

# Ten key questions on climate change

Climate change is a political and scientific conundrum. From the denialism of the George Bush era to the neo-liberal imperatives of carbon trading, the subject is confusing, and an activist agenda is sometimes a navigational minefield. David Fig helps *Amandla!* to answer 10 questions on climate change.



## 01. | Why is climate change on the political agenda?

The member states of the United Nations are meeting in Copenhagen in December to set a new agenda for global commitment to address the problems of climate change. The world is concerned that should temperatures rise by an average of 2 degrees, or should carbon concentrations in the atmosphere not be reduced to around 350 parts per million, then we would reach a tipping point. Beyond this, the changes will be too difficult to reverse, and our generation will leave an unfortunate legacy of planetary destruction. Climate change goes beyond national boundaries, so it is one issue on which the whole world has to agree to take action.

## 02. | What is causing the climate to change?

Apart from natural cycles, human activities are causing an intensification of climate change as never before. It began with the Industrial Revolution in

the eighteenth century, when humans started to burn coal on a large scale as a means of generating power for industry. This releases carbon dioxide gas into the atmosphere, and when concentrations are too high, it prevents the rays of the sun from bouncing back into space. Instead, these rays bounce back to earth and warm up the planet. The carbon in the atmosphere acts like a greenhouse to trap the heat near the earth's surface. A number of other gases perform the same function. These include methane (from cattle waste, rice paddies, coal mines and landfills) and nitrous oxides (from car exhaust). Together they are known as the greenhouse gases.

## 03. | What is so bad about a warmer planet?

In some areas the planet will heat up and in other areas it will cool down. The changed temperatures will lead to the extinction of many fragile species of plants and animals, some of which are useful to human survival. The higher temperatures will also lead

# 35 000

estimated deaths in a  
**heatwave** in Europe  
in 2003

# 80%

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reductions in other countries where there were no targets, and count these as part of their own targets. Yet even reaching the Kyoto targets has proven problematic. The USA, under George W Bush, refused to implement Kyoto. It took Russia until 2005 to join, and Kyoto only came into effect after that. Countries are not all likely to meet their 2012 targets, and Canada has already stated that it will default.

## **05. | What is the significance of the Copenhagen meeting?**

Each year, the signatories of the Framework Convention and of the Kyoto Protocol come together to assess progress and to plan the future. The big question currently is what will happen after 2012 when Kyoto runs out. The purpose of the Copenhagen meeting is to design an agenda for the world to take up in fighting climate change after 2012. The problem is that the nations of the world cannot agree on a number of issues. Some countries or groups of countries want to set greater targets, and make them apply to more countries. Some small island states feel that the targets that may be set are insufficient to protect them. Other countries like China and India are arguing that quantifiable targets are inappropriate as a way forward. Some oil-rich countries are arguing that they should receive huge compensation to reduce their oil production. Poorer countries are arguing that the richer ones need to fund measures they need to take to deal with climate change, since they did not cause the problem. It looks very unlikely that the meeting at Copenhagen can produce an effective and radical plan to address climate change in a unified way.

## **06. | What is Africa's position?**

At Copenhagen the African group is putting forward a single position. This demands that Africa is compensated for suffering the effects of climate change, for which it has not been responsible. It is calling on the industrialised nations to make greater efforts to support an Adaptation Fund, which would finance the measures and technologies necessary for Africa to adapt to climate change. At preliminary meetings in Barcelona, in the run up to Copenhagen, the African delegations left the meetings in protest that the industrialised countries lacked full commitment to their demands.

## **07. | What is South Africa's position?**

At national level, South Africa remains without a strategic plan for dealing with climate change. This is despite many consultative meetings, of which the last big one was held in March 2009. It was

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to greater food insecurity as certain agricultural activities will be curbed by the changes in climate. Already farmers in the Western Cape are having difficulties growing wheat for staple bread consumption. Deserts will spread more widely. Ice caps will melt, leading to higher sea levels. Since around 80% of our major settlements are on the coast, there will be increased risks of flooding. Low-lying states like the Netherlands, Mozambique and some small islands will be most vulnerable. There will be more extreme weather events like hurricanes and typhoons. We have begun to see this with the destruction of New Orleans, the floods in Mozambique, and most recently the series of typhoons in the Philippines. There will also be more widespread water- and vector-borne diseases like cholera and malaria. In short, survival of humans, animals and plants will become more difficult. It is necessary for urgent action to be taken to avoid the tipping point, beyond which we will be unable to do much to reverse the ill-effects of climate change.

## **04. | What has been done so far to deal with the problem?**

Climate change knows no boundaries, and therefore the world has to deal with the problem globally as well as locally. For the first time, countries came together in 1992 in Rio de Janeiro and put together the UN Framework Convention on Climate Change. This signalled a broad commitment but did not contain the details. So in 1997, the Kyoto Protocol was signed. This set reduction targets for greenhouse gases in the most industrialised countries. The developing countries, including South Africa, were excused from setting targets. However, in order to stabilise climate, scientists are saying that we need to reduce emissions of greenhouse gases by something like 70% below the level they were at in 1990. In the Kyoto Protocol, the targets set were on average between 5% and 6%, to be fulfilled by 2012. This was disappointing, but seen as the beginning of a process. To assist them to reach their targets, the industrialised countries were also permitted to finance

stressed that South Africa would only develop its strategy after knowing the outcome of the Copenhagen conference. This seems rather opportunistic. Instead of providing a proactive plan, we will wait and see. Meanwhile, the general position is that we will allow our emissions to rise until around 2030 before we reach a "plateau" of no further increases, and then only begin to reduce our emissions after 2035. This position was contained in President Motlanthe's speech at the meeting last March. Meanwhile South Africa is going ahead with the opening of giant new or refurbished coal-fired power stations. Efforts to impose a carbon tax on new vehicles will be put in the shade in comparison with the emissions likely to arise from the power stations. Our investment as a country in renewal energy has so far been derisory. Instead, we are over-investing in nuclear. The nuclear industry makes claims to be a low-carbon source of energy, but this does not take the whole of the fuel cycle into account, nor will there ever be sufficient nuclear power generated in South Africa to bring down carbon emissions significantly.

At Copenhagen we are linking with the Africa position, but unlike the rest of the continent, we are a large perpetrator of greenhouse emissions. Therefore we cannot claim only to be a victim of the process. We need to take the lead in making commitments to emissions reductions, and not wait until 2050.

## 08. | Why should countries of the South reduce emissions?

The least industrialised countries should not be called on to reduce their already small emissions. However, what of countries that are already very industrialised, like China, India, Brazil or South Africa? By escaping commitments under Kyoto, these countries were allowed to extend their emissions. It was argued that these countries are in the process of development, and their peoples have not reached the standard of living of those in the industrialised countries. The Convention and the Protocol acknowledged that they should be allowed space for development, even if this means burning more greenhouse gases. However, if we take the case of China, which recently exceeded the USA as an emitter, the question remains as to whether it should continue to be given a "free ride" without any expectations of reduction of its greenhouse gas emissions. In the post-2012 commitment period, should these countries continue to be exempted from targets? India is teaming up with China in the world talks to oppose the imposition of targets on them. South Africa is similarly reluctant to reduce emissions. Since these countries are all in the top 20 emitters, can their free-riding status legitimately be challenged by countries which are

being compelled to reduce? Or should the North be acknowledging its imperial past, and so accept that the emergent economies should not be penalised for industrialising much later than they did.

## 09. | What should our demands be?

Action has to be taken at local, national and international levels. We need to ensure that our workplaces, communities, and municipalities are made aware of the problems and develop strategies to deal with them. Similarly, at national level we should be demanding that government implement a strategic plan to reduce emissions. There should be much greater investment in renewable energy, which would create many jobs. We should be demanding safe, affordable public transport systems and making pledges to use private vehicles less. We should be involved in programmes to reduce and save electricity use, combined with attention to smart, better-insulated buildings. We should be climate-proofing our agriculture and water resources in order to guarantee food security and sovereignty. We also need to demand that all forms of industry reduce their carbon footprint through the introduction of cleaner technologies and zero-waste strategies. At global level we have to demand that the biggest polluters make the greatest commitments to reduce emissions and that countries that are victims of climate change be compensated with finance, training and technology so that they can overcome the worst effects of climate change.

## 10. | What can activists do?

Keep informed of the latest developments. Develop a knowledge base that can serve to educate more people. Join activist organisations like Climate Justice Now! South Africa or the Durban Group in order to participate in climate-related actions and strategies. Challenge retrograde decisions and policies of national government and Eskom. Insist that companies, municipalities and institutions start to act. Take personal actions at household and local levels in order to demonstrate that we can all make a difference. Examine your personal carbon footprint and find ways to reduce it. This can occur through using less electricity and fossil fuels, repairing and recycling more goods, making fewer journeys, planting more trees, or eating more local foods. We can all make a difference. Let us do so while we still can.

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Photo by Greenpeace

*We are told to turn off our lights for an hour, fly less, buy organic food from Woolworths, drive less, buy an electric car, get solar heaters for our swimming pools, recycle our plastic, turn off air conditioners, and put insulation in ceilings. Imagine for what this message sends to the residents of a back room shack in Alexandra township in Johannesburg, or an overcrowded and decaying flat in the urban maze of Hillbrow. **Tristen Taylor** wades through the promises of the upcoming Climate Change Conference in Copenhagen in December.*

**H**ORDES OF INTERESTED parties will descend upon Copenhagen in December 2009 for what has been billed the best (and last) chance to fix the climate, to reduce world's emissions and save the planet from the worst effects of global warming. Good luck to them, for the science is looking grim.