

# Framework for a new global agreement on climate change

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**Climate change is a complex, long term problem, two centuries in the making. There are few human activities that do not contribute to it and as such, the scale of response needed for an ultimate solution is so large that widespread, collective action is essential. The Global Leadership for Climate Action, facilitated by Mohamed El-Ashry, was set up to mobilise political action and offer a framework for collective action. The framework and its recommendations for mitigation and adaptation policies, technological development, finance and global collaboration are discussed here.**

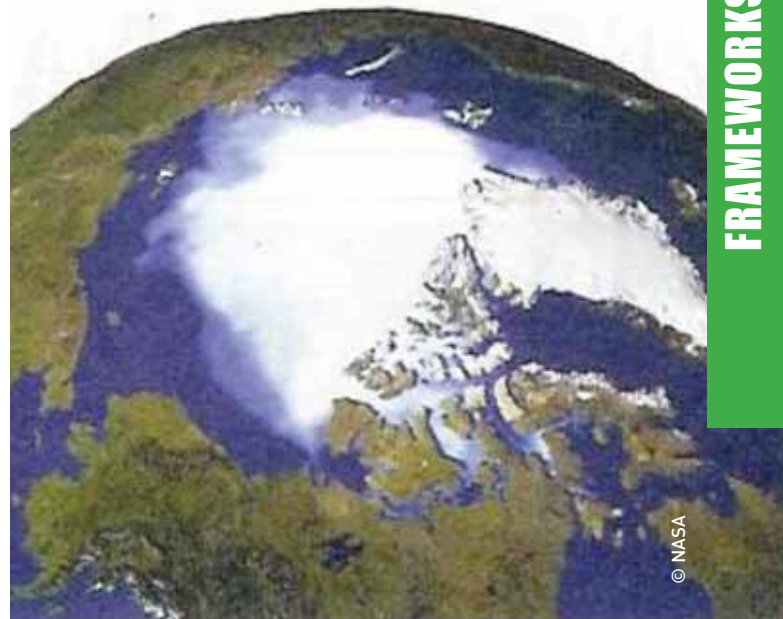
## INTRODUCTION

Scientists believe that a temperature rise above 2°-2.5°C risks serious and intolerable impacts. With rising temperatures, the Intergovernmental Panel on Climate Change (IPCC) predicts that frequency of heat waves, droughts, and heavy rainfall events will very likely increase, affecting agriculture, forests, water resources, industry, human health and settlements. Developing countries, where greater poverty and vulnerability limit the capacity to act, will be the most seriously harmed, particularly their poorer segments.

Avoiding such a future requires global greenhouse gas (GHG) emissions to peak in the next 10-15 years, followed by substantial reductions of at least 60 per cent by 2050 compared to 1990. This is a formidable task requiring unprecedented international cooperation and collective action. There is now a convergence of science, technology, economics, and finance to guide collective international action on climate change, but the window of opportunity for staying within an acceptable range of atmospheric GHGs (450-550 parts per million (ppm)) is rapidly closing, and an agreement to begin international negotiations has been elusive.



Satellite images from NASA show sea ice changes in the Arctic from 1970 (above) and 2003 (below).



## GLOBAL LEADERSHIP FOR CLIMATE ACTION

The Global Leadership for Climate Action (GLCA) was established in January 2006 to address two objectives: to mobilise political will and invigorate negotiations towards a post-2012 agreement, and to develop a framework for such an agreement.

The GLCA is a collaborative effort of the Club of Madrid and the UN Foundation consisting of 25 members from 20 different countries: 13 former heads of state and government and 12 leaders from business, intergovernmental organisations, and civil society. In September 2007, the GLCA agreed on a framework for a post-2012 agreement on climate change. The following highlights this framework and its recommendations.

## COMPREHENSIVE AGREEMENT

Any new global climate change agreement must be comprehensive and negotiated under the auspices of UNFCCC, including all countries, sectors, sources and sinks, and mitigation as well as adaptation. A comprehensive emissions-based agreement sends a clear signal to the market and offers countries the flexibility to implement emissions reduction strategies most appropriate to their national circumstances. Smaller, targeted agreements, eg on industrial sectors, energy efficiency, technology cooperation, offer the potential of early action by countries that are not ready to accept emissions limits and should be encouraged. GLCA proposes four interconnected pathways for future negotiations:

- ▶ Mitigation targets, timetables, and market-based mechanisms.
- ▶ Adaptation.
- ▶ Technology development and cooperation.
- ▶ Finance.

## MITIGATION – TARGETS AND TIMETABLES

A new agreement will be successful only if all participating countries perceive it to be equitable. Requiring all countries to achieve the same percentage reduction in emissions in the next commitment period would be unfair.

Developed countries should take the lead in global emissions reduction, given their historic responsibility and capability to act.

### GLCA recommends:

All countries should commit to reduce global emissions collectively by at least 60 per cent below the 1990 level by 2050.

Even an 80 per cent reduction of GHG emissions in all developed countries by 2050 would not avoid the most adverse impacts without emissions reductions by developing countries. But not all developing countries are alike. Some are rapidly industrialising and some are least developed. Their engagement should be differentiated by their responsibilities and capabilities.

### GLCA recommends:

As a first step, developed countries should reduce their collective emissions by 30 per cent by 2020; rapidly industrialising countries should commit to reduce their energy intensity by 30 per cent and agree to emissions reduction targets after 2020. Other developing countries should commit to energy intensity targets differentiated by their responsibilities and capabilities.

## Targeted agreements on energy efficiency and renewable energy

Energy and climate security are intertwined and should be addressed simultaneously. Renewable energy and energy efficiency can contribute to such a strategy. Both are win-win propositions for all countries. Renewable energy generates employment, contributes to reducing air pollution and climate change, and enhances energy security through reliance on domestic energy sources. The technical and economic potentials of improving energy efficiency are also enormous although this has not been pursued by countries as aggressively as new supply in spite of experience showing the opportunities for gains.

### GLCA recommends:

Long term policies, measurable and verifiable targets, should be adopted by all countries to increase significantly the use of renewable energy and promote greater efficiency in energy production and use. In addition, global standards for end-use efficiency should be developed and adopted.

## Carbon sinks

Land-use changes, mainly deforestation, account for more than one-fifth of global emissions. With increasing emphasis on biofuels for transport, pressure to convert remaining forests will increase. Strategies to reduce deforestation have other benefits beside reducing atmospheric carbon dioxide. These include conserving biodiversity, providing ecosystem goods and services, especially water resources, and improving livelihoods for neighboring communities.

### GLCA recommends:

In order to capture the many co-benefits of reducing deforestation, a full range of interventions to create and maintain biological sinks of carbon is recommended.

## Market-based mechanisms

As the Stern Review said, "Establishing a carbon price, through tax, trading or regulation, is an essential foundation for climate change policy." GLCA agrees with most economists that the preferred mechanism is a system of harmonised universal carbon taxes, which reduce emissions and generate financial resources. Carbon taxes are easier to implement than cap and trade schemes and are economically efficient.

Cap and trade schemes are generally welcomed by industry, as they tend to reduce the cost of complying with targets. The cap is generally set at a level below the national allowance because small sources and those difficult to monitor are excluded. But without binding targets and a clear policy framework, a formal system cannot function. Tradable allowance systems

can target either upstream sources, ie fossil producers and importers, if they are based on carbon content, or downstream if they focus on end uses and emissions. If tradable allowances are issued at no cost, the problem is one of distributing initial allowances among recipients. If the allowances are sold or auctioned, these schemes can raise revenue that can be used for other purposes.

#### **GLCA recommends:**

A price on carbon should be set through a system of harmonised, universal carbon taxes, although many in industry prefer a cap and trade system. For a well functioning cap and trade system, carbon markets need to be financially linked. In general, emissions allowances should be auctioned, raising resources that can be allocated by national governments for other purposes.

## **ADAPTATION**

Substantially reducing global emissions of GHGs will not avoid the serious impacts of climate change to which the world is already committed, with the poor in developing countries being the least able to adapt. Adaptation is not simply a matter of designing projects or putting together lists of measures to reduce climate change impacts. A national policy response would increase resilience to climate vulnerability and should be anchored in a country's framework for sustainable development and integrated in its poverty reduction strategies. Responses to climate change need to encompass several levels including access to clean energy for vulnerable populations, crop and farm level adaptations, national level agricultural and supporting policies and investments.

Future agricultural systems will have to be more resilient to a variety of stresses to cope with the consequences of climate change. Technologies for adaptation, eg salt- and drought-resistant crop cultivars, should be developed and disseminated widely.

Effective adaptation will require broader planning capacity in all relevant departments in developing countries. Local scientists should be supported for monitoring and research on climate impacts on various sectors in their own countries.

#### **GLCA recommends:**

Financial support should be provided for vulnerability assessments, enhancing resilience to climate impacts, access to information and best practices, building human and institutional capacity, and making public and private investments in developing countries less susceptible to climate change. Centres for adaptation in agriculture should be established, particularly by the Consultative Group on International Agriculture Research (CGIAR) in Africa.

## **ACCELERATE TECHNOLOGY RESEARCH AND DEPLOYMENT**

If the world continues on its current energy path, energy-related CO<sub>2</sub> emissions in 2050 will be two and a half times their current levels. According to the International Energy Agency, these emissions can be returned to their current levels by 2050 through a combination of all-country actions including strong energy efficiency gains, increased renewable energy deployment, natural gas, nuclear, and coal with CO<sub>2</sub> capture and storage (CCS), and increased biofuels use.

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Reducing global emissions by at least 60 per cent from 1990 levels at acceptable costs will require a technology revolution, at least as large as those in space and telecommunications, to make clean energy technologies more efficient and affordable. Technologies such as solar, wind, biofuels, hydrogen, energy efficiency, and CCS need breakthroughs that will only be made possible by public funds. Unfortunately, investments in energy R&D programmes have been declining for the past two decades. These declines need to be halted and reversed.

#### **GLCA recommends:**

Clean energy technologies should be made available and utilised by all countries. Barriers that hamper dissemination of such technologies in developing countries, such as intellectual property rights and competitive rules, should be overcome. Recent declines in investment for R&D should be reversed and the aggregate amount of public funds doubled to US\$20 billion per year.

## **Consultative group on clean energy research**

Forming a consultative group on clean energy research (CGCER) could facilitate international collaboration in developing low cost, low carbon technologies and the exchange of information about clean energy technologies. Initially, the CGCER could be established as a virtual institution, linking centres of excellence in developed and developing countries. It could support research, act as a catalyst for South-South cooperation, and pay for patents or licensing fees to enable cleaner technologies to be deployed in the South.

#### **GLCA recommends:**

A consultative group on clean energy research should be formed to encourage a clean technology revolution. Innovation targets to bring new technologies to market, as well as incentives for meeting them, should be considered.

## **FINANCE**

Both public and private finance are essential for adaptation, to avoid deforestation, increase technology transfer and implement a long term strategy to combat climate change. Climate friendly investments need to be multiplied through national and international frameworks, and the current international carbon market needs to be enhanced in order to scale up private flows. However, external funding must be additional to national resources obtained through domestic savings and taxation. Governments have an obligation to establish a supportive framework for investment. Local capital markets should facilitate long term investments in adaptation measures. Carbon taxes or the auctioning of allowances can also raise resources for other purposes.

## **Reform Clean Development Mechanism**

The Clean Development Mechanism (CDM) was created under the Kyoto Protocol to support low carbon investments in developing countries. For the developed countries, its purpose is to lower emissions reduction costs and provide flexibility in carrying out national

obligations. For developing countries, CDM's purpose is to promote sustainable development and contribute to GHG stabilisation. The CDM has encountered administrative and technical hurdles with initial projects limited to a few countries and a few gases and plagued by bureaucratic procedures.

To promote policy reform, underwrite technology development, and stimulate investment flows at a transformational scale, an additional market mechanism must take a sectoral approach. The distinction between a sectoral approach and project-based or programmatic approach (the current emphasis of CDM) is that a developing country could set sector-wide baselines for carbon-intensive sectors at levels that coincide with its economic interest while meeting commitments to reduce the energy intensity of its growth.

### Enhance public finance

Public finance can demonstrate new approaches for building human and institutional capacity and for mitigation and adaptation in developing countries. However, the existing funding sources for these purposes, eg the GEF and multilateral development banks, are too small for the scale of assistance required. However, they should be strengthened and their funds enhanced.

Sustainable development is not possible without making energy systems more sustainable. Rapidly industrialising countries need to grow in a climate-friendly manner. However, the current costs of cleaner and more efficient technologies are higher, as much as US\$100 million for an average 1 GW coal-fired power plant. It is estimated that between US\$30-35 billion a year is required to 'green' energy sectors in developing countries.

### A new US\$50 billion per year climate fund

The average net public financial flows from all developed countries, including loans, amounted to about US\$58 billion per year between 1996 and 2005, or about 0.23 per cent of GDP, of which about US\$7 billion was for energy. GLCA estimates that about US\$50 billion per year will be needed for activities in developing countries to support a comprehensive climate change agreement. Since commitments and actions to meet a 60 per cent reduction by 2050 will have to be undertaken in phases, the first phase could be about US\$10 billion per year. Funding sources could come from a combination of public finance and the carbon market, especially the auctioning of emissions allowances.

#### GLCA recommends:

A climate fund of additional resources, starting at US\$10 billion and growing to US\$50 billion per year, should be established to support climate change activities in developing countries and should include both public and private resources. It should have an innovative structure and transparent and inclusive governance.



## CONCLUSION

As we embark on a more comprehensive and inclusive agreement, we need to build on the experience gained from Kyoto and from cities, states, communities, businesses, and individuals who have voluntarily undertaken important steps to address climate change. Above all, we need to build trust between North and South and establish an equitable basis and new modalities for genuine international cooperation to address the linked challenges of energy and climate security.

### Author

Mohamed T El-Ashry is currently Senior Fellow at the UN Foundation in Washington, DC. He was CEO & Chairman of the Global Environment Facility (GEF) from 1991-2003 and previously Chief Environmental Advisor to the President and Director of the Environment Department at the World Bank. Prior to that, he served as Senior Vice President of the World Resources Institute and Director of Environmental Quality at the Tennessee Valley Authority (TVA). He has also served as Special Advisor to the Secretary General of the 1992 Rio Earth Summit.

### Organisation

The Global Leadership for Climate Action (GLCA) is a task force of world leaders committed to addressing climate change through international negotiations. A joint initiative of the United Nations Foundation and the Club of Madrid, the GLCA consists of former heads of state and government as well as leaders from business, government and civil society from more than 20 countries.

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