Eight ways YOU can help stop climate change!

There are many simple measures you can introduce to your daily life that will cut greenhouse gas emissions and help stop climate change. Here are a few suggestions:

- **Green Your Commute**
  - Adopt the “1-3-5” green commute: Walk within 1 kilometer, cycle within 3 kilometers, use public transportation within 5 kilometers. You’ll save money and get into better shape!
  - If you can’t car-share, try, and use the smallest, most fuel-efficient, new energy vehicle possible.

- **Save Energy**
  - Change light bulbs to compact fluorescents or LEDs.
  - Unplug computers, TVs and other electronics when not in use.
  - Turn off lights when you leave a room.
  - Insulate your home properly.

- **Reduce Waste**
  - Divert food waste by composting.
  - Reduce, reuse, recycle.
  - Use less disposable products.

- **Use Water Efficiently**
  - Take shorter showers and install low-flow showerheads.
  - Fix leaky faucets and toilets.

- **Support Social and Environmental Issues**
  - Support fair trade products and companies.
  - Support community groups and organizations working towards sustainability.

- **Stay Informed**
  - Follow the latest news about climate change.
  - Visit www.climatechange.gov.uk to get information about climate change.

- **Get Involved**
  - Green strategies in your daily life can have a small impact, but the whole planet is left to deal with climate change.
  - Tell family and friends that energy efficiency is good for their homes, good for their pockets, and good for the environment because it lowers greenhouse gas emissions and air pollution.

What is Climate Change?

It is widely accepted by the international scientific community that the climate is changing as a result of human activities, particularly burning fossil fuels and land clearing. Climate change poses a significant threat to natural systems and human settlements.

Human activities such as burning fossil fuels and land clearing, and intensive agricultural practices release greenhouse gases such as carbon dioxide and methane. These gases trap heat from the sun in our atmosphere, acting like a greenhouse and increasing temperatures. This enhanced greenhouse effect is referred to as global warming. But climate change is more than a warming world. Increasing temperatures are changing many aspects of weather and can cause changes in the amount, type, and seasonal patterns of rain, and the types and frequency of severe weather events such as droughts and floods.
How has the climate changed?

As a consequence of global warming, the world's climate has changed over the last century. Temperatures have increased by 0.7-0.8°C from 1900-2000. There have also been more extreme weather events such as heat waves, heavy rainfalls, and typhoons. Glaciers and ice caps have retreated. Sea levels have risen by 10-20 cm as a result of warmer oceans and melting ice caps and glaciers.

From 1961-2012, temperatures across Yunnan have increased at a rate of 0.25°C every ten years. The trend has been more pronounced since the late 1990s, with 15 warm winters occurring since 1986. Annual rainfall in Yunnan has declined, and the number and frequency of droughts have increased. The years 2009-2011 saw the most severe drought in Yunnan in the last 50 years. These trends of increasing temperatures and changing rainfall patterns are expected to continue in the future. Research conducted by the Yunnan Environmental Protection Department (YEPD) and the Center for Mountain Ecosystem Studies (CMES) has predicted temperature will rise on average between 1.6 to 2.1°C by 2050.

How is climate change affecting our daily lives?

Food

As the climate warms, the air holds more moisture and rainstorms become more intense, damaging crops. Overall precipitation patterns are also changing, bringing more frequent droughts. Warmer temperatures also mean more pests. Insects can better survive the milder winters, and aggressive weeds such as Ageratum adenophorum do much better in warmer conditions than do crop plants.

Health

Wildfires such as the one at Fraser, 2013, will become more common due to climate change.

Fire

Warmer, wetter weather will lead to the spread of tropical disease. Longer pollen seasons will lead to more air-based allergies. Asthma and allergies will continue to rise. Water-borne diseases such as Dengue, malaria, cholera, typhoid could spread.

Water

Increasingly severe outbreaks of the dengue virus (spread by the Yellow Fever Mosquito) in Yunnan and other southern provinces have been linked to warmer, wetter weather and the growth of cities.

Flooding

Increased damage to villages, cities, and roads is occurring due to sudden downpours, storms, flash floods and prolonged droughts. Contamination of water supplies will be increased by floods. Spending on defending towns from river flooding will likely need to increase.

The distribution of ethnic minorities in Yunnan overlaps with many areas of high biodiversity value. These regions with fragile environment are amongst the most vulnerable to the impacts of climate change. The livelihoods of poor minorities rely heavily on land, water, and other natural resources; so they suffer more seriously in extreme weather disasters.

How is climate change affecting biodiversity?

The changing climate is likely to result in impacts on biodiversity across Yunnan as landscapes respond to changes in temperature, precipitation, and seasonality. The latest global climate change modeling result shows a large predicted expansion in the area of the warmer bioclimatic zones, and a corresponding decrease in cold bioclimatic zones. This may cause changes in distribution, propagation time, growth period and increase of extinction rates for plants and animals. Species currently restricted to colder areas at high elevations will be especially at risk, as isolated mountain tops become warmer, species occurring in these areas that are already at the limit of their range could become locally extinct.

Climate change will affect ongoing landscape changes that will in turn impact biodiversity. For example, as temperatures increase, wet terems and tropical rainforests will increasingly fall within climatic zones suitable for rubber plantations. They will therefore be at higher risk of clearing for plantation development. Improving our understanding of climate change impact on biodiversity requires allocation of resources to implementing on conservation strategies and policies are to be effective within the context of a rapidly changing climate.