

Assessments of Bali 2007

Benito Müller provides impressions from the Thirteenth UN Climate Change Conference

The aim of the recent UN climate change conference in Nusa Dua (Bali, Indonesia) was widely held to be twofold. To finalise the operational details of the Kyoto Protocol Adaptation Fund (AF), and to put together a 'Road Map' for negotiations on strengthening the UN climate change regime beyond the initial commitments of the Kyoto Protocol which expire in 2012. Both aims were achieved, albeit not with the same degree of ease. Keeping in mind the aphorism that UN conferences can only be either 'successful' or 'very successful,' there is little doubt that the Bali climate change conference has been a very successful one.

The Adaptation Fund

To the surprise of many who – like the Secretariat – had thought the Adaptation Fund negotiations would carry on until the bitter end, an agreement on how the Fund should be managed was reached during the first week of the Conference and finalised on Monday 10 December. The outcome was seen by many as 'a major victory for the developing world in setting a new governance system for funding of adaptation activities,' to quote the South African Minister, Marthinus van Schalkwyk, who led the final stages of the negotiations on behalf of the G77 and China.

The battle, however, was not a simple North-South affair. The ultimate fault line concerning the role of the Global Environment Facility (GEF) in the running of the Fund, ran both through the developing and the industrialised world. Indeed one of the key factors for the early success of the negotiations was the pre-Bali declaration by the European Union that they

would accept whatever model the G77 endorsed.

In time, the Bali meeting established an independent Adaptation Fund Board – with members selected by and under the direct authority of the COP/MOP – as an operating entity for its financial mechanisms, independent of the previously only operating entity: the GEF. The role of the GEF in managing the AF had been, and remained to the very end, the most contentious issue in the attempt to make the Fund operational. In fact, the involvement of the GEF even for merely secretarial purposes was by no means uncontroversial. However, in the end, it was decided that the Board should usually meet at the seat of the UNFCCC (Bonn, Germany) with the GEF Secretariat providing dedicated secretariat services. The organisational set-up of the AF differs in another important respect from that of the other UN funds with funding for climate change (The LDC, Special Climate Change Funds, and the GEF Trust Fund). Following the wish of many developing country Parties, particularly the most vulnerable ones, countries are given direct access to the Fund, without having to go through 'implementing agencies' such as the World Bank, UNDP, or UNEP.

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The key to the astonishingly smooth progress and the early breakthrough in the negotiations on the AF was no doubt the absence of surprises and a raised level of trust between the G77

and China, on the one hand, and the EU, on the other. This was, in part, due to informal private discussions that led, among other things, to a couple of influential opinion pieces on the issue of making the AF operational by lead G77 and China negotiators.¹

This was in stark contrast to the other key negotiations strand on the Bali Road Map which, particularly in the final phase, turned out to have a number of very unfortunate surprises with a concomitant loss of trust.

The Bali Road Map: The many plots of the Ides of December

Of Contact and Small Groups

At the beginning of the conference, a contact group of officials was tasked to determine the next steps on enhancing long-term cooperative action to address climate change. The group was asked by the COP President Wittolear 'to agree on or narrow down options for consideration by ministers on the future process under the Convention.' They presented their conclusions to a small group of ministerial-level representatives from all the relevant UN groups convened by the COP President, which finished its informal consultations at 2 am on the 15th day (the Ides) of December. The outcome of these deliberations was a draft text proposing the launch of comprehensive two-year negotiations under the Convention with a key aim to enhance national and international greenhouse gas mitigation in developed and developing countries.

Given that post-2012 commitments for industrialised Kyoto Parties are to be dealt with in separate negotiations

¹ *Operationalising the Kyoto Protocol's Adaptation Fund: A new proposal* (2006), by Amjad Abdullah (Maldives), Bubus Pateh Jallow (The Gambia), and Mohammad Reazuddin (Bangladesh); and *On the Road to Bali: Operationalising the Kyoto Protocol Adaptation Fund* (2007), Enele Sopoaga (Tuvalu), Lydia Greyling (South Africa), David Lesolle (Botswana), Emily Massawa (Kenya), José Miguez (Brazil).

under the Kyoto Protocol, the paragraph delineating the scope of these Convention-track negotiations for developed countries – namely

(1.b.i) Measurable, reportable and verifiable nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives, by all developed country Parties, while ensuring the comparability of efforts among them, taking into account differences in their national circumstances

– was essentially aimed at the only remaining developed country non-Kyoto Party: the United States.

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The one issue that eluded consensus in the small ministerial group was the relevant paragraph (1.b.ii) on the scope of developing country mitigation activities to be considered in the proposed Convention-track negotiations. The draft text of the small group submitted to the COP President in the early hours of Saturday morning consequently still included two bracketed options for this paragraph, namely:

- (α) Measurable, reportable and verifiable nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported by technology and enabled by financing and capacity-building;
- (β) Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner.

At first glance, one may be puzzled about the difference between the two.

But a closer look will reveal that it is substantive: in (α), measurability, reportability and verifiability refer only to developing country mitigation actions, while in (β) they cover developed country technology, finance and capacity building support. Given this, it will not be surprising that the latter was the version supported by the G77 and China.

The Multi-plot Plenary

At around 8 am the same day, a draft Decision was disseminated among the conference participants and soon after tabled by the President for adoption by the COP. Having acknowledged the failure of the small ministerial group ‘to eliminate fully options in one of the paragraphs’, the President continued by reminding the delegates that ‘reaching agreement requires a delicate balance to be struck. I believe that the proposal for a draft decision that I have placed in front of you ... strikes this delicate balance.’

After officially requesting the COP plenary to adopt the draft decision, the President opened the floor for interventions. Portugal, on behalf of the EU took the floor to express their support for the text. ‘So under the good spirit and with the notion that there are no perfect texts for all, the EU supports this text and we call for all Parties to support it.’

At this point the drama started to unfold. Seven seconds after the EU intervention, the President declared ‘I see no other wish to ask for the floor, so it is decid ... oh, India, ... please take the floor!’ India’s literally last second intervention together with the subsequent G77 and China interventions made it clear that the text presented to the plenary was not – as assumed by many (including, judging from their intervention, the EU) – a consensus document. It only contained version (α) and left out version (β) of the contentious paragraph (1.b.ii) without G77 consent to do so.

After the Indian Minister finished his intervention, another disconcerting plot line appeared when China called for a point of order and demanded that the adoption of the proposed

draft decision be suspended because the heads of key G77 delegations, including China, were at that very moment engaged in discussions with the Indonesian Foreign Minister outside the plenary, and thus unable to make their views heard.

The plenary was duly suspended for 20 minutes, but that was unfortunately not the end of it. The President returned to where the plenary had left off and invited the head of the Indian delegation to repeat his reservation, only to be told that unfortunately, he was again in consultation with the Indonesian Foreign Minister outside the plenary – as was, it turned out, the head of the Chinese delegation! Clearly, whoever was responsible for convening the plenary this second time was not doing as good a job as could possibly have been expected. To paraphrase Oscar Wilde’s Lady Bracknell ‘to miss the absence of one minister may be regarded as a misfortune ... to miss two seems like carelessness.’

By now, one of the Chinese lead negotiators had rushed back into the plenary from these parallel consultations. He demanded to know why the plenary was again convened while G77 was meeting the Indonesian Foreign Minister. He could not imagine that this repetition could have happened unintentionally. After this, the plenary was duly suspended for a second time.

To be fair to the Chinese delegate, it is indeed difficult to see how – after the uproar that followed the first convening of the plenary in parallel to the other meeting – this repeat performance could have been a coincidence. But then he was not present when the President invited the absent Indian Minister to repeat his reservation, which proves, in fairness to the podium, that they were clearly ignorant of the fact that the parallel consultations were still ongoing when they reconvened the plenary.

The only consolation to be drawn from this sorry story is that it should put to rest the inevitable conspiracy theories, at least with regard to the parallel-meeting plot line. What happened in the plenary that morning

was clearly not intentional. After all, bungling hardly ever is!

But there remains the initial conundrum: how the COP President came to table a 'draft decision' for adoption that was not consensus-based. What is clear is that, unlike the plenary events, this cannot be put down 'to genuine misunderstandings about the multiplicity of the settings of the meetings.' Even if the person or persons who decided to drop the G77 proposal (β) of the contentious paragraph mistakenly thought it to be synonymous with the other one, it would still have been completely unacceptable to remove it without consulting all the major groups, in particular its sponsor, the G77 and China. Egypt summed up the events of that morning by comparing it to 'a movie with a lot of plots.' This was one plot that the process could have done without.

Given that the G77 language ultimately did make it back into the Bali Road Map, some might be inclined to forgive and forget in the spirit of 'all is well that ends well.' The problem – as UN Secretary-General Ban Ki-moon put it – is that, 'this is just a beginning and not an ending. ... We'll have to engage in many complex, difficult and long negotiations.' And they will require a lot of trust. The unfortunate events of the final morning have turned this into a rather inauspicious beginning, as far as trust building is concerned. Conspiracy theories are already flourishing and have to be dealt with for the good of the process. This is why there is still a need to get to the bottom of how the G77 language got to be dropped without G77 consent: reconciliation requires truth!

An American 'U-turn'?

When the plenary convened for the third time – finally with all key delegates present – Portugal, on behalf of the EU, took the floor to support the proposal of India on behalf of G77. However, the hopes of those who cheered at this point believing that this endorsement marked the elusive breakthrough were soon dashed, it turned out to be merely the end of act one.

The second act of the drama began soon after with the United States taking the floor and rejecting the G77 proposal. Returning to the sort of language used earlier by the COP President to recommend the controversial draft text to the plenary in terms of 'balance', the American head of delegation argued that the USA had to reject 'the formulation that has been put forward ... because it does represent a significant change in the balance that I think many of us have truly worked towards over the last week.'

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The US intervention was about developing country mitigation, and claimed that in this respect, there is a substantive difference between the original proposal of the President's draft (α) and the G77 alternative (β). The problem is that (β) does lend itself to different interpretations in this regard, namely

- (β .1) Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, *all* in a measurable, reportable and verifiable manner.
- (β .2) Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by *measurable, reportable and verifiable technology, financing and capacity-building*.

With respect to developing country mitigation, there clearly is no difference between the proposal contained in the President's text (α) and this first reading (β .1) of the G77 language: both are about mitigation actions that are 'measurable, reportable and verifiable.' The US intervention thus only

makes sense in the context of second reading (β .2). Fortunately, South Africa clarified the situation: 'Developing countries are saying voluntarily that we are willing to commit ourselves to measurable, reportable and verifiable mitigation actions. It has never happened before. A year ago, it was totally unthinkable.' In other words, the first reading was meant to be the intended one.

When the head of the US delegation said that they had 'specially listened to what has been said in this hall today, and we are very heartened by the comments and the expression of firm commitments that have in fact been expressed by the developing countries,' she was referring to the interventions by South Africa and others that clarified the G77 proposal. Contrary to some press reports, it thus stands to reason that there never was a US 'U-turn' – all there was is a clarification of the G77 proposal that satisfied the concerns of the US delegation. Of course, it makes for better headlines to report on Papua New Guinea's demand for the USA to 'get out of the way!' But to think that the USA was swayed by this, or indeed by the jeering after their initial intervention, is simply naïve.

“According to the White House, the Bali Road Map does not fully reflect the principle of common but differentiated responsibilities”

However, a sub-plot – the attempt by Bangladesh to mirror the developed country paragraph (1.b.i) by including a reference to 'differences in national circumstances' in (1.b.ii) that failed due to vehement opposition by China and India – should caution one not to misread the South African clarification: The G77 and China committed itself to 'measurable, reportable and verifiable mitigation *actions*,' but *not* to 'measurable, reportable and verifiable mitigation *commitments*,' as

developed countries did in (1.b.i).

The White House, apparently, was all too aware of this when its Press Secretary raised ‘serious concerns about ... aspects of the [Bali Road Map] Decision’ on the same day. According to the White House, the Bali Road Map does not fully reflect the principle of common but differentiated responsibilities. The climate change problem ‘cannot be adequately addressed through commitments for emissions cuts by developed countries alone. Major developing economies must likewise act.’ In line with the Bangladeshi demand, the White House also insisted (i) that the responsibility to mitigate must be differentiated ‘among developing countries in terms of the size of their economies, their level of emissions and level of energy utilization, [and ii] that the responsibilities of the smaller or least developed countries are different from the larger, more advanced developing countries.’

It is doubtful whether this differentiation scheme will cut much ice with these larger developing countries, particularly in the absence of any reference to population size. But it gives a good indication as to where the ‘battle lines’ in the forthcoming negotiations will be drawn.

The Way Forward: To Ensure a Safe Journey

For the Bali Road Map to succeed, the way forward requires both immediate and medium-term actions. For one, the making of the Adaptation Fund operational must be completed swiftly through the adoption of governance procedures which ensure that the Fund is the success which all Parties would like it to be. The one thing which has to be avoided at all cost is to have this new instrument tainted with some mismanagement scandal. The Adaptation Fund Board has to be above all suspicion, and the rules of procedure have to ensure that it is!

Immediate action is needed to establish clarity on how the President’s text came to be presented as a draft decision, not only to counter existing and avoid further conspiracy theories,

but to mend the loss of trust resulting from the unfortunate incident, and if necessary to establish procedural safeguards to prevent anything like it in the future.

As to the medium term, the difficulty will be to find tools to ‘square the global mitigation circle,’ that is to break out of the we-will-only-take-on-commitments-if-they-do” stalemate which has bedevilled the climate change process ever since the passing of the notorious Byrd-Hagel resolution in the US Senate in 1997, and which was implicitly reiterated in the above-mentioned White House Press Statement. No one ‘in the know’ will underestimate the difficulty of this task. But it is not impossible.

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For one, one might want to draw a lesson from the Adaptation Fund negotiations and try to continue the sort of informal dialogue that was crucial in creating the conditions that led to the early breakthrough, even though that may be more difficult given the demand on time from the formal additional negotiation sessions.

Second, the whole debate about the developing country mitigation paragraph in the Bali Road Map may well hold some clues as to how to proceed. The key lies in the difference between asking developing countries to act on their own or asking them to act with the support of developed countries. This, of course, is nothing new at all. It is what everyone (including those that have not ratified the Kyoto Protocol) signed up to in Article 4.7 of the Framework Convention:

The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by

developed country Parties of their commitments under the Convention related to financial resources and transfer of technology...

The Bali Road Map negotiations have shown (yet again) that progress can be made with regard to this delicate issue, but only if due respect is given to the joint responsibility/duty enshrined in this Article. Measurable, reportable and verifiable developing country mitigation commitments will, if at all, only be possible as a package deal with measurable, reportable and verifiable commitments to provide technology, financing and capacity-building by developed countries. Indeed India’s closing statement can and should be read in this spirit:

The road to Bali was in principle strong, the road from Bali must be much stronger. We need to move forward to Poland to Denmark, and beyond, for what is at stake is saving our future generations. And therefore it is not a question of what you will commit or what I will commit. It is a question of what we will commit together to meet that challenge!



David Robinson focuses on the significance of the US decision to support the Bali Action Plan

At the United Nations Climate Change Conference in Bali, about 190 nations adopted the Bali Action Plan, which aims by December 2009 to replace the Kyoto Protocol when it expires in 2012. This note analyses the significance of the US decision to support that Plan.

The US decision was important, but not a great surprise. According to many, the question was not whether to participate in the UN-led negotiations over the post-2012 framework, it was how and under what conditions. Bali was the opportunity for the US administration to influence the aims and the road map for those negotiations.

We should not forget that the USA was a signatory of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. As a party to the UNFCCC, under President Clinton the USA signed the Kyoto Protocol in 1997. The Clinton administration never sent the Kyoto Protocol to Congress for ratification because it had no hope of Senate ratification.

“the Bush administration has recently taken off its climate change ‘invisibility cloak’”

It is nonetheless striking that the Bush administration has recently taken off its climate change ‘invisibility cloak’. That is because climate change is now politically ‘hot’. Domestically, the Lieberman-Warner Bill is being debated on the Senate Floor and has had bipartisan support in the Committee stages. The centre-piece of that legislation and other competing Bills is the ‘cap and trade’ of greenhouse gases. Many observers expect legislation like it to be signed by the new president. On the international front, in September, the USA initiated a dialogue with the 17 major emitters of CO₂, under the Major Economies Process, to exchange views on how to ‘reduce greenhouse gas emissions, provide for energy security, and support economic prosperity’ (US Department of State).

Some of the factors behind this change of stance are domestic. The Democratic Party victory in the 2006 elections put climate change high on the federal agenda. In addition, the ‘purple’, or independent, vote that makes up 30

percent of the electorate tends to be concerned about climate change. The passage of climate change legislation by Republican and Democrat leaders in many US states and in hundreds of US cities has also put pressure on the Federal administration. Furthermore, the experience of extreme local weather conditions in the USA, especially in the south, has increased public awareness of the dangers of climate change; notably among evangelical religious movements. Many major US corporations are also pressing for federal mandatory cap and trade legislation. Finally, Al Gore’s movie, his Oscar and the Nobel Peace Prize have all raised public awareness about climate change.

Other factors may be described as international. There is a growing sense of unease in the USA at its isolation in the world. The USA could be a world leader on climate change, a point made by Senator Kerry in Bali. Furthermore, many world leaders have put pressure on the USA to join them in fighting climate change, and indeed to lead the way. Most important, US concerns over energy security (i.e. energy import dependence) are key drivers of US federal climate change policy.

So, when the USA eventually agreed to the Bali Action Plan at the very last minute, there was great relief but no great surprise.

The Impact of Bali on the USA

There is a sceptical view that Bali, or for that matter any international climate change negotiation, will not influence US domestic politics and legislation. I beg to differ for three reasons.

First, these negotiations have already begun to have an influence.

International scientific and economic opinion has started to influence a growing body of the population and decision makers in the USA; proposed legislation in fact adopts emissions reductions that reflect the international consensus over the longer term. The fact that China and India are major emitters of greenhouse gases, and that those countries pose

an increasing economic and political challenge to the USA, makes it all the more likely that negotiations over climate change will become part of the highly politicised debate over trade and protectionism.

Second, this is happening in the midst of a Presidential campaign. Although climate change is not as high on the agenda as other issues (e.g. health care, Iraq, the economy) it is rising quickly. It attracts the independent voters, who may swing the election in key states.

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Third, Bali will have influenced participants from the USA, as well as people at home following the debate. The glare of the world’s press was on the US Delegation. When, in the final moments, the representative of Papua New Guinea called on the USA to lead or ‘get out of the way’, that small country was expressing a view that was widely shared by many in Bali. Perhaps the heaviest pressure on the US Delegation came from its own citizens, especially those who were in Bali. The enthusiasm of representatives from thousands of US municipalities and US states which had adopted measures to fight climate change was striking. Most will have returned home with a sense of renewed enthusiasm and responsibility to make a success of the upcoming negotiations.

US Impact on the International Negotiations

The USA will influence the direction and the outcome of international negotiations. Five issues will be paramount.

First, the USA will be concerned about ‘competitiveness’. It will resist accepting obligations that favour its competitors, in particular China.

The environmental concern about 'leakage' is far less influential than the economic one – namely the loss of competitiveness, leading to industrial relocation and the loss of jobs. This concern is easily converted into protectionism, which can be found in proposed US climate change legislation. The Leiberman-Warner Bill has a clause that aims to ensure that other countries do not free-ride. Imports from large countries that do free-ride will be 'taxed' at the border, with importers having to buy emission certificates to reflect the carbon content of their products.

This is both good and bad news. It is good news that the USA is determined to fight for an agreement that is enforceable and that includes all the major emitters. One of the worst features of the Kyoto Protocol is that it is not enforceable, and that it left out major emitters. With the USA involved, an agreement has a much higher probability of being effective.

The bad news is that proposed US legislation involves unilateral trade sanctions that could lead to sanctions being imposed by other countries and even to trade war. Assuming these border taxes were simply a way of equalising carbon taxes paid by domestic and foreign producers, they would not necessarily be against WTO rules. However, it is easy to see how domestic climate change legislation may become, or be perceived as, a protectionist trade weapon.

Second, the USA will seek flexibility. One of the more interesting discussions in Bali had to do with the architecture of the post-2012 climate change regime. In particular, would it be centralised (like the Kyoto Protocol) with agreed national emissions limits at least for all developed countries and a set of common rules for trade? Or would it be a bottom-up, decentralised, model that was based on a set of national, regional, sector and voluntary agreements? The sense in Bali was that the decentralised model is a reality and that the world simply does not have the luxury to wait for a comprehensive, centralised top-down agreement. On the other

hand, participants were concerned that the decentralised architecture would not be up sufficient to meet the global challenge. The question was how and when to bring the two architectures together.

Third, the USA will support meaningful action to reduce deforestation and forest degradation in developing countries. The Kyoto regime offers rewards for storing carbon in trees only in cases of reforestation or planting new forests. However, the evidence suggests that destruction of tropical forests is causing as much as 20 percent of greenhouse gas emissions. The new approach identified in the Bali Action Plan would turn Indonesia and Brazil into two of the world's largest 'emitters', lessening somewhat the pressure on developed countries. Federal US legislation is also likely to support 'offset' projects to protect the forests of the poorest countries because they do not compete directly with economic activity in the United States.

“Meanwhile, the USA becomes increasingly dependent on oil and gas imports from NOCs in countries that are perceived as hostile or unstable politically”

Fourth, the Major Economies Process is important. Some observers are convinced that the USA intends to use this forum to define the terms of the climate change debate and to propose a solution that the rest of the world will have to accept as a *fait accompli*. This could undermine the UN-led negotiations, especially if a large number of smaller countries feel disadvantaged. On the other hand, an agreement among the major economies over climate change could go a long way towards defining a genuinely workable solution. And to achieve such an agreement, the developed countries and particularly the USA will have to convince the major

emerging powers to cooperate. There is room for optimism.

Finally, US influence will be greater and more obvious once it passes federal legislation. It is possible that such legislation will be passed in time to reach an agreement at Copenhagen in December 2009. Much will depend on whether the new president decides to push hard personally for domestic legislation and an international agreement. Obviously, the US decision over its own emissions targets will have a direct influence on the negotiations.

Climate Change Policies, Energy Security and International Energy Markets

To understand the US position on climate change it is best to see it through the lens of US energy 'security' policy – i.e. reducing US dependence on oil imports from 'unstable' or 'hostile' countries. The bulk of world oil and gas reserves are now under the control of national oil companies (NOCs), which are also moving quickly into trading, refining, LNG trains and electricity generation. The recent announcement by Gazprom to partner with Nigeria in developing their energy sector is a sign of the times.

Meanwhile, the USA becomes increasingly dependent on oil and gas imports from NOCs in countries that are perceived as hostile or unstable politically. In total, the USA depends on imports for 60 percent of its liquid fuel consumption. In 2006, it imported 4.8 million b/d of crude oil (48 percent of imports) from OPEC countries, including 2.2 million b/d from the Persian Gulf. The USA is concerned that reliance on these countries will grow further. In the face of this perceived threat, it is looking for alternatives, at least two of which have important implications for climate change and for world energy markets: the defence of domestic coal and the promotion of energy efficiency.

The US intends to defend its coal industry. The US EIA expects coal use to grow by 1.1 percent per annum up to 2030, mainly for new electricity generation (which already accounts for 50 percent of generation), but also

for new Coal to Liquid (CTL) plants. There are also proposals in the USA to make electric cars a competitive alternative for road transport. Given the importance of coal in Chinese, Indian and US growth plans, investment in new coal-based generation and CTL plants would undermine all other global efforts to cap CO₂ emissions if there were no means of capturing and storing the carbon released during the lives of those plants.

The USA will take a lead in promoting carbon capture and storage (CCS) technology. If CCS is successful and coal use grows as planned, this will lower demand for other internationally traded fuels. If CCS is not successfully deployed on a widespread basis, and it is still far from clear that it will be, then either coal use will not grow as planned, or the world will face serious climate change problems even sooner than expected.

“if the entire USA were to achieve the per capita electricity consumption of California by 2020, US electricity demand would fall by over half”

Second, US policies to improve energy efficiency could put downward pressure on world oil prices. The USA is a large and inefficient consumer of energy, especially of domestic electricity and transport fuels. It consumes more than twice the amount of energy per capita as the rest of the OECD, and more than ten times as much as the non-OECD countries. Although some of this can be explained by distances travelled and industrial activity, the potential savings are enormous. For example, if the entire USA were to achieve the per capita electricity consumption of California by 2020, US electricity demand would fall by over half. And if the USA were to adopt the 40 mpg standards being proposed by presidential candidates, US oil imports would fall steadily. Energy efficiency measures could therefore

significantly reduce energy demand and, along with other measures, put downward pressure on world oil prices.

Conclusions

The USA came to Bali determined to influence the framework for the upcoming negotiations over the post-2012 climate change framework. It achieved a number of objectives, in particular avoiding any reference to specific targets for cutting greenhouse gas. Nevertheless, the Action Plan is a reasonable compromise and did achieve more than many participants had expected. It calls for ‘deep cuts’ in emissions and fixes a deadline of 2009 for reaching an agreement. It promises more money for poor countries to adapt to climate change and to adopt green technologies. And although it does not specify which countries will bear the burden of emission reductions, all countries will have to play their part.

The US decision to participate in the UN-led negotiations over climate change is an important turning point. Without the United States at the table, the prospects of a meaningful climate change agreement are very poor. The USA will be in a position to bring significant influence and new ideas to the table, once they have passed their own domestic climate change legislation. The latter will depend fundamentally on two things: who the next president is and, ironically, the weather. The more dramatic the weather becomes, the more likely we are to see US legislation being passed and an international agreement in Copenhagen in December 2009.

The editor welcomes letters contributing to debates in this issue

Personal Commentary

Nader Sultan

Over the last few years, there have been many articles, and even a best-selling book, warning us about the potential crisis the world faces as a result of dwindling oil reserves. The expression ‘peak oil’ has entered the dictionary of most energy journalists as well as US politicians!

It may be because I worked for 34 years at a reserve rich National Oil Company, that I do not share this fear. I am in agreement with the IEA who recently acknowledged that there are sufficient energy reserves to meet the projected growth in demand until 2030. However, a critical challenge for the upstream in the medium term is the scarce resource capacity above the ground. What I am referring to include the human capital dedicated to the industry, the capacity available at engineering and procurement companies, the availability of raw materials for construction, and the capacity at building yards.

As this issue is affecting all parts of the energy value chain, my concern is twofold; firstly, that we are not giving enough attention to it; and secondly, it is not clear how long the situation will last. So the question is, as we enter the uncharted waters of \$100 oil, are we also facing a prolonged resource capacity crunch?

What is unique about the current period is that all the diverse activities in the energy chain (upstream, downstream, chemicals, tankers and so on) have enjoyed parallel financial success and now have massive and concurrent expansion plans. This is a departure from a history of different cycles of investment.

The investment challenge in the Middle East is a good example of the issue.