

Is carbon dioxide really the monster driving climate change? If not, maybe we should prepare for a colder world, writes **Willie Soon**

Hot air

In my 20-plus years of studying carbon dioxide and global warming, I have found that hypothetical scares often come before any realities or factual presentations. Horror stories about rising seas inundating land, cities and wildlife, super typhoons and hurricanes, and epic "mega droughts" lasting a decade or longer are all promoted as devastating results of global warming caused by the rising levels of carbon dioxide, according to reports and scientists associated with the UN Intergovernmental Panel on Climate Change (IPCC).

But will any of these scary scenarios about the carbon dioxide monster prove true for Hong Kong?

My recent seminar at the University of Hong Kong's Department of Earth Sciences offered this simple answer: No. Objective science informs us that the so-called "consensus viewpoints" offered by the IPCC – about man-made carbon dioxide being the dominant factor in climate change – is primarily a political conclusion, and not likely a scientifically accurate one.

The natural and human history of Hong Kong was captured by former British foreign secretary Lord Palmerston around 1841. He described the area as "a barren

the media's, IPCC's and political establishment's unwillingness to address the real science only leads to spurious claims that "the science is settled".

If global temperatures cease to rise, when they are supposedly affected by rapidly rising atmospheric carbon dioxide concentrations, then something more important than carbon dioxide must be driving climate change.

This is also why many peer-reviewed papers on past climatic records (as exemplified by the work of professors Zhonghui Liu and Jason Ali at HKU's Department of Earth Sciences) tell us convincingly that weather and climate varied naturally in the past and will probably do so in the future, without any ties to atmospheric carbon dioxide levels.

In recent years, the world's attention has indeed been drawn to the reality and danger of changing climate. Scientists well understand that climatic records comprise alternating periods of warming and cooling all over our earth. Yet, we have rarely considered how modern civilisation would best deal with the challenges of an emerging cooling trend.

There is no excuse for this neglect. Our knowledge about centuries of climate changes clearly indicates that significant cooling can happen on a time frame of a few decades. Several natural drivers of climate have been enumerated that could drive cooling on these time frames and, today, global climate observations seem to be on a razor's edge between indications of warming and harbingers of cooling.

Thomas Jefferson once remarked: "I have no doubt but that cold is the source of more suffering to all animal nature than hunger, thirst, sickness and all the other pains of life and death itself put together." Closer to home, the transition from the Ming to Qing dynasty, a chaotic time owing to crop failures and periods of civil unrest, was likely to be related to a cooling climate.

As geographer and historian David Zhang and his HKU colleagues recently noted, "during cold phases, China suffered more often from frequent wars, population decline and dynastic change".

Another study of the 1,000-year history of typhoon landfalls in Guangdong, by climate scientists from Chinese University of Hong Kong and Louisiana State University, tells us that the two periods of 1660-1680 and 1850-1880 saw the most devastating typhoons.

It is not surprising to find that these two most active typhoon periods also correspond to the coldest and driest periods in northern and central China, as it is often the relatively colder, dryer times that cause the strongest contrasting meteorological conditions in the land, ocean and atmosphere, leading to frequent

and damaging typhoons. Therefore, hypothetical scares proposed by global warming scenarios caused by carbon dioxide must raise more serious questions.

What if Hong Kong's climate turns cold within the next 100 years?

How would the proposed 33 per cent carbon dioxide emissions reduction by 2020 benefit Hong Kong citizens, if it results in soaring energy costs but has no effect on climate?

Why should anyone continue to blindly demonise a life-supporting molecule: carbon dioxide?

Willie Soon is an astrophysicist and geoscientist at the Harvard-Smithsonian Centre for Astrophysics. All views are strictly based on his own scientific research and conclusions



Research on climatic records tells us that weather varied naturally in the past, without ties to carbon dioxide levels

island with hardly a house upon it!" That was of course explainable by the massive tree-cutting that began during the Song dynasty a millennium ago. It explains why the history of land use changes must surely be a decisive factor in determining the recorded evolution of meteorological and climatic conditions in Hong Kong, before urban greenhouse effects could have played any role.

There is another reason to support a minimal climatic role from atmospheric carbon dioxide. If carbon dioxide is the dominant driver of temperature, why has warming ceased over at least the past decade? Carbon dioxide levels have risen steadily, and yet average planetary temperatures have been stable or even declining since 1995.

Extremist views serve only to increase public panic about climate change – and

Voices: Hong Kong

Tsang should go out with a bang, not a whimper

Lau Nai-keung

Hong Kong is facing mounting social dissatisfaction, but we have a government whose term will expire in 18 months' time. So, the lame duck has a wide stream in front of it, and it simply does not have the capability and resolve to overcome it.

We know that not every acute social problem can be completely resolved by the outgoing administration, because conventional short-term measures cannot help, and long-term solutions will have to wait for the next government.

We have to give credit to Chief Executive Donald Tsang Yam-kuen, who courageously refuses to admit a fait accompli, as he keeps spreading the message that he will deal with these social issues, now that he has managed to push through constitutional development.

In particular, he has raised expectations in the community after being seen to seek advice on how to tackle housing and elderly problems in preparation for his policy address next month.

This is not the time to raise any more expectations that his administration cannot fulfil. Doing so will only backfire on Tsang.

Instead, he should try to manage expectations to soften the issues and delay any blow-up until at least after his term ends. He should candidly lay out the problems and admit the causes, discuss the possible solutions and take some remedial action.

This would show that, as chief executive, he was at least in tune

with reality. This appears to be the only logical thing for him to do for the rest of his term, and most people would understand.

For those who choose not to understand, and whose interest lies in creating more trouble, simple expectation management is not enough. There are a few things the Tsang administration can and should do.

The most obvious is to take remedial action. Indeed, the Tsang

Tsang ought to do something that would visibly improve people's welfare, overnight

administration has been trying hard in areas such as housing, the West Kowloon cultural development, and education – with varying degrees of success.

On the whole, the results have not been very good because the appetite of troublemakers has been whetted, and they know there is no risk in rocking the boat.

Another area is to take a quick and soothing response to sudden events; something the administration has already proved quite good at. A remarkable example is Tsang's handling of the Manila hostage killings, which earned him several points in opinion polls.

From now on, the administration will have to be extra sensitive about everything happening around us

and make sure that all possible problems are nipped in the bud.

While the government cannot make long-term commitments, especially policy shifts that would involve recurrent expenditure, it has all the administrative power it needs to allocate a big sum to certain projects.

It ought to do something that would visibly improve people's general welfare, overnight. For example, it could set up a HK\$10 billion fund for the elderly. People would love the idea, and politicians would not dare to object for fear of losing votes.

Alternatively, the government could leave a lasting legacy by buying back the Eastern and Western cross-harbour tunnels, and unify tolls at an acceptable level.

Such strategies, if properly implemented, would give us a relatively safe and smooth passage to the next administration.

That will be followed by a short political honeymoon while people wait to see what the next chief executive can pull out of the hat. Maybe that would be enough to get us out of trouble.

Lau Nai-keung is a member of the Basic Law Committee of the NPC Standing Committee, and also a member of the Commission on Strategic Development

Contact us Agree or disagree with the opinions on this page? Write to us at letters@scmp.com If you have an idea for an opinion article, e-mail it to oped@scmp.com

Voices: Medicine

Healthy first steps to affordable drugs

Sumi Dhanarajan

It has been a challenging decade for the pharmaceutical industry. With patents expiring in high numbers, new-product pipelines drying up and intensifying competition from generics, branded pharmaceuticals have been hemorrhaging value.

At the same time, traditional markets are becoming saturated. Stark realities in industrialised countries – such as the impact of ageing populations on health care – are leading governments to adopt regulatory regimes that demand more economical, value-based and transparent drug pricing.

Under these circumstances, developing countries present a viable market. A recent study expects sales in 17 "pharmerging" countries – including Indonesia, India and Pakistan – to expand by US\$90 billion from last year to 2013.

But, in many emerging economies, a large proportion of the population is poor, and health care is financed largely out of pocket – up to 60 per cent in Asia.

Philanthropic approaches have achieved little systemic change. Drug donations by companies have been criticised for being mostly unsustainable. Donated medicines can be unpredictable, and they also undermine market competition. Price discounts have been more effective, though their effect is limited by their focus on specific, high-profile diseases and least-developed countries.

Advocates of improved access to medicines have made three demands of the pharmaceutical industry: ● Transparent pricing addressing the challenge of affordability; ● Investment in research and

development that is relevant to the diseases affecting developing countries, and in medicines suitable for resource-poor contexts; and

● A flexible approach to intellectual property rights, in recognition of the role that generics play in vastly reducing medicine prices.

Leading companies are starting to understand how integrating these concerns into core business practices may hold the answer to sustainable, long-term profitability in emerging markets.

At the end of 2008, one company attempted to beat a new path. The chief executive of GlaxoSmithKline unveiled a plan that included a commitment to cap prices for patented medicines in poor countries at 25 per cent of the price in the developed world. Further, it proposed the establishment of a patent pool for neglected tropical diseases and donated to it 13,500 compounds for malaria vaccines.

Others are following suit. Sanofi-Aventis recently said it would halve the price of its diabetes drug, Lantus, and cancer treatment, Taxotere, in Indonesia and the Philippines. The Japanese firm Eisai dropped its price for Aricept, an Alzheimer's treatment, in six Asian countries.

The jury is still out on whether these new approaches deliver systemic change, and whether companies are adopting a "serve" rather than "capture" market strategy, but at least the issue of access to medicines is no longer being viewed at arm's length.

Sumi Dhanarajan is a consultant to the Public Roles of the Private Sector programme at the Centre on Asia and Globalisation, Lee Kuan Yew School of Public Policy in Singapore. Copyright: Project Syndicate

Shalini Mahtani

Boardroom blitz

Fifty per cent of Hong Kong's workforce was female in 2008, up from 46 per cent in 1998. Women are also increasingly taking on senior roles, with 29 per cent in manager and administrator positions in 2008, up from 22 per cent a decade earlier. Women also outnumber their male peers in higher education, taking up 54 per cent of grants funded by the University Grants Committee in Hong Kong.

These trends are positive – more women in the workforce, management and higher education, translates into more female consumers and investors in Hong Kong than ever before.

In this context, focusing on the interests, needs and priorities of women is clearly critical. Consider, first, the workplace. Shortage of talent is a constant mantra in the corporate world. Yet many companies are failing to capitalise and nurture the talents and skills of their female workforce. If they want to attract the best, they would be wise to focus on the lack of workplace flexibility and opportunities for women.

Then, they should consider the fact that empowered women are also consumers; they make purchasing decisions every day. Companies that ignore the "power of the purse" risk losing out on a huge percentage of the market. And, finally, the listed companies in Hong Kong should remember that women are investors, too; they are increasingly making their voices heard.

Because women make up a critical stakeholder group representing staff, consumers and investors, it is imperative to include their voice in corporate strategic decision-making. This means including women with the right skills on the boards of companies. This should be common sense.

Yet, according to a report by Community Business published last December, women hold only 9 per cent of all directorships in the 42 leading companies listed on the Hang Seng Index. And 33 per cent of these companies have no women on their boards at all.

It would appear that Hong Kong companies are not concerned about gender diversity within their boards, according to interviews with female board directors conducted by Community Business.

Women are also being overlooked for positions on the board because companies do not know where to find this talent pool. Within Hong Kong, men tend to pick fellow men for board positions, using personal networks, from which women are generally excluded. Women may choose to leave the workforce at a senior level because they have to care for elderly parents, in-laws or children.

Regardless of these factors, the fundamental problem is that businesses do not see the benefit of gender diversity on their boards.

Greater diversity of thought is clearly good for business. According to a 2008 study of Fortune 500 companies, more women on the board signified a broader and deeper talent pool, led to a greater proportion of female corporate officers and resulted in a better financial performance.

Hong Kong companies need to show much more commitment to gender diversity on their boards. One way to achieve this would be to make the nomination process as inclusive as possible; nomination committees could be required to consider both male and female candidates with the right skills.

According to international research, for companies to really benefit from gender diversity on their boards, women should make up at least 15 per cent of members. At this point, women need not be "fearful" of being on the board, but can gain strength in numbers. Otherwise, there is a danger that a lone woman board member will assimilate with her male peers, negating some of the effects of diversity.

Hong Kong's leading companies understand business. Let's hope that they can also grasp in time the link between gender diversity – particularly at the board level – and corporate success.

Shalini Mahtani is founder and adviser of Community Business. "Women on Boards: Hang Seng Index 2009" can be found on www.communitybusiness.org. This article is part of a monthly series on women and gender issues, developed in collaboration with The Women's Foundation

Voices: Development

Human rights are key to achieving goals

Saïli Shetty

Hawa went into labour in a rural village in the Koinadugu district in northern Sierra Leone. She went to the local health clinic to give birth, but there were serious complications. The local health worker advised her to go to Kabala hospital, a little more than 16 kilometres away, where more advanced care was available.

But it was up to Hawa to find her way there. Her family began collecting money to pay for transport and looking for a means to get her to the hospital. But no car could be found. Hawa died the next morning. Her twins were stillborn.

Hawa's story is all too familiar in Sierra Leone, a country with one of the highest maternal mortality rates in the world.

Like the other members of the United Nations, Sierra Leone committed to improving maternal health as one of its Millennium Development Goals in 2000.

But, a decade on, the fate of the goals is in doubt. The UN has issued a clear warning that many of the goals will not be met in time unless efforts are radically ramped up.

Amnesty International's work over the years has shown how discrimination and exclusion can often cause or exacerbate many of the problems the goals seek to address. In rich countries as well as developing ones, vulnerable people on the fringes of society are frequently subjected to violations of their right to adequate housing, health, water, sanitation and education, among others.

Some countries have adopted targets more ambitious than the ones proposed by the development goals. For example, Latin American

and the Caribbean countries have expanded their commitments on education to include secondary education. In Africa and South Asia, Kenya, South Africa and Sri Lanka adopted targets stronger than the goals for access to water and sanitation. Peru has taken steps to address health barriers for poorer women and Nepal has explored improving maternal health care.

These countries have shown that it is possible to adapt the goals to address some of their most pressing needs and to bolster the rights of some of their most vulnerable people. The rest of the world should do the same.

We have an opportunity to ensure that the political momentum around the goals can be used as a catalyst to bring about deep and long-term change.

But this can be achieved only if world leaders make a commitment at next week's summit on the goals to uphold the human rights of those who need the greatest support. Discrimination against women and exclusion of the marginalised must be addressed in all efforts to meet the goals, if they are to be effective.

To achieve this, all governments should make an honest assessment of their progress. They should work to end discrimination and promote equality and participation, ensuring that progress towards the goals is inclusive.

Finally, they should remember that the Millennium Declaration – from which the goals are drawn – promised to strive for the protection and promotion of all human rights, civil, cultural, economic, social and political rights, for all.

Saïli Shetty is the secretary general of Amnesty International