

## FOLLOW UP ON COP 17



The world, countries and municipalities had converged at Durban in December 2011 on the International COP17 conference of which Greater Giyani participated, the municipality as a sphere of government that directly interact with communities is expected to make clear commitments and to take practical steps to assist in the fight against the new phenomenon called global warming which threatens the existence of human kind and the environment in general, this brief notes serves to assist our communities to understand this new phenomenon.

### 1. What is global warming?

Global warming is the observed and projected increases in the average temperature of Earth's atmosphere and oceans. The Earth's average temperature rose about 0.6° Celsius in the 20th century. This unprecedented temperature rises are dominant factor in the climate change phenomena

### 2. Causes of global warming

Almost 100% of the observed temperature increase over the last 50 years has been due to the increase in the atmosphere of greenhouse gas concentrations such as carbon dioxide, methane and ozone. Greenhouse gases are those gases that contribute to the greenhouse effect. The largest contributing source of greenhouse gas is the burning of fossil fuels leading to the emission of carbon dioxide.

#### The greenhouse effect

When sunlight reaches Earth's surface some is absorbed and warms the earth and most of the rest is radiated back to the atmosphere at a longer wavelength than the sun light. Some of these longer wavelengths are absorbed by greenhouse gases in the atmosphere before they are lost to space. The absorption of this long-wave radiant energy warms the atmosphere. These greenhouse gases act like a mirror and reflect back to the Earth some of the heat energy which would otherwise be lost to space. The reflecting back of heat energy by the atmosphere is called the "greenhouse effect".

### 3. Effects of global warming

The primary effects of global warming are increase in earth and atmospheric temperatures and rise of sea levels. These primary effects have secondary effects such as disastrous occurrences such as extreme weather patterns, droughts, floods, heat waves and tornadoes.

#### 4. What can be done to combat global warming?

Greenhouse gases such as carbon dioxide and methane accumulate in the atmosphere and trap heat that normally would exit into outer space. So the only thing we can do to stop or slow Global Warming is to **reduce the greenhouse gases**. In order to achieve this, certain things must happen:

##### 4.1 Governments have to act and

- Move from fossil-fueled electricity generation to renewable energy generation.
- Educate and encourage people to use less electricity and oil, at least until all our power is renewable. One way this might be done is to force coal power stations to pay the real cost of their carbon emissions. This might force up the price of power, but the tax could be used to give money back to the consumers. The people could use the money to pay their higher electricity bills, or they could use less electricity and keep the money for other things.
- Grow trees and forests, so that the huge carbon sinks that used to cover the earth start growing back and the leaves start pulling carbon dioxide back out of the atmosphere.
- Put incentives in place so people will use energy efficient transport. This means walking, bicycles, public transport of all kinds, and private cars run on renewable energy (solar or hydroelectricity, or hydrogen cells).

##### 4.2 Businesses have to act.

They have to stop their polluting practices and turn green. They may do this because it's the right thing to do, or they may do this to avoid paying carbon taxes for their crimes. But they have to do it.

##### 4.3 We all have to act.

- If everyone turned their TV off at the wall instead of with a remote control, or even at the set, it would mean that thousands of power stations across the world would NOT have to be built. It is estimated that 10% of the power in an average house is this "vampire" current that silently sucks out the electricity from "stand-by" equipment even when the machines are turned off.
- If we all wore warmer clothes in winter and didn't heat our homes so much, and the opposite in summer, if we stopped using clothes dryers but used the wind and the sun like our grandparents did, if we hopped on a bicycle to go to the corner store instead of getting into the car, all these things will play a part in reducing the long term effects of global warming.

##### 4.4 We can try to prevent global warming by saving energy. Some quick does to save electricity are:

- Turn off the lights when not in use.
- Try not to use air conditioning very often. Eat or drink something cold instead.
- In the winter, try not to use the heater very often. Have some soup or something hot.

- Do not watch television too often. Watch it in moderation.
- Do quick five-minute showers.
- Only use the computer for work
- Buy energy saving appliances such as energy efficient light bulbs, and things like kettles etc. that aren't too expensive. The energy efficient bit means less heat is lost unnecessarily.
- People should try to recycle more in order to reduce the requirement for the constant production of new materials
- The use of public transport or even bicycles/walking/carpooling instead of everybody traveling in separate cars
- By carpooling you will send less greenhouse gasses into the air.
- To minimizing global warming you could drive your car less and take an alternative like walking or riding a push bike as much as possible as well as
- Converting to solar power instead of electricity. You are making a difference.
- You could tax automotive fuel, and use the money to fund free urban public transportation.
- Electric powered cars will make less carbon dioxide going into the atmosphere, and also, this way we can save oil.

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