

institution once solutions to the challenges emerge. The European Union provides a precedent, as its origin also lay in political and security concerns.

Outlook

Despite the importance and urgency of the need, and the proliferation of pertinent meetings and groupings, the outlook for the development of substantive multilateral energy co-operation in Northeast Asia is not good in the near term. Indeed, even bilateral initiatives are being obstructed by inter-government distrust, for example Japan and China, and domestic indecision, for example Russia. It is this distrust and the complementary conflicting interests which constrain both the progress of specific projects and the development of substantive institutions for multilateral energy co-operation. Individual and collective leadership is required from the key heads of state in order to set aside political differences and establish a legally-binding framework for multilateral energy co-operation in the region. Only then can the energy supplies be secured at a reasonable cost.



Lessons for North America

Edward Morse

Energy issues should have provided clear political lessons to governments over the past fifteen years, especially the United States, which twice led coalitions to battle in the Middle East over matters in which oil played a significant role. It was also a period when revenues from oil and the symbolic ties between the world's largest oil producer, Saudi Arabia, and Washington, became central to the al-Qaeda attacks on New York and Washington. Even in the domestic arena energy should have been front

and centre, providing lessons for the future. For in the USA there were periodic spikes in gasoline, heating oil, natural gas and electricity prices, major power disruptions on both coasts and frequent public debates over LNG imports, environmental regulations, and resource exploitation on government lands, among other issues.

Yet, perhaps the most remarkable lesson of the past fifteen years for most people living not only in the USA but throughout the OECD is that energy issues are either not salient enough or tractable enough to rise to the top of the political agenda for long. This is certainly the case for the USA, Canada and Mexico (the three governments in the North American Free Trade Agreement), which, except for brief moments have found the status quo to be politically comfortable. Despite the episodic moments during which an energy issue has come to the fore, with rare exceptions that moment passes before critical decisions are required, and the government is free to ignore and avoid the difficult tradeoffs that are required.

Despite this complacency and the difficulty of moving away from the status quo, major challenges have emerged, both regionally and globally, and it is worth reviewing some of these challenges in that they may provide lessons for the future.

In the USA and Canada, as in most of the OECD (but certainly not in Mexico), two major trends have unfolded over the past decade and a half. These have involved first, the withdrawal of the state from active management of the energy sector, and second, the granting of authority to deal with the major factors affecting energy policy to technocrats charged with implementing environmental laws and regulations.

The state has, at both the federal and the state, or provincial levels in both countries relied increasingly on market forces rather than regulation to provide the framework in which energy commerce and investment unfold. For most of this period, the withdrawal of the state has not only borne few costs; it has spun off

perceived tangible benefits. That's because, until quite recently, energy prices to consumers fell substantially over the time frame and governments and publics drew the conclusion that deregulation of energy markets bore permanent benefits. Indeed, through most of the 1990s, declining energy costs were a major factor in the extraordinary economic growth that took place in North America.

Yet, two situations have emerged that may demonstrate that deregulation may have created new problems. Thus far, the problems have not been sufficiently salient to warrant a re-thinking of the relationship between the public and private sectors in energy policy. However, before long that situation might be reversed and the role of the state might again come to the fore of debates. The two problems can be summarised under two words: 'costs' and 'cushions'. They are directly related to one another.

In terms of physical costs, most of the period between 1990 and 2000 was characterised by lower energy costs. Oil costs were persistently below \$20, for WTI, Brent and the OPEC basket, except for the brief period after August 1990, when Iraq invaded Kuwait and the UN embargoed Iraqi oil exports. Natural gas and electricity costs likewise were reduced. Indeed, the extraordinary economic growth in North America during the last decade was buttressed by reduced energy costs.

The first sign of change came in 1997. That was when infrastructure constraints first started to loom large, as energy demand growth hit against physical constraints. Oil prices rose to twelve-year highs in nominal terms, as WTI crude, which had averaged \$19.30 between 1985 and 1996, and had scarcely risen above \$20 a barrel after 1993, suddenly spiked to over \$27 a barrel. Day rates for semi-submersible rigs in the Gulf of Mexico, which had averaged less than \$10,000 a day in the late 1980s and early 1990s, rose to over \$75,000. And OPEC, meeting late that year, virtually lifted all quotas. However, by late 1998 and early 1999, as demand bounced off constraints, oil prices

plummeted to \$10 and the illusion that surplus capacities in the energy sector were endemic and permanent again came to the fore.

Yet since 1999 energy prices in North America – as elsewhere in the world – have been on an upward trajectory, most markedly in 2004, when gasoline prices peaked at an average of \$2.10 a gallon and ended at \$1.80, up 40 cents year-on-year. Diesel prices peaked at \$2.20 a gallon, ending the year at \$2.00, up 45 cents year-on-year. More stunningly, natural gas prices, which averaged \$2 per million BTUs throughout the 1990s, climbed to an average \$5.43 in 2003 and \$6.03 in 2004.

Higher average prices, accompanied by occasional price spikes were a reflection of a second critical factor – the loss of surplus capacities, not only in North America but internationally as well. The erosion of capacity cushions became a major feature after 2000 along the entire energy chain. This included not just lost capacity to produce surged oil and gas and electricity. It also involved lost transportation capacity (both along pipelines and via tankers), and lost surplus refining capacity (both in terms of gross distillation capacity and, equally importantly, lost flexibility to process an increasingly sour and more heavy crude slate into increasingly tighter product specifications, especially for transportation fuels).

Lost cushions have reflected two converging trends. On the one hand, they reflected the erosion of surpluses that had been created through over-investment a generation ago, at the end of the 1980s and the 1990s. That erosion also reflected industry-wide under-investment due partially to low financial returns in refining and the upstream, and partially to an unanticipated surge in demand growth globally in recent years. But, on the other hand, the lost cushions and flexibility in the energy chain reflected the retreat of government as regulator and guarantor that adequate supplies were available to meet anticipated demand. This was especially true with respect to power generation, where the benefits of deregulation and the withdrawal of

state interference were thought to bear permanent benefits, because when deregulation occurred no one doubted that fuel supplies would be adequate to fuel electricity generation.

The illusion that liberalisation would bring permanent tangible benefits was reinforced by the growth of the North American energy trade, both between the USA and Canada and between the USA and Mexico. Since 1990, global oil consumption has increased by 12.9 mmb/d, with US demand rising by about 3.3 mmb/d, or 25% of the total. But because US domestic production has also slipped, US imports rose by 4.3 mmb/d over this period, more than 30% of the total increase in world oil trade. Canada and Mexico benefited substantially by this growth in consumption and by the openness in markets fostered by the North American Free Trade Agreement, launched in January 1994. Canadian production during this period grew from 1.96 mmb/d to 2.99 mmb/d, and its exports, virtually all to the USA, increased from 0.96 mmb/d to 2.1 mmb/d. Mexico's production base grew from 2.98 mmb/d to 3.79 mmb/d and its gross exports (again virtually all to the USA) grew from 1.39 mmb/d to 2.12 mmb/d.

The benefits of rapidly increasing energy trade in North America have both strengthened the view that deregulation of markets alone brings benefits without costs and bolstered the view that the energy sector was governed essentially by market forces. Both are illusions. The first one is resulting in the postponement of any sensible debate about the role of the public sector in assuring that the energy sector has the flexibility required to meet public needs and to rapidly adjust to changes in underlying conditions. The second is perhaps even more dangerous. It jeopardises the public good by its failure to understand that in energy, and especially in oil, the dramatic role played by the state in certain oil-producing countries is itself a factor in the lost flexibility of the system to adjust to change. And it is especially obvious in the southern part of North America. Mexico continues its state monopoly over its

hydrocarbon sector. This is a factor that not only makes full liberalisation of trade and investment in energy in North America impossible. It also brings costs to Mexican citizens as well as to the Mexican government by limiting the growth of that sector which would be accompanied by open investment.

There were numerous times in the recent past when the USA might have taken action to thwart government control over the energy sector in supplier countries, a factor which lately has created a weird situation, especially in this age of globalisation and liberal trade and investment. Today OPEC countries and Mexico fail to convert their abundant resources in the ground into proportional market share. Yet they have nearly unlimited trade and investment access to oil importing countries. In the mid-1980s, at the peak of OPEC surplus capacity, and again right after the Gulf War in 1991, Washington might have used the muscle associated with the size of its market. It could have required those exporters wanting access to the US market and ownership of part of the US refining sector to re-open their own markets to foreign trade and investment. Such a re-opening would have brought more of the fruits of globalisation to producer countries and would have resulted almost certainly in higher economic growth for all countries, including the producers, and lower costs to consumers. That is a potential lesson that may haunt future governments in the West.

What other lessons might there be in the experience of the past decade and a half? Here is a brief overview of some of the more noteworthy lessons.

Washington, like Ottawa and the capitals of most other OECD countries, has made domestic energy policies subservient to other governmental goals, especially environmental policy. In the case of the United States, Congress, with Executive branch acquiescence, has granted the Environmental Protection Agency responsibility for administering the Clean Air Act and other environmental laws and regulations. The problem has been that the mandates of these

acts enable the EPA to be free from responsible reporting to Congress or the President. They have also enabled a group of technocrats to dictate fuel standards, emissions controls, and other core aspects of energy policy without regard to any sensible cost versus benefit analysis of its actions. This has brought costs to the industry and to citizens, which can be dealt with only if the legislative and executive branches find a way to reassert the authority and responsibility of elected officials in formulating and implementing policy.

“The illusion that liberalisation would bring permanent tangible benefits was reinforced by the growth of North American energy trade”

Similar conclusions can be drawn from a review of the administration of the Strategic Petroleum Reserve. The US SPR is approaching full capacity of 700 million barrels, and it might well be enlarged in the years ahead. The SPR is the most significant tool in the armour of government for dealing with energy issues. For more than a decade, until the election of George W. Bush, various administrations have insisted that the SPR should be used as a last resort to deal with physical disruptions of oil supply. Yet, each administration has found a way to release SPR oil to damp prices when speculators pushed them well above market-clearing levels. Until recently, it was costly for funds to go long above \$35 a barrel, because of the ambiguities inherent in US SPR policy. But now an administration has, for essentially ideological reasons, ended that ambiguity and made it clear that there is virtually no circumstance in which it will release oil from its strategic stockpile, reserving that oil for a rainy day to come. As a result speculators have been free to drive prices well above \$35 a barrel. It seems clear that there are lessons in what the Bush administration has *not*

done with the SPR, which will also enter future public debate.

In yet another area, the last decade and a half has witnessed the rise of two new energy superpowers, each of which is set upon pursuing what diplomatic historians used to call ‘revanchist’ policies. Neither Russia nor China likes the status quo. Russia is likely to stand some fifteen years from now alongside Saudi Arabia and other Middle East exporters, and alongside Nigeria, Angola and some West African exporters, as one of the three major sources of oil and gas in the world, and one of the only suppliers with global reach. China is likely to stand alongside the USA as one of the two major markets, both in terms of size and growth potential. Yet Washington has preferred to ignore these trends. It has done little to try to induce Moscow into playing by liberal trade and investment rules and has done even less to integrate China into the importing nations safety net of co-operation within the IEA. This, too, may turn out to have been a mistake and, a decade or so from now, there will likely be recriminations in Washington about what might have been done to ensure that the goals pursued by Moscow and Beijing were more congruent with Washington’s.

The debate over dependence upon foreign sources of hydrocarbon supply and over vulnerability to supply disruption re-emerged after the events of September 11, 2001. But the debate has not awakened sustained public interest. Three elements of the debate remain particularly obvious arenas for future discussion and could well form the core of a new energy policy consensus. These relate to (1) LNG imports; (2) rampant demand growth for oil as a transportation fuel; and (3) the quest for energy self-sufficiency.

With respect to LNG, there is little doubt that official Washington has taken measures to ease the siting of regasification facilities to ensure ample supplies of natural gas. Yet, there has been no debate over the costs of increased dependence on foreign supplies or about measures that might be taken to ensure that higher gas import dependence does not translate into

higher vulnerability.

When it comes to demand, Washington (along with Ottawa and Mexico City) remains the major exception within the OECD when it is necessary to take measures to damp demand for oil as a transportation fuel. Yet half of the increase in US imports over the past decade and a half (which equal to total oil consumption of all countries in the world except China and Japan) is due to rampant, if not wanton oil demand growth. At some point, if costs continue to rise, actions to increase radically the efficiency of the US automotive fleet must once again come to the fore of public debate.

With respect to self-sufficiency, or regional sufficiency, it remains an obvious fact that the United States is robustly endowed with coal. The public pursuit of clean coal technologies and of technologies to transform coal via liquefaction and gasification into the other fuels, will almost certainly re-emerge as the appropriate roles of the private and public sectors are examined.

Finally, perhaps the most intriguing element of the emerging debate within the United States on energy policy has been the extraordinary convergence between the political left and the right. It is borne from the right-wing neo-conservative desire to free the USA from dependence on Middle Eastern oil and from the left-wing desire to foster soft and alternative fuel technology paths. Green Conservatism, for lack of a better phrase, may well be creating the basis of a new energy consensus in the USA. That consensus begins with the perceived need to end relentless growth of oil demand in the USA, because of the consequences of that growth with respect to physical and foreign policy dependence on Middle East countries, and on Saudi Arabia in particular. It includes a Green strategy as the way toward energy independence, which is based on essentially national security goals. The increasing contacts between these two groups may indeed provide the most lasting lesson of the recent past few years, especially the years since 9/11.