Water Pricing and Its Availability

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Introduction

In recent times, perhaps because of the drought, concern about the availability and management of water has become the ultimate barbeque stopper. A critical consensus now seems to be emerging that:

- Water is scarce – a scarcity made worse for irrigators and the environment by the over-allocation of rural water licences,
- Investment in water supply has been neglected, partly driven by rapacious State governments pursuing dividends from their water agencies, and
- There has been a lack of progress on water trading and in realising the greater contribution that the private sector could make to help clean up the mess.

To some critics all these ills of the water industry are due to the fact that water prices are too low. The argument runs that prices need to be reformed to provide the necessary incentives to use water efficiently and so the more efficient private sector can provide new innovative solutions for the future supply of water.

Reflecting these criticisms, the Treasurer, Peter Costello, in a recent speech called for the establishment of a national market for water. More specifically the National Water Initiative that COAG agreed to in 2004 included the introduction of cost reflective pricing for water, the development of entitlement trading systems, separating land and water titles, and the provision of water for environmental purposes. In the Treasurer's opinion the States are failing to deliver on these reforms, and he noted that many of them had previously been agreed by COAG way back in 1994.

I am concerned, however, that many of these criticisms are ill-informed. What I want to do today, therefore, is to explore these criticisms more fully and consider what progress has really been made, what difficulties remain, and what further progress

might be expected in balancing the needs of the community, industry and the environment for water in the future.

Water pricing

Water pricing is a key element of a sound water policy. But how should water be priced and what is the appropriate price for water?

We tend to forget that until the 1980s urban water bills were determined by the value of the property at which the water was used. In effect water was paid for by a system of taxation on property values. Most ratepayers used less than their water allowance and effectively faced a zero price for their additional consumption. Consequently water agencies were unable to manage water demand, and so they responded to increasing water use, partly brought about by a zero or low water price, by expanding supply, which was then paid for by an increase in rates.

In addition, different users' water allowances varied, depending on the rates paid, so that virtually every urban water user confronted a different average price of water. These different average prices, coupled with the fact that properties could be valued on different bases, depending on whether they were used for residential purposes or for commercial or industrial purposes, meant that cross subsidisation was an endemic feature between different user groups as well as within user groups.

Following the 1994 COAG Water Reforms, pricing regulators, such as the Independent Pricing and Regulatory Tribunal in NSW, have worked diligently for over a decade, in association with water agencies, to unravel problems that were a century in the making. The stage has now been reached in NSW where consumption charging is now the rule for virtually all urban water, and most rural water. Cross subsidies between different types of users have largely been eliminated and the prices of water and related services now better reflect the costs of those services. In some ways this has been a remarkable achievement given the starting point and the resistance to change that is sometimes evident in the Australian psyche.

What is the appropriate water price?

But that still leaves the question of whether the price of water is still too low to achieve a satisfactory balance of supply and demand?

I suspect that most of you believe that the present price is too low? I have even heard the view that the price of water should be doubled or even tripled.

Such views, however, beg the question of how the price of water should be determined. Traditionally, water itself has been almost a free good, and consumption charging to recover the full cost of supplying water would still only cover the cost of capturing the water, then storing and transporting it to the consumer. In recent times, however, it has been recognised that the cost of future additions to the water supply and measures to encourage water saving are likely to cost more. Consequently, in order to signal to consumers the higher costs of water, and attract the necessary investment to meet forecast demand, it is now agreed that the volumetric component of water prices should be set at the level of the long-run marginal cost of water.

Unfortunately, however, many commentators think, or assume, that urban water is still under-priced relative to this standard of the long-run marginal cost. For example, the BCA asserted earlier this year that urban water is priced as if it was plentiful and does not reflect the next supply source. But contrary to this and other similar views, I propose to demonstrate, at least in NSW, that we have now taken the necessary steps to achieve prices that approximate long-run marginal costs and thus support future urban water supplies.

At its 2005 inquiry into the water services provided by Sydney Water, the Independent Pricing and Regulatory Tribunal (or IPART) estimated that the long run marginal cost of the next suite of augmentation options was in the range of $1.20 to $1.50 ($ of 2004/05). There is also a range of demand side water management measures available that effectively win back water by allowing users to achieve the same outcome while using less water. Many of these water savings can also be attained at or below that $1.20 to $1.50 range.

It is instructive to note that Malcolm Turnbull, the Parliamentary Secretary to the Prime Minister for Water, said in Brisbane earlier in the year that “in the final analysis we can desalinate anywhere on the coast for a cost of between $1.00 and $1.50 a KL at the factory gate.” As Mr Turnbull rightly points out, this provides a rough and ready benchmark against which to test the economic viability of other water supply options. In the case of Perth where they have already established a desalination plant, Mr Turnbull has pointed out that the cost of desalinating sea water is $1.16 a KL.

By comparison, Sydney Water currently sells most of its water at $1.26 per kilolitre. This price will rise to $1.35 in today’s dollars by 2008/09. Large residential users will face a price approaching $2.00 in 2008/09.

In the Newcastle region where the water supply is holding up remarkably well, the water price for residential customers will be about $1.20 per kilolitre by 2008/09.

The Central Coast of NSW faces a much more serious water supply situation than either the Sydney, Illawarra, and Blue Mountains regions or the Newcastle region. The Tribunal estimated the marginal cost in the Central Coast region at between $1.52 and $1.66. By 2008/09 the price of water on the Central Coast will have reached $1.57 in today’s dollars.

It appears to me that Mr Turnbull is confirming that in all these urban areas the prices of water determined by the NSW Pricing Tribunal are within the range that would be expected.

In a similar vein, I also want to take issue with the assertion by the Department of Prime Minister and Cabinet that “in most cases, rural water pricing will barely cover the operational expenses of the supplier and funding for new or upgraded infrastructure is often sought from other sources.” In fact the prices set by IPART for bulk water to NSW irrigators earlier this year are expected to fully recover both the operational and future capital expenditure costs of 95 per cent of the irrigated water sold in NSW by 2009/10, with the price of the remaining water that is not fully cost recovered being even higher. In addition, the structure of irrigated water prices has been altered, so that although the proportion of fixed costs is very high, charges that

depend upon the volume of water consumed account for 60 per cent of a typical irrigator's bill in a normal year.

Somewhat ironically, the major exception to cost reflective pricing for irrigated water is, in fact, the Commonwealth itself. Thus the Commonwealth and NSW governments are funding the Murray-Darling Basin Commission for works that clearly benefit farmers. The NSW Government's share of these MDBC costs is recovered through bulk water charges, where those works benefit farmers. But these cost reflective pricing rules are not being applied to works funded by the Commonwealth, despite its insistence that the states abide by them. Similarly the Commonwealth has now offered to pay for what the Prime Minister calls "iconic" national water projects, but again there seems to be no intention to recover the costs of these projects through the price of the water they will provide.

Water restrictions and future water supplies

But you might ask, is cost-recovery a sufficient basis for pricing? In particular, does it sufficiently allow for the scarcity of water? For example, if we have got the prices right, why then do we have water restrictions? Don't these restrictions suggest that there has been underinvestment in the past, possibly because prices were too low or alternatively because greedy state governments have demanded excessive dividends?

I agree that there is no case for considering permanent water restrictions for urban water when we can augment future supplies through recycling or desalination. Nor should permanent restrictions be needed in a rational water market once the price of water in all major cities is set at a level consistent with the long run marginal cost of supplying additional water.

In the case of rural water, the situation is distinctly different. There is no likelihood that irrigators would be prepared to pay the cost of a significant augmentation of rural water supplies. Therefore, in a situation where irrigators' demands are running ahead of present supplies, some form of rationing is required. How rural water should be allocated and priced to promote its efficient use is something I will also say more about later.

But returning to urban water, I think it is understandable that water planners did not foresee what has been described as the “worst drought on record”. Even more important, there is a high cost to drought proofing a city so that a drought *never* has an impact. Just as banks and super-markets have queues when they are busy, water restrictions can be preferred to the cost of installing more capacity than would normally be required, just to avoid ever having to resort to water restrictions. Instead, the question that must be answered in these cases is whether the cost consequences of a drought, multiplied by the probability of it occurring, are greater than the cost of building and reserving additional water supply systems to cater for that drought.

Another alternative that has been suggested is that the price of water should be allowed to rise when water is scarce because of a drought. To some extent that can happen with irrigated water now on the private market, but this proposition is unlikely to enjoy much community support for urban water. The problem is that the demand for residential water is so inelastic that the price could be subject to wide gyrations if it were the sole means of balancing supply and demand in a drought. My feeling is that the public would object to the perceived impact on low-income households and to the massive excess profits, which would then accrue to the government from a drought situation.

Dividends, Prices and Infrastructure Investment

That leads me to the suggestion that the avarice of state governments for dividend payments has led to gross under-investment in the water industry over recent years, and that this is the cause of the current “water crisis”. The irony is that for most of our history governments have tended to over-invest, especially in water. Indeed I am reminded of the former “modest member” of parliament, Bert Kelly, who observed that “we are entering an election, and I smell another dam coming along”.

Today I believe that we are seeing a more considered approach to investment in the water industry by State Governments. A number of State Governments have developed their future water proposals by way of very public processes involving extensive public consultation.

Here in NSW the Government has developed and publicly released its *2006 Metropolitan Water Plan*. That plan was predicated on studies undertaken by consultants into factors likely to influence the supply and demand for water, "both in the long term and during drought periods". That Water Plan outlines proposals to diversify water supplies which will see traditional dam fed sources supplemented by recycled water schemes, greater water efficiency, and "in severe or extreme droughts, (by) groundwater and desalinated seawater". The water measures set out in the Metropolitan Water Plan are forecast to meet Sydney's water needs to at least 2015.

If necessary, however, the Metropolitan Water Plan has the flexibility to bring forward or defer works as circumstances dictate. It makes no sense to prematurely construct works. On the other hand, droughts and climate change may see the need for some works to be brought forward if water levels fall below predetermined targets.

As for the claim that excessive dividend payments to the State Government have led to underinvestment in Sydney's water services, I would draw your attention to the following facts. First, in the last five years capital expenditure by Sydney Water on water, sewerage and drainage works has averaged almost $500m per annum – five times more than the dividends paid. Second, Sydney Water's dividend payout ratio over the five years to 2004-05 averaged 57 per cent, slightly less than for the typical private company, whereas over the same period the dividend payout ratios for Australia Post and Telstra have averaged a high 83 and 73 per cent respectively.

So investment in Sydney's water is not being held back by excessive dividend payments. Indeed, it would seem that the Commonwealth is more rapacious when it comes to dividend payments. So perhaps it is time for the pot to stop calling the (relatively clean) kettle black.

Water Allocation and Trading

I would now like to say something more about the allocation of water and the possibility of building a national market which would encourage trading in water.

But first we need to appreciate some particular features of water as a commodity that will inevitably influence the scope for any water market, be it national or local. The reality is that water is not like electricity which is easily and cheaply transported, and therefore readily traded across state borders. Instead water is bulky and heavy; indeed, you might remember that by definition a kilolitre of water occupies a cubic metre and weighs exactly one tonne. Thus unless water is transported by gravity through rivers and streams, it is so expensive to transport that water collection and distribution tends to be localised to a particular city or region.

The major exception to this rule is the Murray-Darling basin; but this is only an exception to the extent that water can be transported by letting it flow down stream, and that in effect proves the general rule. It would not be economic, for example, to take water from the Murray and sell it upstream into Queensland. Furthermore, even within the Murray-Darling basin the cost of collecting and distributing water varies markedly between different irrigation areas. Consequently, State Water's usage charges for some districts in the Murray-Darling basin need to be as much as four times the price in the cheapest districts in order to be cost reflective.

Nevertheless, and notwithstanding these limits upon the possible trading of water, I would agree that building a market for the trading of water should help improve the efficiency of water use where trades are economically possible. To achieve such a market it was recognised by COAG back in 1994 that it would be necessary to separate the title of an irrigator to water from the title to land. And this has now been done, although it is curious that the Commonwealth Treasurer is apparently unaware of this achievement.

Furthermore, the NSW Government is tackling the problem of over-allocation of water entitlements. In 2000 the NSW Government introduced legislation which reformed the water management framework. Under that legislation water sharing plans have been developed for the major river systems in NSW, which specify each user's access rights as a share of the water available. In effect, an assessment is made each year of how much water will be available and an irrigator has an entitlement to a share of that total. Because the various shares only add to one hundred percent, the water can no longer be over-allocated as it was previously.

The introduction of separate water titles, along with water sharing plans that allocate only the water available, also means that the basic requirements for water trading have now been met. Furthermore such trades are occurring, and I understand that on 2 November entitlements were trading for $700 per ML in the Murrumbidgee Irrigation area, for $800 in the Murrumbidgee Valley, and $950 in the Lower Murray. In the Namoi the traded entitlement price was $2395 per ML, while it was $2400 in the Macintyre Valley and $3000 in the Hunter. Temporary rather than permanent trades in water are also possible. Water is on offer at $350 a ML in the Murrumbidgee and the Lower Murray, $100 in the Namoi, $90 in the MacIntyre and $150 in the Lachlan.

These prices give the lie to the popular criticism that the price of irrigated water is too low, and that it should be increased to stop profligate and inefficient irrigation practices. Certainly, the regulated price of bulk water charged by the government to irrigators is below the urban price, but it costs less to supply this lower quality bulk water in open channels. In fact, what should matter for water use is the market price of this bulk water, and as the market prices I have just quoted demonstrate, this market price is clearly very much higher than the cost of supplying bulk water. Irrigators are now facing a choice of whether they use their water entitlement on their own farm, or whether they would be better off selling some or all of their entitlement to someone else who values it more because they can put it to more profitable use. In principle, if a cotton farmer is continuing to use water, it is because that cotton farmer is getting a greater return (net of the costs of production, including the water) than would be possible from any alternative use of that water.

Clearly, the market prices will reflect the scarcity value of water, but that scarcity value, over and above the cost of supply, accrues to irrigators who choose to sell their water rather than to the government. However, it is the owners of the property rights to this water who have to agree to trade. Governments can only ensure that trading can take place where these owners want to take advantage of the market prices now available to sell their water to alternative users who value the water more highly, including cities where the water can be economically transported, as for example in the case of Adelaide.

There is no longer any regulatory impediment to trade *within* NSW, and the prices I have just quoted reflect those trades. So far interstate trading has only been fairly limited, mainly because in reality water – or more exactly a water entitlement – is not a homogeneous product. In particular, the relative security of water entitlements differs between the states and between catchments. This is because of different supply characteristics across catchments, such as rainfall, dam capacity and run-off. Consequently, it has taken time to agree on how to take account of the different levels of security of water entitlements in any interstate water trading framework. Similarly, compatible systems that properly account for these water trades have also inevitably taken time to be developed. But the necessary arrangements to support interstate water trading are now agreed, and interstate trade in water can now take place.

While I appreciate that it is fashionable to criticise the states for what often seems to be their tardiness in agreeing to such arrangements, I actually think what has been agreed represents quite an achievement – an achievement that owes little to the Commonwealth Government. Indeed, an overseas expert on water markets, Roger Bate from the American Enterprise Institute, has praised our water trading system. Bate has advised other countries to emulate us in recognising the different security of different entitlements in interstate trading, and also our separate entitlement to cover conveyance losses as water travels over longer distances.

The critical question is how much difference will a market for water make? Water typically only accounts for between 1 to 4 per cent of an irrigator's costs. There is also quite a lot of evidence that irrigators are using water more efficiently – for example, rice-growers are reported to have increased their water use productivity by 35 per cent since 1996 – but irrigators have been using their water savings to expand production, rather than using less water. In future, the extent to which irrigators will be willing to permanently sell their water rights is an open question. Farmers know that the value of their land and their ability to recoup their considerable investment in on-site irrigation infrastructure is dependent on their continued access to water. In addition, there are lifestyle issues, and farmers have a history of not selling out even when the yields on alternative investments are much higher elsewhere. So how well

the market for water will work to achieve a better allocation is something of a moot point at this stage.

Furthermore, some people still consider the present market-based system for managing rural water is flawed. Their principal criticism is that the share for the environment was set too low to maintain the health of our river systems, and especially the health of the Murray-Darling system. In particular they argue that in our rush to establish a market for water there has been insufficient attention to the sustainability of water supplies, and that there is a need for more bio-physical research.

In fact the water sharing plans for NSW rivers do provide for environmental flows to rank ahead of irrigators' entitlements, so that these flows are much less affected when allocations are low. In addition, safeguards have been included to ensure water trading is environmentally benign, but the critics argue that "given their complexity, it is hard to believe that water trading will really be conducted in this way". For example, it is not just a matter of defining the sustainable extraction level, but the government also needs to decide how close to approach this level before further intervening on behalf of the environment. The environmentalists' concern is that "the capacity to implement and enforce the present water management regime … is well beyond the current institutional capacity of most catchment bodies and of available hydrological knowledge".

Judgements can differ, however, about the appropriate sharing of water and who should benefit. And often it is necessary in public policy to make a decision without perfect knowledge. Thus there is inevitably an element of compromise in balancing the claims of the environment and the irrigators.

In future it would be possible to further increase the share of water available for environmental flows, if such action were considered warranted, but it would generally require the government to buy out some of the irrigators' entitlements. Indeed the NSW Government has already implemented a program to buyback licences in a number of regions in NSW. Such buybacks imply a more secure water supply for the environment and the remaining entitlement holders. However, they do involve a

higher price, which reflects the scarcity value of the water, and will therefore cost more than if the environment had received a higher allocation in the original distribution. I suspect that this higher price is what the environmental movement is most objecting to. But we should not forget that persuading the irrigators to forego what they saw as their former higher entitlement to water was not easy. It was probably only made possible by turning their previous *de facto* entitlement into a *de jure* entitlement, and allowing them to trade water at a price that reflects its scarcity value.

Private sector involvement

Last year at the request of the NSW Government, IPART reported on the alternatives for the provision of water and waste water services in the greater Sydney region. The Tribunal found that efficiency might be enhanced and more innovative solutions might be forthcoming if more work was contracted out by Sydney Water and if third parties were encouraged to access the trunk network to supply competitive services. The Tribunal also considered how private sector involvement might affect the present system of uniform pricing for water across the Sydney region, and whether the access regime might lead to 'cherry picking' where the private sector had an incentive to service only those clients where service costs are relatively low.

The NSW Government has now responded to that IPART report, and the new *Water Industry Competition Act* provides for the natural monopoly elements of the major water utilities to be opened up and accessed by other parties. Those other parties, subject to certain conditions being satisfied, are then free to market a range of services to their customers, and customers will be free to choose their water service provider. The water service providers will have to pay for any transportation and treatment services provided by the incumbent infrastructure owner, but will be free to develop products and services desired by consumers. The increment earned on the value added services will, of course, be retained by the new service provider.

Most recently IPART considered the pricing of recycled water services. In undertaking that review the Tribunal was mindful of the potential for private sector participation in this market and of the need to ensure that any price structures developed would not impede or otherwise limit the development of that market. In the

case of recycled water the Tribunal decided against setting a uniform or “postage stamp” price for recycled water services. Rather it will follow the precedent that it had already established for the recycled water scheme at Rouse Hill, and providers of recycled water services will be allowed to calculate their own prices that reflect the particular cost structure of each recycled water scheme.

With the exception of recycled water at Rouse Hill, the notion of having different prices for similar services is something new for the urban water sector of NSW. Traditionally water and related services have been charged on a “postage stamp” basis under which all customers of a water supply authority are charged for services at the same price, irrespective of location. A common price for essential services has much to commend it from a social equity viewpoint. Furthermore, the economic efficiency losses that might at first sight seem to be implicit in such an approach are largely mitigated by other elements of IPART’s charging arrangements for metropolitan water services.

In the water industry developer charges are an established feature of water and sewerage charging arrangements. These charges are effectively contributions to the cost of service provision by land developers whose incidence falls mainly on final homebuyers. IPART sets these developer charges so that they do vary according to the relative costs of supplying water services to different localities. Thus the combination of developer charges and periodic charges means that, while periodic charges for water services are uniform across the urban area, the overall charge does vary having regard to the cost of service provision.

However, the prospect of competition has now thrown into high relief whether or not the existing charging arrangements are sustainable in a competitive market. One focus of attention has been the future of developer charges and “postage stamp” pricing regimes. It needs to be recognised that because householders have paid developer charges upfront and these charges have been capitalised into existing house prices, there is a strong case for not disturbing the traditional uniform periodic, or “postage stamp” pricing arrangements. But whether and how these arrangements can be sustained is a question whose answer lies somewhere in the future.

In contrast with these actions taken by the NSW Government to involve the private sector in the provision of water services, the discussion paper released by the Department of Prime Minister and Cabinet in August contained very little beyond a text-book summary of the possible opportunities for private investors to make a commercial return – to paraphrase the paper's introduction. The discussion paper calls for national guidelines for contracting with the private sector and a national code for third party access. For the Commonwealth this need for national direction is apparently a self-evident proposition, and no rationale is offered as to why we need *national* guidelines. In contrast to the IPART report, which was already available to the Commonwealth, there is no real exploration of the possible content of these national guidelines and access code, and the implications for different consumers. Frankly, the private sector is unlikely to enter the water industry without a lot more information than the Commonwealth seems willing or able to provide. I think the only fair conclusion is that the NSW Government is getting on with the job of providing the necessary framework for the private sector to enter the water industry, and that the Commonwealth neither needs to nor is capable of taking over water management and regulation.

Commonwealth and State Responsibilities

That leads me to say something more about the respective roles and responsibilities of the Commonwealth and State Governments in the provision of water and waste water services.

I note that the Commonwealth seems to be fostering the presumption that it should take over the management of water from the States. For most of my career in government, however, the widespread assumption was that services were best provided by the level of government closest to the people, and that duplication between the Commonwealth and the States was normally considered to be the Commonwealth's fault. The exceptions to this presumption of state responsibility for services used to be where the provision of a service crossed state borders, such as post and telecommunications or aviation, or where some other national interests were at stake.

Now I accept that in the Murray-Darling basin the provision of water crosses state borders and the Commonwealth should have a role in managing the water in this important basin, as it has had for many years through its membership of the Murray-Darling Basin Commission. I also accept that the Commonwealth should have a role elsewhere if the states were somehow failing in their provision of essential services such as water, and if the Commonwealth could be expected to do it better. But I suggest that neither of these conditions have been satisfied. The states are not failing and there is no evidence that the Commonwealth could do it better – rather the evidence presently suggests the opposite.

Furthermore, I think that there are good reasons why the States should continue to be responsible for most water management. First, as Malcolm Turnbull has himself acknowledged, “there can never be a national water market”. This is because, unlike electricity, water is bulky and heavy, so its supply and management is almost always local. Second, the prices and conditions of supply, as I have shown, vary considerably from one location to another. Third, there is a need for integrated water planning which is based on individual catchments, engages directly with the people who live in that catchment area, and is integrated into other aspects of town and regional planning – another state and/or local responsibility. Fourth, access pricing must be related to water prices that are already regulated by the states, and will need to consider the implications for the relative prices charged to different consumers. Fifth, the other aspects of water and waste-water provision, such as health and the environment are already regulated by the States, and water management and pricing should not be separated from them.

For these various reasons I think water management in most river valleys should and is likely to remain a matter for each State jurisdiction. State governments, as I see it, have a role as a rule maker which sets the conditions for an orderly market process, including setting and monitoring conditions and standards for water supply. The states also have traditionally had a role in the actual provision of water and sewerage services. However, with the advent of open access, private sector participants will be able to enter the market for water and waste water. This will make the management and regulatory roles of State governments all the more important. On the other hand, it is not clear to me that the Commonwealth Government necessarily needs a role or

can, in fact, have a meaningful role in the localised water management that characterises most of our urban, regional and indeed some irrigation supplies. As the Productivity Commission put it in a recent report – "there is no 'one size fits all' approach – market mechanisms must be tailored to the circumstances".

What then should be the role of the Commonwealth in water? It seems to me that the most useful role for the Commonwealth is one of being a catalyst for best practice and brokering and developing agreement on national principles. In some respects the Commonwealth has sought to undertake this role, but so far with only limited success. It should not be forgotten that the Commonwealth took practically no interest in water between 1994 and 2004. As the Treasurer has acknowledged, the National Water Initiative was for the most part a repeat of the 1994 COAG agreement, and as I have shown the progress that was made during those ten years was almost entirely due to the states. For most of that period the Howard Government was not interested in water reform and only entered the policy debate in 2004, probably prompted by the drought and most recently by increasing concerns about climate change. Indeed, as I mentioned earlier, the Commonwealth has even failed to ensure cost reflective pricing to cover infrastructure it is financing through the Murray-Darling Basin Commission and elsewhere.

Concluding Comments

In my talk today I have sought to consider and address a number of positions and criticisms levelled about the current state of play with water policy, and especially water pricing policy, which have recently gained currency.

I believe that the States, particularly NSW and other eastern seaboard states, have made greater progress than they are given credit for. The States have developed and implemented sophisticated, reasoned and considered approaches to water management and regulation. Prices do reflect the cost of providing the services and match the long-run marginal cost of balancing demand and supply in the absence of major climate change. Where water is scarce, water trading is occurring at prices that reflect that scarcity. The present water restrictions are in response to the drought, and we should not be rushed into departing from carefully developed plans and creating capacity that would then risk being uneconomic for at least a period of

time after the drought breaks. In short, I think there is ample evidence that the States have the expertise and the will to continue with their responsibility for managing water, particularly in urban settings.

In future I expect that there will be increasing competition not only for water through trading, but also in the provision of water and related services by the private sector. Here in the Sydney region long-term water planning clearly envisages that new sources of supply will have to be developed over time in response to population increases and possibly changing climate conditions. The private sector with its capacity to innovate is expected to make a very important contribution to these future water services. I think that can be done at prices close to those now available, and the way is now open for that to happen.