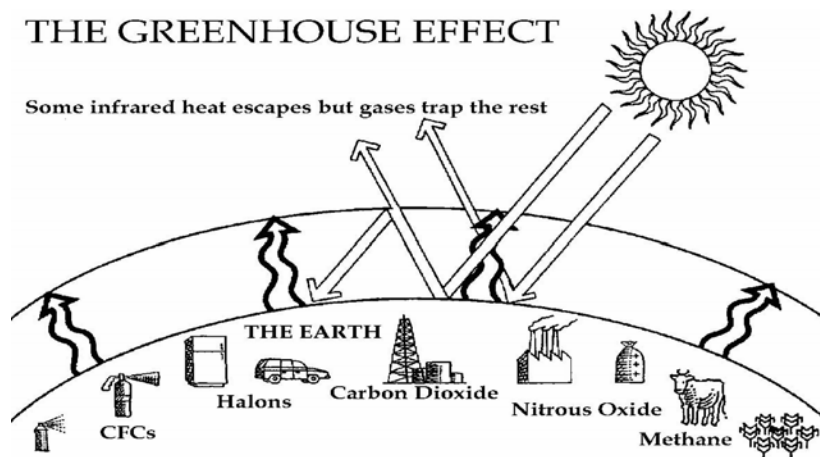


FACT SHEET - CLIMATE CHANGE

What is climate change?

Climate Change is real and is no longer a concept that we might need to worry about later. Forecasts vary, but we do know that our actions TODAY will affect our world of tomorrow. Even though it's a global issue, there are things that we can all do to help.

Climate change, also known as enhanced global warming, is occurring as a result of a build up of greenhouse gases in our atmosphere. Whilst the greenhouse effect is a natural process that traps some heat from the sun to make our planet inhabitable, greenhouse gases, such as carbon dioxide, are being produced in large quantities from human activity. These activities include burning fossil fuels (such as coal, oil and natural gas) to make electricity and to fuel our cars. Too much of these gases are now in the atmosphere and they are trapping too much heat. As a result of climate change, we are likely to experience temperature rises which will affect weather patterns.



EFFECTS:

The CSIRO has predicted the following impacts for the Top End:

- Changes in extreme temperatures with more days reaching over 35°C;
- The average temperature in the NT may rise up to 2.2°C by 2030 and up to 7.2°C by 2070;
- Changes to rainfall patterns, including less rainfall for the Territory;

These predicted impacts may result in:

- Loss of native animals and plants that are unable to adapt to the changes;
- Impacts on our health, such as increased risk of heat stress and mosquito borne diseases;
- Increased losses due to natural disasters;
- Increased insurance premiums;
- and Lifestyle impacts as the arid zone get even hotter, that could mean difficulty keeping skilled workers in the Centre.

See here for the full CSIRO report: <http://www.nt.gov.au/nreta/environment/greenhouse/publications/pdf/ntclimatechange.pdf>

The Intergovernmental Panel on Climate Change (part of the United Nations Environment Program) reported on climate change in 2007, stating:

- 11 of the last 12 years rank in the 12 hottest years on record.
- Hot temperature extremes and heat waves will continue to become more frequent.
- The marked increases in greenhouse gases since 1750 are due primarily to emissions from fossil fuel use, agriculture, and land-use changes.
- Continued greenhouse gas emissions at or above current rates would cause further warming and induce many changes in the global climate system during the 21st century that would very likely be larger than those observed during the 20th century.

With the world's population doubling every 30 years and more and more people gaining access to electricity and cars, there is concern that this problem is going to be exacerbated. Global warming will continue to increase at a greater rate unless the world community can work to bring emissions into check through energy efficiency and renewable energy. Some sectors are promoting nuclear power as a solution to climate change. Independent studies have shown that the difference nuclear power can make globally is very marginal and extremely costly.

Scientists predict that we need to reduce greenhouse gas emissions by 60% - 70% to stabilise the climate.

There is no single greenhouse villain we can point the finger at – everyone needs to do what they can. Since Australians are amongst the highest greenhouse gas emitters per person in the world, we have a role to play through leading by example.

What can we do?

The good news is - there is much that we can do as individuals and most of it is simple and cheap.

Our electricity in Alice Springs comes from turbines run on Natural Gas drawn from the Mereenie gas fields to the west. The power is monitored and the amount generated is adjusted according to the demand being placed on it. As we reduce our demand; we reduce the amount of generation required and, by default, our greenhouse gas emissions. If we continue to grow as a town and increase our energy demands, more turbines will be required to meet that demand and ultimately those costs will be handed on to us, the consumers.

Energy efficiency is being embraced world-wide as the major opportunity for reducing emissions. Both low use appliances and our habits and behaviour have a role to play. Also, renewable energies, such as solar and wind power are options, which will help us locally and globally to move to a more sustainable future.

The burning of fuel in our vehicles and especially airplanes are major contributor to emissions. As we use those vehicles more, the amount of greenhouse gas increases and the greater global demand for fuel is driving prices up. New technologies like hydrogen and electric cars will assist us in lowering emissions.

In and outside of the house, our lifestyle choices have an environmental impact, so DKA COOLmob is aiming to help you make informed decisions about the action you take.