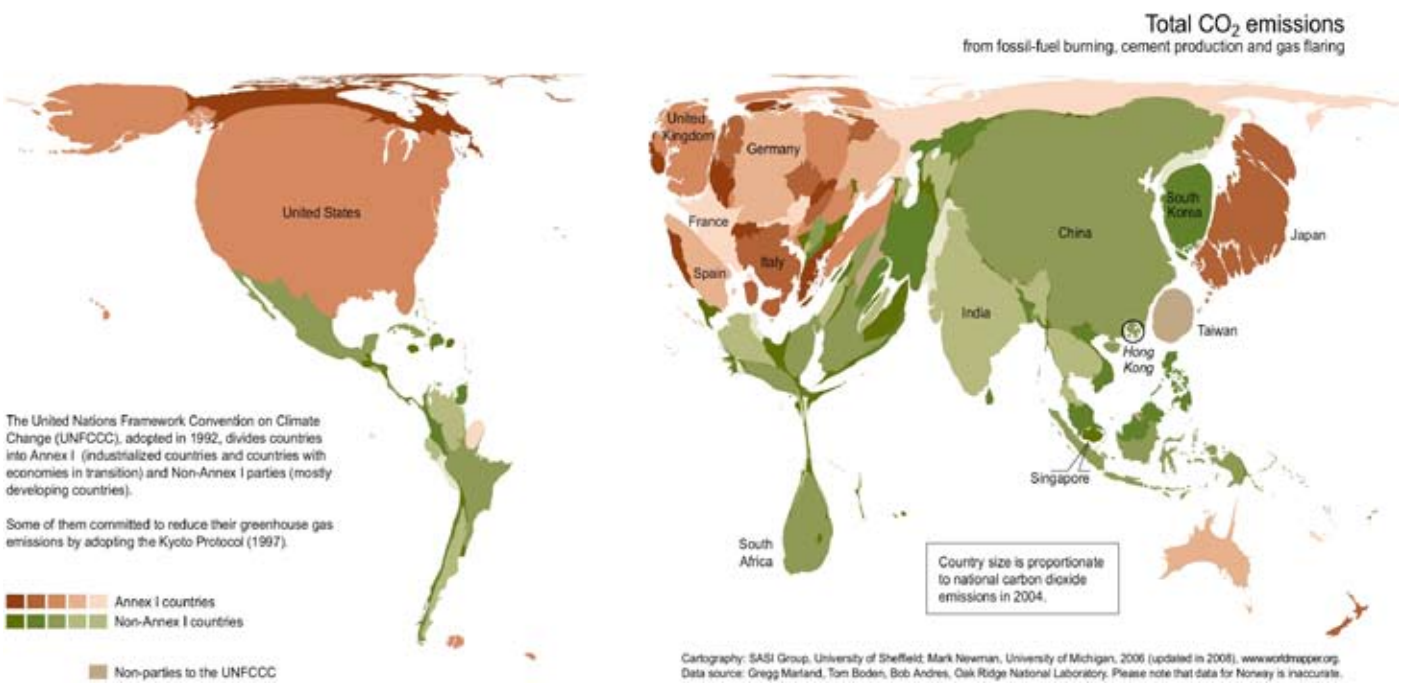
PACIFIC YEAR OF CLIMATE CHANGE 2009

Factsheet

Climate Change Mitigation



UNEP/GRID-Arendal link: http://maps.grida.no/go/graphic/total-co2-emissions-from-fossil-fuel-burning-cement-production-and-gas-flaring

What is Climate Change Mitigation?

The earth's atmosphere is a blanket of gases that traps some of the sun's heat, while letting the rest of the heat escape. The gases that help trap the heat are collectively known as greenhouse gases.

The atmosphere acts like a natural greenhouse and keeps the planet at a constant, warm, liveable temperature.

If enough heat energy was not kept in the Earth's atmosphere, the planet would freeze and life as we know it would not be able to survive. Similarly, if too much heat energy is trapped within the atmosphere, the planet would heat up and make survival of many life-forms impossible.

Human activity over the past 100 years has led to an increase in many of the greenhouse gases and is causing the planet to warm up. This global warming is leading to climate change and threatening the natural environment and people's livelihoods.

The main greenhouse gases (GHGs) are carbon dioxide, methane and nitrous oxide. Several other industrial gases are also known to be GHGs but carbon dioxide is the greatest contributor to climate change.

Increased use of fossil fuels in industry and transport has led to increased carbon dioxide in the atmosphere.

Removal of large tracts of forests has also led to an increase of carbon dioxide since there are fewer trees to take up the gas.

Climate Change Mitigation refers to taking action to reduce the level of greenhouse gases in the atmosphere. Mitigation can involve either reducing the production and emission of these gases, or it can involve enhancing "carbon sinks" such as forests, which absorb carbon dioxide and remove it from the atmosphere.

So what are the Pacific Islands doing to mitigate climate change?

The Pacific region contributes to just 0.03% of the world's greenhouse gases but is amongst the most vulnerable to its effects. Despite this, the Pacific Islands Forum Leaders have been consistent in joining the International Panel on Climate Change (IPCC) and the global community in the call for concrete actions to stabilise the atmospheric concentrations of GHGs.

At the global level, the Pacific is calling for industrialised countries to reduce GHG emissions by 40-45% by 2020, and for developing countries to also significantly reduce their emissions within their capacities and mitigation potential.

The 2009 Regional Energy Meeting encouraged Pacific Island Countries to set voluntary renewable energy and energy efficiency targets.

Some actions already underway in the Pacific Islands are:

• The Fiji Electricity Authority has set itself a target of generating at least 90% of its energy requirements from renewable energy by 2011;

• The Tonga government announced in July 2008 that it has embarked on a major renewable energy campaign with a target of having 50% of its electricity from Renewable Energy sources within three years;

• Samoa's adopted National Energy Policy has a goal of increasing the contribution of renewable energy for energy services and supply by 20% by year 2030;

• The Power Utility at Vanuatu (UNELCO) has set itself a goal of generating 33% of its electricity from renewable energy by 2013;

• Nauru has adopted a National Energy Strategic Action Plan Framework where it has set itself a target of 50% renewable energy by 2015; and

• The Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIGGAREP) is a regional mitigation project utilising renewable energy to reduce GHG emissions from fossil fuels in 11 Pacific Islands Countries by 33% by 2015. For more on this: http://www.sprep.org/climate_change/piggarep.htm

How can we practice mitigation?

Plant trees! Set aside a local reserve to plant trees or replant trees on reserves already established, to enhance carbon sinks.

Light up with energy efficiency. Install lighting like compact fluorescent bulbs which reduces your power consumption dramatically. Turn off unnecessary lights, including your fluorescent lamps.

Buy energy efficient. Look out for the energy rating label when buying your appliances, the higher the star rating the less energy it uses..

Be paint wise, use light coloured paint inside your home. Dark coloured walls absorb light, increasing the amount of light needed.

Go for natural power when you plan building your new home consider renewable energy such as solar power or wind energy as your main power source.

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