

The climate for a change

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Are the nations of the world serious in their much-touted efforts to control greenhouse gas emissions? VINAYAK RAO examines the motives, moods and manifestoes in the run-up to the forthcoming climate change conference in Geneva

THE stage is set for the second Conference of Parties (COP-2) to the United Nations Framework Convention on Climate Change (UNFCCC), slated for July 8-19, 1996, in Geneva, Switzerland. It may be recalled that the Framework Convention on Climate Change (FCCC) signed at the Earth Summit in Rio in 1992 had called upon the industrialised nations to reduce their carbon dioxide (CO₂) emissions to 1990 levels by the year 2000. This commitment was recognised as only a first modest step towards substantial reductions in emissions of greenhouse gases (GHG) — gases which trap heat inside the atmosphere.

The objective of the Convention is to contain CO₂ and other GHG emissions at levels that would prevent further human interference with the climate system. Reaching this goal, however, will require much greater reductions in emissions than merely returning them to the 1990 levels. In fact, the Intergovernmental Panel on Climate Change (IPCC) has predicted that 60 per cent cuts are required.

Berlin beginnings

The COP-2 will be more of a stock-taking exercise to assess the progress (or the lack of it) in the follow-up to the Berlin Climate Summit held from March 28 to April 7, 1995. In Berlin, the participants attending the Summit had reviewed the obligations of industrialised countries. The UNFCCC commits them to reduce their emissions to 1990 levels by the year 2000, but it does not specify what should happen beyond that date. The Berlin meet had concluded on a modest note by recognising that the existing nature of commitments in the UNFCCC were “not adequate” to meet the threat of



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Confusion: the transport sector has been a major culprit

climate change. In order to strengthen their commitments, delegates sought the negotiation of a protocol, with the goal of setting for developed countries “quantified limitation and reduction objectives within specified timeframes, such as 2005, 2010, and 2020”. This was called the Berlin mandate.

The Berlin meeting thus sanctioned a round of negotiations to strengthen the UNFCCC. But the US, on its part, has demonstrated an extreme reluctance to discuss reduction targets and has found vocal allies in Australia, Canada, Japan and New Zealand. Australia’s dependence on coal exports for foreign exchange, for instance, is the reason for its hostility to measures which might restrict CO₂ emissions.

In Japan, policy-making continues to be influenced by the powerful transport and energy sector lobbies which are also biased against any tough course of action. For instance, Japan’s new Fiscal 1995 Electric Power Facility Plan approved by its ministry of international trade and industry indicates

that the country will not meet its CO₂ emission control target by the year 2000; the Osaka-based NGO, Citizens Alliance for Saving the Atmosphere (CASA) attributes the rising energy use in the residential, commercial and transportation sectors as the reason behind this incapacity to meet the target. CASA’s representative Dwight Van Winkle points out, “In effect, Japan would meet its climate convention commitments by shifting emissions offshore, while expanding domestic consumption of fossil fuels, including oil, for transportation.”

Looking back, and ahead

One way of evaluating the post-Berlin Climate Summit politics would be to follow the difficult and complex negotiations. What will the Berlin mandate really accomplish? Or alternatively, what has it accomplished so far?

Negotiations on the mandate agreed to at the Berlin meet had got off to a slow start in August 1995 in Geneva. Despite an ambitious timetable aimed at completing negotiations for further developed country commitments under the FCCC before the third Conference of Parties (COP-3) in 1997, the ad hoc group charged with these negotiations was unable to even agree on the composition of its bureau in its first meeting.

Discussions focussed primarily on the nature, scope and duration of the analysis and assessment phase called for by the mandate. This part of the negotiation process — the analysis and assessment of measures for reducing GHG emissions — involves, largely, reporting on and discussing national research programmes. There was disagreement about what information should be collected as part of the assessment phase, aimed at identifying policies and measures that developed countries could use to reduce GHG emissions.

Developing nations, alongwith the European Union (EU)

A mandate for the future

The Berlin mandate incorporates certain pointers to what should be the elements in a future protocol to be adopted at the third Conference of Parties (COP-3) in 1997. The most important of these elements are as follows:

- Governments agree that the proposal of the Alliance of Small Island States, calling for a 20 per cent reduction in emissions from industrialised countries by the year 2005, should be included for consideration in future negotiations and that these negotiations will have to be finalised by COP-3 in 1997.
- There is also an agreement over the inadequacy of the existing commitments listed for industrialised nations in Article 4.2 (a) and (b) of the UNFCCC.
- Governments agree that no new commitments should

be introduced for developing countries, but that the existing general commitments listed in Article 4.1 should be reaffirmed in order to advance their implementation. This would serve to achieve sustainable development in the South and take into account the existing commitments of the OECD to transfer finances and technologies.

- Governments also are in agreement that based on the 1990 levels, new reduction targets and timetables for industrialised nations are needed under the climate convention for the period beyond the year 2000.
- It has been decided to elaborate policies as well as measures, and to set quantified limitation and reduction objectives within specified timeframes, such as 2005, 2010, 2020, for anthropogenic (human-induced) emissions by sources such as CO₂ and methane, and removals of greenhouse gases by sinks (such as forests).

stressed that the analysis and assessment phase should be conducted in parallel with negotiations on a protocol or other legally binding agreements to strengthen the climate convention. On the other hand, the developed nations, including the US, argued that the phase should occur before protocol negotiations begin. The only meaningful proposal came from Germany which called for sizeable CO₂ cuts — by 10 per cent from 1990 levels by the year 2005, and by 15-20 per cent by 2010 — in the industrialised world. German environment minister Angela Merkel said the goal, though ambitious, was “totally realistic” for the EU as a whole, provided the member-states made clear commitments to implement national targets and took necessary measures to achieve them.

At the December 18, 1995 meeting of the EU, the member-states agreed on a number of mainly internal issues relating to the on-going negotiations on a protocol to the UNFCCC. However, no specific reduction targets were put forward. The only other target proposal on the table so far is Britain’s call to developed countries to cut GHG emissions by five to 10 per cent by 2010.

Despite pressures from France to abandon targets, the ministerial statement confirmed that the EU continues to favour a ‘joint approach’ to the protocol — combining policies and measures with targets and timetables. A new and positive element was an agreement that there should be a common reduction target under the protocol, with burden-shar-

ing among industrial countries to be negotiated. This would have to take into account the differences in the countries’ respective emission levels and other individual circumstances, such as economic strength.

The European Union favours a ‘joint approach’ to the UNFCCC protocol — combining policies and measures with targets and timetables

Apparently, the internal agreements and discussions within the EU are geared to maintain the Union’s leadership in climate change negotiations. For instance, member-states are being asked to report on policies, measures and objectives they are currently preparing for the years 2005, 2010 and 2020. The EU wants to be able to present a proposal on the policies and measures to be covered in the near future.

The slate is hazy

A simple yet sure way of examining the seriousness of all such efforts would be to analyse the record of the major actors so far and see what countries can really deliver in terms of national policies and credible projections. The Netherlands government, for one, has fixed its CO₂ reduction target at three per cent below 1990 levels by the year 2000. Earlier policy plans had set the target at three-five per cent below 1989-1990 levels, but the government now acknowledges that it no longer considers a five per cent cut feasible and has also dropped 1989 as a baseline. A new report from the Dutch National Institute of Public Health and Environmental Protection shows that the nation’s CO₂ emissions, which were supposed to stabilise at the 1989 levels by 1994, instead



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rose by 3.7 per cent — a result of economic growth combined with low energy prices.

According to the Swedish environment agency, the Naturvardsverket, between 1990 and 1994, Sweden's energy-related carbon emissions grew by five per cent in spite of an existing carbon tax. Austrian carbon emissions have risen eight per cent from 1988 to 1994 and it is doubtful if the existing policies will be sufficient for Austria to meet its so-called Toronto target of reducing CO₂ emissions by 20 per cent between 1988 and 2005. An indication that the Austrian government was in the process of abandoning the Toronto target came in the wake of the creation of the climate advisory board which replaced the CO₂ commission. The agenda of the newly constituted board does not even mention the Toronto target.

Norway, unfortunately, has been the first country to have adopted a national CO₂ reduction target only to abandon it; the country's parliament has voted by a large majority to abandon the target of stabilising CO₂ emissions at 1989 levels by the year 2000. The parliament had endorsed the target in 1989. The government currently forecasts a 16 per cent increase in CO₂ emissions over this period, largely as a result of increased oil production. Quite interestingly, the Norwegian environment minister defended the plan to abandon the target by arguing that Norwegian CO₂ emissions accounted for only 0.2 per cent of the global total and that instead of making drastic cuts itself, it should export its 'clean' energy to replace 'dirty' energy in other nations.

Even Germany is likely to miss its target of reducing CO₂ emissions by 25 per cent from 1990 levels by 2005, according to a study carried out by the Switzerland-based PROGNOS Research Institute and commissioned by the German economic affairs ministry. The study forecasts a reduction of only about 10.5 per cent due primarily to the economic transition in former East Germany. While emissions from energy use are expected to remain largely constant as a result of technological and energy efficiency improvements, transport emissions are projected to rise as a result of substantial growth in all transport sectors. PROGNOS predicts that between 1992 and 2020, gasoline use will increase by 12 per cent despite improved fuel efficiency.

The first pan-European state of the environment report, in preparation since 1992, was recently published by the Copenhagen-based European Environment Agency. *Europe's Environment: The Dobris Assessment* covers 46 countries and undertakes a structured overview of the state and trends of European environment and the stresses exerted upon it by human activities. The 650-page report inventories 56 environmental problems facing the continent, including climate change, and points to the transport sector as an area of particular concern. It emphasises the fact that the steady increases in CO₂ emissions from transport, the ongoing shift towards road transport and the rapid growth in air transport are exacerbating the problem.

The situation on the North American continent is not assuring either. Recent estimates by the Alberta-based Pembina Institute for Appropriate Development, prepared for Environment Canada (Canada's environment department),



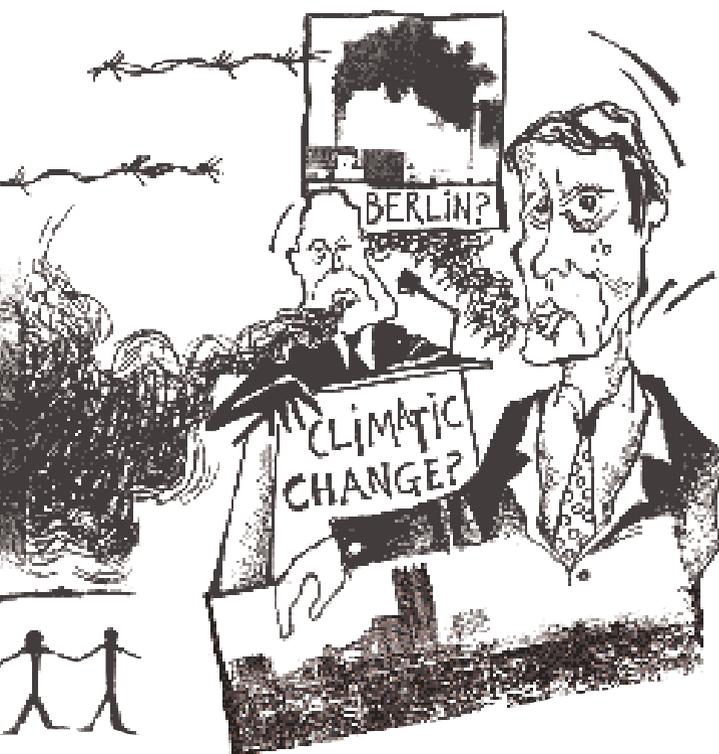
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The US, while being responsible for most of the CO₂ emissions in the world, is extremely reluctant to discuss reduction targets

show that the nation's GHG emissions increased 4.4 per cent from 1990 to 1993. CO₂ emissions, which account for 81 per cent of Canada's total emissions, increased 4.7 per cent from 1990 to 1994. A review carried by the climate secretariat says that the projections that include existing measures to reduce emissions suggest that Canada's total GHG emissions will increase 13 per cent from 1990 to 2000 unless there are new initiatives such as the use of carbon or energy tax. The government is not prepared to review progress on these initiatives until December 1996, and the team notes that "if the government at that time finds that Canada is unlikely to reach its target without more aggressive action, there will be limited time to implement and see the full effects of initiatives by 2000...".

According to a report from the US department of energy's energy information administration (EIA), total US GHG emissions increased by 1.7 per cent from 1990 to 1993. Preliminary estimates in the same report suggest that CO₂ emissions increased — from 1993 to 1994 — equivalent to more than 70 per cent of the growth in the preceding three years put together, representing an overall increase from 1990 to 1994 of 4.1 per cent. Early this year, the EIA published a report called *Annual Energy Outlook 1996* which states that US carbon emissions from energy use will reach 1,660 million metric tonnes (Mtc) annually by the year 2010, and 1,735 Mtc by 2015. These estimates are equivalent to 23 per cent and 29 per cent increases over the 1990 levels by 2010 and 2015 respectively.

The US, with the world's largest economy, is responsible for almost one-fourth of global CO₂ emissions. Efforts to mitigate climate change in the US have received a major setback by



the fact that the Congress approved less than 50 per cent of the funding required to implement the climate change action plan in its first year, and there is a likelihood that the second year of the plan will receive an even lower share.

Voluntary moves

Interestingly, efforts in the Organization of Economic Cooperation and Development (OECD) countries have relied almost entirely on voluntary measures till date — a clear indication of the difficulties encountered by governments in taking concrete measures and the problems of roping in the industry. But reliance on voluntary measures are unlikely to be sufficient to reduce CO₂ emissions. In September 1995, several industries in New Zealand had signed voluntary agreements with the ministry of energy to reduce their CO₂ emissions. Participants included glass, steel, methanol, urea, aluminium, plaster board and cement manufacturing companies, as well as a conglomerate based on wood and plastic products. Each agreement established the company's 1990 base year date, expressed in most cases as CO₂ emitted per standard unit of production. The agreements also specified a target to be achieved by the year 2000.

In October, the Australian government formally launched its 'Greenhouse Challenge' programme, a cooperative effort between industry and government to reduce GHG emissions through voluntary measures. An allocation of Aus \$9.7 million (approximately US \$6.8 million) over a four-year period to support the development and implementation of this programme was also made. Australia is the world's largest coal exporter and generates 80 per cent of its electricity with coal, a fact that is leading to concerns that energy related mitigation measures could affect national economy and its trade balance.

As a result, a tendency is growing within the OECD to develop politically safe plans that rely on voluntary action to reduce

GHG emissions. This is not a credible response to existing UNFCCC commitments. To be successful, voluntary action must be accompanied by the use of other policy tools that produce market signals, thereby encouraging this action and establishing standards that determine a minimum level of performance. Most OECD countries have failed to produce such an effective package of measures. Unless these countries can demonstrate that they will return GHGs to 1990 levels by the year 2000, the negotiations to strengthen the UNFCCC are bound to go nowhere. Any new commitments made in the context of protocol necessities will lack credibility and present insurmountable problems of compliance and implementation.

The US remains one of the most energy-intensive countries among developed nations, and has a very important role to play by reducing its own emissions of GHG. Its progress or lack of progress in this area is likely to have a strong influence on the OECD nations. It is clear from the above analysis that most industrialised countries will not stabilise GHG emissions at 1990 levels by the year 2000. This was also the information that emerged at the third meeting of the ad hoc group on the Berlin mandate (AGBM), held in Geneva on March 5, 1996. Rather than moving towards stabilisation, most countries are "heading in the opposite direction", the convention executive secretary, Michael Zammit Cutajar, told a press conference — although Germany, UK and Russia appear to be on track.

The AGBM is due to finalise its proposals by the time of the COP-3 in 1997 in Japan. However, halfway through its meeting schedule, the group has had little to show for its efforts as countries disagree on what approach to take. In line with the proposal it had made at a meeting of EU environment ministers last December, Germany has advocated setting binding, across-the-board CO₂ reduction targets of 10 per cent from 1990 levels by 2005 and 15-20 per cent by 2010. The proposal has met with a mixed response. Some nations maintain that new agreements should include all GHGs, and not just CO₂. Australia argues that new targets should be differential and shared among industrialised countries, according to factors such as their gross domestic product, economic indicators and emissions.

The EU has announced that it is investigating 11 areas where new policies and measures could possibly be taken. These include renewable energy and energy efficiency, labeling, transport and economic instruments. In addition, the OECD and the International Energy Agency are examining a range of possible common actions.

In conclusion, it must be noted that the OECD countries must demonstrate within this year that they are making a serious effort to meet their current commitments. But to achieve reductions in GHG emissions, significant changes will be needed in the economy and lifestyles: improved transportation systems, fuel switching, greater emphasis on renewable resources and the use of economic instruments like carbon or energy tax to encourage emission reductions.

The process of post-Berlin climate talks reveals that so far no substantive proposals for strengthening the commitments have been tabled. Hopefully, this should change in the course of this year, when the focus shifts from analysis and assessment to the product of the negotiations. But in the absence of substantial progress on the part of major industrialised countries in the field of climate protection policy, it is unlikely that the protocol negotiations will yield a positive outcome. ■