

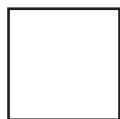
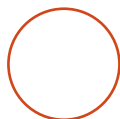


REDUCING RED TAPE IN NEW SOUTH WALES

IPA SUBMISSION TO IPART INVESTIGATION INTO
THE BURDEN OF REGULATION IN NSW AND
IMPROVING REGULATORY EFFICIENCY

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Australia's Leading Free Market Think Tank

The Regulatory Mind-Set

We have recently emerged from an era, which peaked some three decades ago, during which socialist thinking dominated government decision taking. This perspective led many to believe that “experts” provide more accurate determinations of demand (and more appropriate supply responses) than the various individual decision makers in the community.

More recently, government intervention within the economy has been normally justified by the claim that there are “externalities” that render individual demand and supply decisions inadequate as the determinant of income maximisation. Externalities as unpriced values concomitant with a transaction offer ready justification for government interventions of all kinds.

Nonetheless there has been a clear recognition that those governments which undertake such intervention most frequently and intensively tend to preside over economies that perform poorly. Hence there have been increased calls for deregulation.

This focus upon Red Tape has assumed a higher profile over the past year or so and both the State and Commonwealth Governments have given a high priority to the issue. At the February 10 COAG meeting regulation was a major agenda item and governments agreed to:

- *establish and maintain effective arrangements to maximise the efficiency of new and amended regulation and avoid unnecessary compliance costs and restrictions on competition;*
- *undertake targeted public annual reviews of existing regulation to identify priority areas where regulatory reform would provide significant net benefits to business and the community;*
- *identify further reforms that enhance regulatory consistency across jurisdictions or reduce duplication and overlap in regulation and in the role and operation of regulatory bodies; and*
- *in-principle, aim to adopt a common framework for benchmarking, measuring and reporting on the regulatory burden*

There is now a far greater realisation of the costs that over-government and over-taxation can bring even to economies that not so long ago were regarded as engine rooms of world growth. If for no other reason, retaining our competi-

tiveness makes it vital that Australian Governments do all they can to minimise regulatory excessive costs.

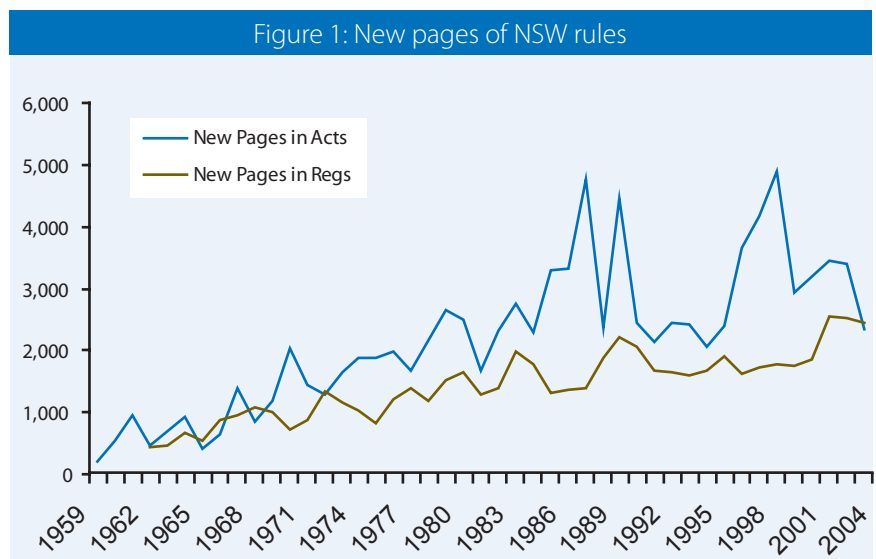
Regulatory Trends in NSW

The most obvious point to make about the level of regulation in Australia is its extraordinary growth over time. Parliaments seemingly have an almost insatiable desire to push through ever greater amounts of legislation and regulation with every passing year. In the years from 1991 to 2004, the Commonwealth Government produced approximately as many pages of legislation as had been passed over the previous nine decades since Federation.

Though NSW has not been the Australian jurisdiction with the fastest increase in regulatory burden, governments in the State have continued to add increasing numbers of new regulations over recent decades. The following chart (Figure 1) covering pages of acts and regulations is indicative.

It should also be remembered when looking at this graph that this represents only the flow of *new* legislation every year. What individuals and businesses have to daily comply with however is the actual stock of legislation already in existence and constantly been made worse by the cumulative effect of new legislation that is continually being added.

There is no need for this continual growth in regulation - life is getting safer, sellers are becoming more accountable. This begs the question as to why regulation continues to increase. To some extent it may simply reflect increased wealth causing us to become more risk-averse



and are more likely to demand regulation to minimise risks that were once regarded as being part and parcel of daily life. However, as British Prime Minister Tony Blair has pointed out, it is neither possible nor even necessarily desirable to eliminate risk beyond a certain point. There is an urgent need for Australian governments at all levels to make this point to their own constituents, and point out that demands for risk-minimisation can be very damaging and counterproductive when taken to the level that is now becoming increasingly common.

Perhaps even more importantly however, there is also a need for governments to look at the institutional drivers of regulation and whether the incentives facing regulators are at present aligned with what is in the interests of the broader public. Much legislation is now undoubtedly being driven by bureaucratic empire building or alternatively by risk aversity among policy-makers seeking to insulate themselves against blame for future potential problems. This is legislative overkill. It is important that all levels of government, but particularly the state level, create more coherent and sensible processes for the introduction of new legislation to ensure consistency and transparency and to assure themselves that the benefits will outweigh the costs.

The focus of our own advice is three areas: building and planning regulations; energy regulations; and labour related regulations. In addition, we nominate some reforms in the process of regulation review which could be helpful to a government determined to reduce the regulatory burden.

Building Regulations

Over the past two decades, what is now called the Building Code of Australia (BCA) has developed from different state codes that were less than consistent with one another.

A major deregulatory thrust took place in the 1980s when the states agreed to shift the Code requirements onto a non-prescriptive basis with certain approaches given a “safe harbour” deemed-to-comply status. At the same time the Code itself was re-written in plain English. This allows cost savings in building construction by -

- (a) permitting the innovative use of alternative materials and forms of construction or designs while still allowing existing building practices through the Deemed-to-Satisfy Provisions;
- (b) allowing designs to be tailored to a particular building; and

- (c) being clear and providing guidance on what the BCA is trying to achieve.

However, in response to regulatory pressures, the Code has been diverted into a more regulatory set of measures over recent years. Two areas of particular concern are with respect to energy conservation and to promote better access for people with disabilities.

Energy Regulations and House Building

In 2003 the Australian Building Codes Board (ABCB) introduced energy efficiency requirements for Class 1 buildings – i.e. detached houses – into the Building Code. This has proven to be a mere start of a steadily escalating process. Jurisdictions are competing with each other to introduce escalating regulatory measures on house construction for energy saving.

Among the most onerous are the NSW BASIX requirements. These are comparable to the Victorian “5 Star” energy saving regulations for housing. This, according to a survey by Master Builders Australia of its members revealed that the cost of a three-bedroom brick-veneer dwelling had increased by between \$13,000 and \$18,000 depending on design and location.

Energy saving regulations constitute a clear case of regulatory reflex actions that are imposing considerable costs on the economy. Because they focus on the least affluent sections of the community – those who do not have their own home (and those who are unaware of and politically disorganised to counter adverse regulatory impacts) the outcome is all the more regrettable. Indeed the zenith of hypocrisy is observed when the most vociferous proponents of additional measures to save energy are volunteering new houses as the vehicle for achieving this. In general those campaigning for the regulation already own a house, the value of which will be lifted by measures imposed on new houses.

No further regulations aimed at energy savings should be proceeded with and existing ones should be critically reviewed to determine their merit.

Energy Regulations in Commercial Buildings

A further area of market failure which BCA proposals seek to address arises from the presumption that building owners do not in all circumstances have incentives to specify optimal levels of thermal performance. This problem is said to arise particularly in relation to rental accommodation. Buildings are complex products and it is likely that, in many cases, owners will not be able to retrieve the marginal costs of specifying higher levels of thermal efficiency from

tenants in terms of higher rents. That is, energy efficiency represents only one small element of the bundle of “goods” that a prospective tenant obtains by renting an apartment and so preferences for greater efficiency are unlikely to be translated into effective demand in the market place.

The wrong conclusions can be drawn from such starting positions. Thus it is often argued that a developer who intends to sell a house or building is not concerned about the ongoing energy costs that the occupier must bear, except to the extent that purchaser preference for higher levels of efficiency is translated into higher sale prices. Again, because of the complex “bundle” of characteristics or services effectively provided by a building, the ability of consumers to express effectively their preferences for higher levels of thermal efficiency may be limited in practice. That is, market failure may derive from demand signals not being effectively perceived by suppliers. Alternatively, the complexity of the services provided by buildings may mean that consumers are not sufficiently informed about the impact of thermal performance on running costs and comfort levels and, as a result, do not express a demand for higher levels of performance.

Regulatory implications stemming from these sorts of arguments are highly suspect. In fact building owners need to attract customers and develop an attractive amalgam of features and cost savings to maximise their profits by developing appealing packages. There is no less likelihood that the builder as the “agent” of the renter or subsequent owner is any less careful in this than the designers and builders of other complex purchases like cars or trucks. As the Productivity Commission has demonstrated, the evidence that there might be market failure as a result of a difference of interests between owners and renters is far from convincing.

NSW should abandon all plans to introduce energy savings requirements into commercial buildings.

Regulations to Improve Access to Commercial Premises for People with Disabilities

There is a proposed Disability Standard for Access to Premises (Premises Standard), which is intended to codify the general requirements of the Australian Government’s Disability Discrimination Act 1992. The DDA prohibits discrimination against people with disabilities in a range of contexts, including access to premises. The technical requirements of the Premises Standard would also be adopted as part of the Building Code of Australia.

The proposed Premises Standard would include specific requirements aimed at providing greater access to premises

for people with mobility disabilities, as well as people with vision and hearing impairments. Matters that would be regulated include ramps and doorways, corridor widths, lifts, sanitary facilities, seating spaces in auditoria, car parking spaces and provision of signage.

It would affect virtually all new commercial building, valued at around \$15 billion per annum as well as major refurbishments valued at about \$8 billion per annum.

It is believed that the standard, if adopted for commercial buildings would lead to costs in the hundreds of millions of dollars per annum and mean that many buildings would be less useful as a result of the spatial and access reorganisation that would be required of new buildings and buildings subject to refurbishment.

The measure is aimed at those with disabilities especially those within the workforce. The concern is waste, both personal and economy-wide, where people with disabilities are prevented or discouraged from work as a result of building design.

Frisch¹ points out that the 80,000 wheelchair users in the community between 15 and 65 years old have a workforce participation rate of only 38 per cent compared with a rate of 76.9 per cent for those without disabilities. He looked to regulatory change to bring about a doubling of the workforce participation rate for people with disabilities.

Unfortunately, a rigorous review of the outcomes by Schwochau and Blanck² indicates that the US regulations introduced with the Americans with Disabilities Act of 1990 have failed to increase employment levels among people with a disability. This is supported by research by the National Organization on Disability/Harris³ which indicated that 29 per cent of individuals with disabilities were employed in the survey of 1998 compared with 31 per cent in 1994 and 34 per cent in 1986.

The failure of US regulations to improve employment levels among people with a disability may be due to a regulation’s inability to address on-going reluctance on the part of employers to hire people who, once hired, may require special and costly facilities in workplaces that would not otherwise be required. But even if this is the case there is little governments can do to remedy it – at least through regulatory means.

In sum, empirical data does not provide substantial evidence of equivalent legislation having achieved the effects sought of Australian regulations. The Frisch suggestion of a doubling in employment rates for users of wheelchairs would seem to be unrealistic. The benefits of the regulatory proposals are correspondingly reduced.

The Government should not proceed to regulate with the proposed “premises” standard to require buildings be more “useable” to the handicapped.

Regulations to Improve Access to Housing for People with Disabilities

The Australian Building Commission Board is investigating requiring that all houses incorporate features that make them more accessible to people with disabilities. Many advocates argue that better design inputs can deliver accessibility at no additional cost compared with current practices.

The sort of features that are valued to promote accessibility include, wider passageways, stepless entry, larger bathrooms with grab handles and other features that facilitate wheelchair use, graded pathways, and so on. Often these features are easier to incorporate into larger dwellings and Australian norm of single storey houses makes one feature of these, a downstairs toilet, automatically easier to accommodate than in most other countries.

There is a great deal of literature on the costs for and the need for such regulations. Many suggest that the costs are trivial. However there is evidence from the government housing authorities (which commission a considerable part of the housing that is specifically geared towards the needs of people with disabilities) that the costs of the building are increased by at least 4% and up to 20% where houses are built fully compliant with the relevant Australian Standard (AS4299 Part C).

Some argue that as we age we will increasingly value the features of accessibility and we need regulation on accessibility to save us from our own myopic decision framework. This is perspective of little merit. Purchases, especially major ones like a house, are best left to individual choice. If we do not weigh up the various options available to us and the budget constraints facing us with the purchase of

a house we can never hope to do so for other goods and services.

In abandoning consumer choice and substituting the decision taking of experts we are abandoning the free market. Moreover, as with so many features impacting upon housing, regulatory impacts are on the new home owner. Not only is this segment of demand less affluent than others but it would also be less likely to value the costs that make housing more accessible or liveable to those with disabilities.

No regulations of housing to require “accessible” or other features to cater for the needs of people with disabilities should be introduced.

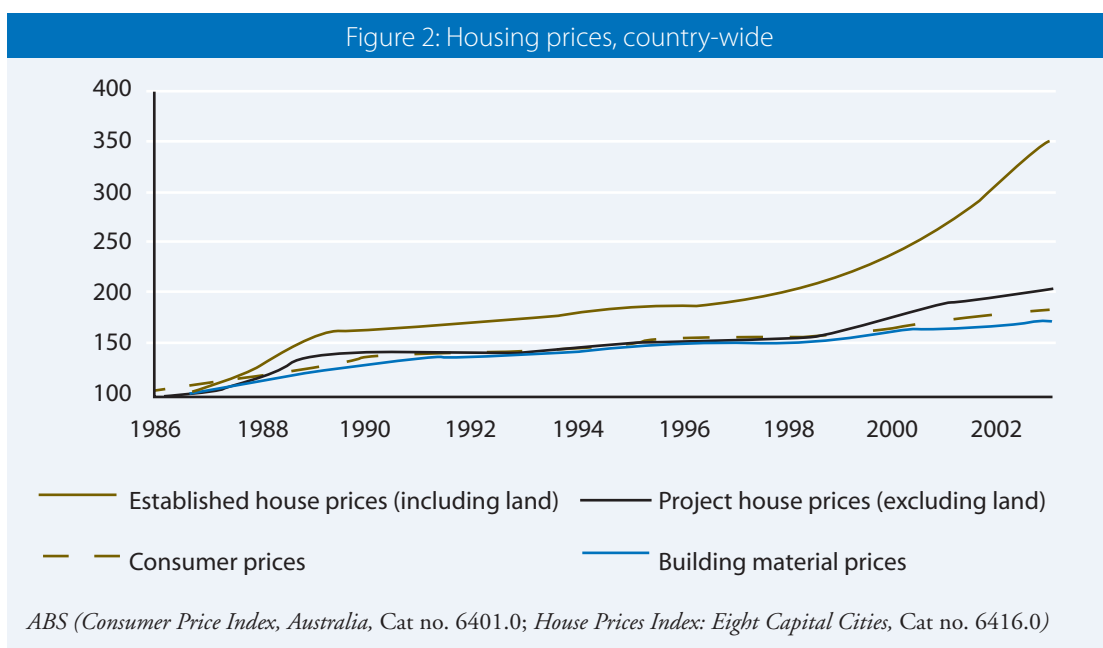
Land Use Regulations

Planning for Housing

Throughout Australia, state and local authorities have placed serious restraints on the location of new home building. These restraints have been particularly severe in NSW with the previous Premier placing a high priority on restraining population growth, but the same general trend is evident throughout Australia. As a result, although house building costs have been kept at around the general level of prices (quite an achievement in view of the increased regulatory impositions on the industry and the fact that new house sizes have gradually increased), new homes have risen markedly in price.

This and its cause is illustrated in Figure 2.

The land component of the new home package, which in 1976/7 comprised 32% of new home in Sydney, in 2005



comprised 62%. This has been mainly due to the squeeze on land availability originating from misplaced desires to prevent “urban sprawl”.

Australian house prices are now, in terms of multiples of household income levels, among the highest prices in the world.⁴

According to the Demographia 2006 International Housing Affordability Survey, Sydney ranked seventh in the least affordable housing market from their study of 100 cities in North America, New Zealand, Australia and the United Kingdom. The study rates urban areas in terms of

year profit from sales of \$320 million. Moreover, such developers obtain the necessary rezoning of land by making commitments to local authorities for tennis courts, neighbourhood centres and other infrastructure over and above the already sizeable mandatory contributions. Consumers have no opportunities to decide for themselves whether such expenditure meets their preferences – the costs are rolled up in a price that they are obliged to pay.

There are some hopeful signs for reform in this area, not least of which were comments made by the Prime Minister on the issue at the HIA conference in November 2005 calling for an expansion of land availability.⁵

In the case of development approvals, winners are created as a result of the zoning system. In order to plan their business futures, house builders and land developers take positions and buy land at the inflated prices the regulations create. They then have a vital interest in ensuring that the regulations do not leave them with an asset that is reduced in value at the stroke of the same administrative pen that brought the inflated value. These forces are aided and abetted by very prosperous individuals living in areas that are relatively close to major urban areas but have features of remoteness and exclusivity.

Land regulations, in particular zoning laws also pose considerable dangers to the integrity of the political process. When vast profits can be made by a politically directed and essentially arbitrary reclassification there are grave dangers of political corruption. Those dangers extend beyond individuals’ cupidity and can infect the political process by providing funds for political parties to use for electoral purposes. In such cases, the community would be seeing its net real income levels reduced by a regulatory tax, with part of the proceeds diverted to the re-election of those purporting to represent their interests.

Unfortunately, the administration of planning regulations has become infested by elected busybodies and appointed experts who are determined to tell consumers what is good for them and to prevent them from doing anything else. In many cases, builders rather than suffer the costs of delays that are entailed in contesting demands on them for the construction of houses with particular features, acquiesce in the demands, unwarranted though they are. For the commercial builder, the alternative is costs that will not be reimbursed.

Although these regulatory trends have not yet escalated the costs of the house building itself, they are poised to do so. We have cost impositions requiring water storage, heating measures, and room layouts which are stopping entry into the industry. The restraints on supply together with the imposts placed on developers have clearly been the major if not the only factors in pushing up the prices of housing.

Figure 3: 20 Most Unaffordable Housing Markets

Rank	Housing Market	Median Multiple	Rank	Housing Market	Median Multiple
1	US Los Angeles	11.2	11	UK London	6.9
2	US San Diego	10.8	12	UK Bristol	6.8
3	US Honolulu	10.6	12	US Fresno	6.8
4	US Ventura County	9.6	12	US Sacramento	6.8
5	US San Francisco	9.3	15	NZ Auckland	6.6
6	US Miami	8.8	15	Australia Hobart	6.6
7	Australia Sydney	8.5	15	Canada Vancouver	6.6
8	US New York	7.9	18	Australia Adelaide	6.5
9	US Riverside	7.7	19	US Las Vegas	6.4
10	US San Jose	7.4	19	Australia Melbourne	6.4

Demographia; <http://www.demographia.com/dhi-ix2005q3.pdf>

median housing costs and median income levels.

The most affordable cities, which include several of comparable size to Sydney like Pittsburgh, St Louis, Atlanta, Houston and Quebec, have median house prices that make them only one third as expensive in relation to median income levels.

The key cause of this is planning constraints that have reduced the availability of land for housing and house tax measures often in the guise of development contributions. Raw land on the periphery suitable for housing has an alternative use of only a few thousand dollars per hectare. Planning constraints result in a price at \$300,000 a block and more. Increased prices in existing zones are caused by government created regulatory scarcity on the periphery, an effect that is often compounded by local NIMBY action designed to prevent more intensive land use.

As part of this regulatory price forcing, the HIA estimate that the direct regulatory “tax” on new subdivisions in western Sydney is \$60,000. Though some of this may contribute to the value of the subdivision, much of it is for social infrastructure like “affordable housing contributions”, local community facilities, public transport contributions and the employment of community liaison officers. These costs are further amplified by joint actions between developers (often government owned) and councils. Thus in NSW, the Government owned Landcom uses its influence to obtain development rights, earning \$150 million a

All this is at the expense of the weakest and poorest members of society – the mainly young first home buyer.

The restoration of low costs for the home building industry requires measures like:

- **relaxation of restraints on where homes may be built even if this means the urban sprawl. This might entail restricting area restraints only to areas of great natural beauty such as national parks.**
- **considerably curtailing requirements on builders to set aside land for public use.**
- **restraining the demands that can be placed on developers for expenditures on infrastructure by redefining infrastructure to mean such essential features as water, sanitation, and local roads and by recognising that much of the expenditure for these services is funded out of general state and local charges.**

Other Planning Issues

Shopping Centre and Similar Developments

Clover Moore and State Government Ministers have expressed strong opposition to the Sydney Airport Corporation Ltd. (SACL) providing facilities on Commonwealth land for new shopping malls and cinema complexes.

There are many links between property development, politicians and regulation. Planning approvals form the bedrock of a system of patronage that has long been the bankroller of NSW politics. Sydney airport threatens to seriously undermine this.

Politicians use their veto powers on new development proposals to allow favoured parties to proceed with such infrastructure. The regulatory system allows a scarcity of such facilities and those fortunate enough to obtain approval are therefore cushioned from competition. Political power both grants planning approval and can deliver regulatory protection to those that have the approvals. This regulatory constraint means higher prices than would otherwise be necessary to attract the consumer. Higher profits from higher prices to the consumer are the corollary.

Some of these profits are passed back in informally pre-arranged payments to those politicians at a local and State government level that are manning the political gates.

Although very few politicians are corrupt in the sense of openness to personal bribes, they rely on networks of patronage in terms of helpers and cash to fund their election and re-election.

With Sydney Airport, SACL finds itself within a federal enclave inside Sydney. It therefore represents a rival planning body and this seriously undermines the State Government's planning approval monopoly.

In setting up the privatized airports authorities, the

Commonwealth was alive to the opportunities for higher sales prices that were being created by the regulatory created shortage of urban infrastructure. Both Melbourne and Brisbane have seen some developments as a result. But it is the planning restraints in place in southern Sydney that have the greatest profit potential. SACL as landlord now intends to exploit the high prices brought about by the area's shortage of the services.

Where planning regulations create restraints to trade removing monopolies over planning will unleash competition and reduce prices. There is a massive upside for the community as a result of this subversion of monopolistic protective planning structures. Undermining those monopolies unleashes competition and provides the consumer benefits that have previously been skimmed off by the protected suppliers and their associated political patrons.

A preferable approach would be for the regulations themselves to be dismantled and for those wishing to develop new shopping centres to be made subject only to provision of the stand-alone and support services that are required. There should be no test of whether the facility is "needed" or whether a new competitor would harm existing facilities. The greatest enemy of a cow is another cow; the greatest enemy of a car factory is another car factory. But in neither of these cases should governments be involved in making decisions about whether to permit a rival. It should exit this function in the planning arena both to ensure a reduced risk of corrupting the democratic process and to bring about lower prices for consumers.

The government should rescind planning rules that seek to ration the availability shopping and other common services and abandon criteria which seek to establish a "need" for new facilities and assurances that new facilities will not operate to the detriment of existing facilities.

Approval Processes

Councils essentially act as the agent of the State Government in progressing planning applications. The whole process should be considerably simplified. In addition, some councils operate on the basis that they and their constituents are opposed to additional development in the area. This should not be a legitimate stance in public policy – land is owned by individuals and responsible government should place limitations on those claiming to act on behalf of the "community" to infringe upon individuals' peaceful and unhampered use of their own possessions.

In addition, considerable costs are absorbed as a result of the slow progress in obtaining approvals. Greater electronic mechanisation could allow planning applicants and service providers like Telstra and Sydney Water to determine where proposals are within the system and to expedite progress. The State government could introduce training facilitation and implement incentive structures to

expedite the planning approval process.

Introduce requirements on councils to grant development approvals and penalties on those which restrain development through delays.

Introduce incentives to councils for expediting the progress of planning applications.

Registration of Builders

The career development from unskilled labourer or skilled tradesman to house builders of substance has brought hundreds of Australian success stories. And it has done so concurrently with – indeed has contributed to – the impressive efficiency found in the house building industry. The system of sub-contracting greatly facilitated this progression from subbie to main contractor.

More recently there has been a rise in credentialism. Unlike in the past, builders now must take written tests and demonstrate to the authorities a knowledge of building procedures and laws, business and other matters. This level of credential testing has not proved to be necessary in the past.

One outcome has been an increase in people purporting to be “owner-builders” to escape the regulatory restraint. This in turn has led to a vast expansion in the so-called owner builder applications. The Department of Fair Trading issues between 16,000 and 20,000 owner-builder licenses each year. This infers a share of about 10 per cent of new permits but it is apparent that some owner-builder licenses in NSW are being used to construct multiple residences while some may not be activated in the year of their issue. The Independent Commission Against Corruption is examining NSW licensing operations.

The authorities in all Australian jurisdictions have sought to counter this by imposing limitations on the ability of an owner-builder to construct new houses and major extensions. Inter alia, they require the would-be owner-builder to attend a largely useless building course to force up the regulatory costs of opting for this method of building.

These provisions have no effect in terms of the safety or functionality of the work (mandatory insurance is necessary in any case and there is no evidence that owner builder work is any less satisfactory than that built by registered builders). Owner-builders operate on the same sub-contracting principles that prevail throughout the industry. The owner or the head builder is unlikely to be the actual roofer or carpenter undertaking the work. It is the sub-contracting system that has made the industry so efficient and responsive to the consumers’ needs and, incidentally, to allowing the cost impositions introduced by building

regulatory requirements to be minimised.

The subbie turned major contractor is the way by which the industry has been able constantly to renew itself and to ensure incumbents maintain their competitive edge. Re-creating a medieval guild system that freezes out new players would be highly detrimental to the industry’s vibrancy and resilience.

Allow anyone to become a builder and rely on the insurance system as a means of ensuring safety and quality.

Occupational Health and Safety

Most people running businesses in Australia would describe workers’ compensation and occupational health and safety (OHS) laws as two of the most frustrating and confusing areas of government regulation. The laws frequently fail to provide clarity and are, for the most part, inordinately complex.

Occupational Health and Safety laws vary widely between the States in terms of their core structure and definitional approach. NSW is the worst of the states; Victoria is probably the best.

This confusion and complexity is made worse because there is a high level of inconsistency in regulatory design, approaches, systems and administration between the States. This inconsistency is not being addressed by the States.

Existing workers’ compensation and OHS schemes directly and unnecessarily increase operating costs, dampen productivity and constrain business success. Further, the key national priority—targeting safe working arrangements and compensation for genuine injuries across Australia—is compromised.

What needs to be understood is that a significant percentage of the systemic problems directly flow from a fundamental design flaw, namely the conceptual underpinning of the schemes by employment concepts. If this design flaw is not addressed the systemic problems will remain.

National leadership by NSW on these two issues should be viewed as a priority.

A Flawed Conceptual Framework

Most analysis of OHS and workers’ compensation problems focuses on the details of how the various schemes across Australia are administered. That is, the usual focus is on ‘red tape’ compliance issues associated with the schemes. This, however, is inadequate, because both regulatory areas suffer from a key flaw in the conceptual framework with which all state schemes operate. It is this which is at the heart of the compliance problems.

Both OHS and workers’ compensation take as their

starting point the elements of control which are embedded in the employer-employee legal relationship. The crucial feature of this relationship is that the employer has the 'right to control' the employee. The inference contained within the legal relationship is that the employer is all powerful in the work relationship and, further, that the employee is in most respects powerless. The legislative structures of OHS and workers' compensation are both predicated upon the existence of the employment relationship and it has, therefore, come to dominate the cultures and administration of the institutions that administer the laws.

This results in a number of assumptions being built into the design of regulations that are highly suspect when it comes to practical work realities.

Those assumptions are that:

- When a work injury occurs, the employer, however defined, is responsible for the injury.
- Employees have diminished capacity to control the work environment and, when an injury occurs, are assumed to be blameless.

Thus, the employer (however defined) is presumed to be at fault regardless of the actual causes of any particular injury. This distorts the effective functioning of workers' compensation arrangements as insurance schemes and OHS laws as injury-prevention mechanisms.

This is the starting point from which the policy and operational distortions that occur in workers' compensation and OHS laws can most readily be understood.

The Issue of 'Control'

The closest public policy parallel to workers' compensation and OHS laws are the road laws. By contrasting the two areas, the inconsistencies in public policy approach become clear.

Both road laws and work safety laws have to consider "who controls the situation" in order to create effective rules which (a) reduce the incidence of injury and (b) facilitate enforcement.

However, when it comes to the funding and administration of the rehabilitation of injured individuals:

- who controlled the vehicle and caused an injury is not taken as relevant under road laws but,
- who is assumed to control the work situation is central under work injury insurance laws.

For example, road laws operate on a practical basis that drivers control vehicles and are held personally liable for their driving behaviour. But, unlike property insurance, compulsory personal injury insurance for vehicle-related accidents does not apportion blame. In fact, to apportion blame for personal road injury insurance purposes would distort the operation of this insurance.

Road laws clearly stipulate what drivers can and cannot do. It is recognized that if the laws are ambiguous or

confusing, this will result in car crashes. Drivers are held responsible for their individual actions over what they personally control. Serious breaches of road laws resulting in crashes, death and/or injury can result in criminal charges being laid with possible imprisonment as punishment. Manufacturers of vehicles are required to supply vehicles to minimum regulated safe standards, given technical limitations.

With car insurance, when crashes result in personal injury, the insurance schemes operate on a no-fault basis (this is different to non-compulsory property insurance). All vehicles must be insured for personal injury cover, individual premiums are not adjusted according to claims history, and all injured persons are treated equally and have access to medical, compensation and rehabilitation services. Even a driver who may have caused a crash is not denied medical insurance services.

This system works well and is accepted as fair and just because the individual who controls a vehicle is easily identified. If fault is to be apportioned under the road laws, this is tied to the discovery of facts. Drivers are not held to be liable for situations beyond their practical control. But control and blame are not relevant for the purposes of rehabilitating injured persons.

Work safety

Under work safety laws, however, the apportionment of blame dominates. Work safety laws take it as given that the employer controls the work situation and is therefore responsible and liable under both workers' compensation insurance and OHS.

But the reality of work situations is that many different individuals have combined control over work. The truth is that there are normally multiple 'hands' on the steering wheel of the work 'vehicle'. Work safety laws, however, are biased toward the assumption that only one 'hand' - the employer's, controls work. This is a false assumption based on the presence of a legal contractual relationship called employment. The truth is that employers do have significant control, but so too do employees and many others, including unions, suppliers and government authorities.

The outcome of this false assumption about employer control is that:

- Individuals who did not have practical, effective or total 'control' are held to be totally liable, both from an insurance perspective and a prosecution perspective.
- Other individuals who did have control or shared control in any situation are not held liable in any respect.

Twisting the truth about 'work control' in such a contorted way diminishes community trust in the fairness and justice of work safety laws, causes people to spend time and en-

ergy trying to avoid the injustices of the laws, and reduces the effectiveness of public policy targeting safe work.

Further, this key conceptual point—‘employment control’—if ever it was valid, is quickly being deconstructed by the rapid rise of independent contracting which organizes work without using the employment contract. The response of work safety regulators to this development has been to further distort the law by selectively and inconsistently ‘deeming’ some non-employees to be ‘employees’. This process has layered regulatory confusion upon confusion to the point where the ‘road laws’ of OHS and workers’ compensation cannot effectively be known in advance by the community. This confusion of work safety ‘road laws’ must, of itself, work against safe work.

The extent to which this confusion and distortion occurs varies from State to State, thereby creating further confusion. Some States, however, have made positive developments to have the law reflect work realities and create clarity. Other States have actively distorted the law.

Core legislative structures

The international benchmark for OHS laws are established under the Robens principles of the UK, and ILO Convention 155. These hold that individuals should be held liable and responsible under OHS for what they control within the bounds of what is practicable.

NSW has grossly distorted the international OHS principles and, in so doing, has created significant community distrust of their OHS laws.

The NSW approach is an extreme case of where the laws assume that the legal status of the employer results in the employer being assumed to be in total control of work. In doing this, the NSW laws effectively strip employees of any individual responsibility to comply with statutory OHS responsibilities.

In NSW:

- Employers, independent contractors, suppliers of equipment and so on have a statutory obligation to ensure that no injuries or deaths occur. There is no tempering of this in terms of what is practical or what they in fact control.
- This statutory requirement to “ensure” creates presumption of guilt under NSW OHS laws. “Practical control” only applies as a defence. This is a distortion of international OHS principles rather than an application of them. In particular, the statutory presumption of guilt has led to a serious lack of confidence in the justice and fairness of NSW’s laws.
- Employees do not have a specific statutory obligation to comply with OHS laws. Employee obligations are limited to “co-operating” with the employer’s obligations. This effectively transfers liability for the actions of the employee to the employer. This creates

presumed guilt on the part of an employer, even if the breach of OHS laws occurred because of the negligent actions of an employee. This sends powerful signals to employees that they can ignore OHS obligations, and equally powerful signals to the community that the OHS laws defile justice. This strips the NSW laws of integrity.

Further compounding this defiance of international OHS obligations, the NSW laws:

- Conduct prosecutions in the IRC jurisdiction, as opposed to proper courts as applies in all other States.
- Deny access to trial before jury.
- Prevent full rights of appeal in prosecutions relating to injuries and fines.
- Allow unions to act as prosecutors and to receive up to half of the fines imposed and have their legal fees paid by the party prosecuted.

As a consequence, these laws have bred an aggressive prosecution culture within the NSW Workcover authority. This is highlighted by the fact that NSW conducts over 60 per cent of OHS prosecutions Australia-wide, but has only one-third of the Australian workforce. Further, 65 per cent of Australian OHS convictions occur in NSW.

No other State has OHS laws as distorted as NSW. Instead, they all have a general application of international OHS principles but with variations in their legislative structures. The emphasis is on control within the bounds of practicability. None has applied presumption of guilt. But none has gone as far as Victoria in making it absolutely clear that employees as individuals have equal OHS responsibilities and liabilities alongside all other individuals—regardless of legal or contractual status.

Unions

All States grant unions some form of special OHS authority, including access to workplaces. NSW is the only State that gives unions prosecutorial powers.

Union special privileges for OHS purposes are generally justified on the grounds that employees need a safety voice ‘on the ground’. Unions are chosen because historically they represented a large proportion of employees in the workplace. With the collapse of union membership and the rise of independent contractors, however, special OHS privileges for unions in fact act to disempower employees’ OHS voices. This is dangerous for work safety objectives.

OHS and criminality

All jurisdictions have the normal processes of criminal liability applying alongside OHS laws. This replicates the road laws. That is, if an individual knowingly and/or with gross negligence does something that leads to the injury or death of a person in the work situation, the individual can face criminal prosecution through the normal criminal

courts and with all the rights of criminal justice applying.

Over the last decade, however, there has been a strong push to embed additional criminal or quasi-criminal sanctions inside OHS laws. This is not consistent with international OHS principles. Such laws distort justice.

NSW provides for imprisonment of individuals when death or serious injury occurs. For second offences under its 2000 Act, presumption of guilt applies, trial is before the IRC, trial before a jury is denied and full appeal rights are denied. Imprisonment for first offences applies under its 2005 Act, with presumption of guilt and trial before the IRC. Trial before a jury is still denied, but full appeal rights apply.

Restore normal rights to employers (presumption of innocence) in cases of workplace injury.

Workers' Compensation

Workers' compensation is distorted by confusion of intent. The essence of the problem is that the person paying the premiums (ie the employer, however defined) does not receive the benefit of any claim but suffers the losses resulting from a claim made by someone else. Under normal insurance the person paying the premium is the person covered and liable to receive the benefit in the event of a claim. It is in this basis that actuarial risk is assessed. However workers compensation design distorts normal actuarial risk assessment.

The Heads of Workers' Compensation Authorities insist that workers' compensation benefits apply only to employees and that self-employed individuals cannot be covered by the schemes. However, if self-employed individuals structure themselves as a company, they normally become subject to the schemes by virtue of becoming an employee of their company, even though they are effectively the employer of themselves. Further, NSW has created definitions of employment for the purposes of workers' compensation that go beyond common law and which bring some individual self-employed persons within their scheme and leave others out. There is high level confusion about the status of self-employed individuals and entities that engage self-employed individuals for the purposes of workers' compensation.

NSW will not register self-employed individuals but has a bureaucratic expectation that entities which engage such individuals should pay premiums on the individuals engaged. But the authority will not guarantee that it will honour claims on such individuals, even where premiums have been paid. NSW also lists a variety of occupations where self-employed persons are declared "employees" and subject to the schemes.

NSW is currently undergoing an aggressive audit by Workcover in which businesses that have used independent contractors in good faith are being confronted with

retrospective premium bills large enough to cause business closures. Some businesses have, in fact, closed as a result.

Cease using workcover arrangements to discriminate against independent contractors.

Energy Management Issues

Energy Regulatory Taxes

The main schemes that tax electricity in NSW, ostensibly with a view to imposing penalties to encourage consumption of fuels that produce lower carbon dioxide emissions per unit of energy, are:

- the Federal Government's Mandatory Renewable Energy Target (MRET); and
- the NSW Greenhouse Gas Abatements scheme.

These schemes' costs are

Commonwealth ⁶	\$380M
NSW ⁷	\$221M

The MRET scheme's focus is on renewable energy and requires retailers to acquire and annually surrender a progressively increased number of Renewable Energy Certificates (RECs). The major beneficiary was hydro in 2003, with Snowy having some 490,000 RECs, worth some \$16 million to the business. Although accounting for only 10 per cent of the RECs created in 2003, wind is likely to increasingly account for the growth in new RECs.

The NSW scheme seeks to introduce a penalty on CO2 graduated in line with the emissions per unit of energy of each electricity generation source.

The default penalty costs of the two regulatory measures provide a cap on the costs. These costs entail a premium over the costs of conventional electricity to retailers. By 2010, when the schemes are at full maturity, the fall back penalty rates for the Commonwealth and NSW schemes respectively are \$40, and \$14.3 per MWh.⁸ These rates provide the (maximum) subsidies to the non-carbon or low-carbon emitting fuels. In after-tax terms, costs to retailers of the two schemes' subsidies are \$57 and \$20.4 per MWh, respectively. These costs are over and above the basic wholesale (contract) price of electricity, which is likely to remain close to its present level of \$35 per MWh.

For NSW, existing requirements of NSW Greenhouse Gas Abatements scheme and MRET combined will force an increase in sub-optimal energy supply from 5 per cent in 2004 to over 23 per cent in 2011 (see Attachment).

The NGAC scheme has certain advantages over the Commonwealth's MRET scheme especially since it attempts to be neutral between sources of savings. However, it cannot be wholly so since it is reliant on savings (in-

dependently verified) that firms say they will make in efficiency based on their existing levels of output. As such it would tend to favour those facilities that presently emit higher levels of CO₂ per output of electricity. These facilities are likely to find it easier to raise output per unit of input and thereby obtain the subsidy. Hence it will offer those facilities a subsidy for improving their efficiency and this will either be in excess of the worth of the improvement or will be unnecessary and provide a windfall gain.

Over and above these considerations, NGAC represents the State Government venturing into an area of Commonwealth expertise and responsibility. In imposing a cost on the NSW economy, it reduces the real income of the State and brings a distortion vis-à-vis the Australian economy as a whole.

NSW should dismantle the NGAC Scheme at the earliest opportunity.

Deregulation of Prices

The Green Paper into NSW Energy Policy Directions issued late in 2004 made some commendable suggestions for lifting price regulation between now and 2007. Such a plan should be put into effect. They need to be introduced and the Electricity Tariff Equalisation Fund (EETF) abolished.

In spite of EETF and the price caps there has been some significant churn among NSW customers. Around 10 per cent had switched from their franchise retailer as of December 2004 (in Victoria around 25 per cent had switched) and many more had re-negotiated contracts with their franchise retailer.

The justification for EETF is the regulated nature of the price to small customers. In Victoria and South Australia regulated prices have not required the additional distortion of an EETF scheme. Though it might be argued that this is because the other states have been less draconian than NSW in forcing prices below their market levels, the fact that churn is occurring in NSW indicates pricing headroom for some smaller customers. Even if it maintains price regulation – and the degree of new competition shows this to be unnecessary – the Government should raise the maximum price level to enable more meaningful levels of competition and allow price to become a more accurate market signal of the demand and supply balance.

Because it operates as a form of mandatory insurance for the small customer load (half of the market), EETF prevents the normal interplay of commercial responses to consumer need. It also inhibits out-of-state retailers with no regulated hedge with the state generators from competing for customers. The Green Paper, quite appropriately, recommends the policy be allowed to expire on its due date of June 2007.

The Government should abolish the Electricity Tar-

iff Equalisation Fund and cease regulating electricity prices.

Snowy Privatisation

The IPA is highly supportive of the move that the NSW Government initiated to privatise Snowy. We are hopeful that it will presage further divestment in the electricity industry.

While privatisation should entail little regulatory change, in the context of the management of the system, the opportunity should be taken to clarify any outstanding areas of rights and obligations that have been left to ad hoc decision making backed by regulatory powers. Chief among these appears to be the monthly flow obligations of the Snowy Hydro.

As befits a business that earns little from its water provision responsibilities and almost all its income from electricity production, the current output is geared to maximising income by releasing water when it is most profitable to do so. As we understand it, the monthly release schedule is loosely based on “best endeavour” principles. It is likely, given that the within-year spectrum of electricity prices broadly coincides with the within-year value of irrigations water, that there will be little conflict between these two prime uses. Even so, as the privatisation is the culmination of the facility’s journey from government department to fully commercial business, we consider that the existing rights and obligations be fully clarified in contractual terms rather than be left open to a regulatory solution to some future dispute that might arise.

Clarify and formalise any existing informal obligations of Snowy Hydro to irrigators and other water users.

Government Policies to Combat Over-Regulation

All jurisdictions could improve their handling of regulation. The evidence of over-regulation is clear. The following are some recommendations that should be required prior to new regulations being introduced:

- Require a review to ensure the new regulation is fully consistent with the letter and spirit of the freedom of inter-state commerce provisions of the Constitution
- Introduce the regulation under a two stage process approach: the first simply setting out the issues in a dispassionate and non-committal manner, and the second seeking comment on the agency’s preferred approach.
- Require an independent analysis to verify that the regulation is merited. This might be a scientific review in the case of measures mooted that guard

against health or environmental externalities. And it may use formalised and independent economic analysis to review alleged economic benefits from an externality.

- Establish disciplines that ensure the regulatory burden does not increase. In this respect a useful approach would be that of the UK Prime Minister's direction to the Better Regulation Task Force to look at:
 - First measuring the administrative burden then setting a target to reduce them (the Dutch approach) and
 - A “one in, one out” approach to new regulation, which forces a prioritisation of regulation and its simplification and removal.

The Dutch approach has three dimensions. First it involves measuring the burden on business using a standardised approach. They examine the administrative burden only. This is what the US agencies refer to as the paper burden and which typically amounts to 30 per cent of total regulatory costs. According to Crews⁹ in his annual assessment of US regulatory costs, those of the federal government amount to 8.7 per cent of GDP.

Crews's assessment is based on long standing analyses conducted by the Office of Management and Budget and goes back to work undertaken by Wiedenbaum in 1979. It is broadly consistent with the Dutch estimate of 3.6 per cent as the cost of the administrative burden alone – using the 30 per cent rule of thumb this would amount to 12 per cent of GDP but differences are inevitable due to different roles of the US states and the EU.¹⁰ Various studies have been assembled by the PC and its ORR/BRRU agency which place estimates in the same ball park.

Crews argues that we have very little idea whether the benefits of any of the regulations exceed the costs at present. He considers that legislators have been derelict in allowing regulatory agencies to introduce regulations without proper oversight. He says, “Agencies face overwhelming incentives to expand their turf by regulating even in the absence of demonstrated need, since the only measure of agency productivity—other than growth in its budget and number of employees—is the number of regulations. The unselected rule when it comes to regulatory mandates”.

To counter this growth, the second arm of the Dutch approach involves setting a target for reduction of the burden – after an early false start the Dutch have chosen 25 per cent over four years. The focus on the administrative burden was purposely adopted since it would bring about less political opposition (in the event no political opposition) than measures that confront policy head-on.

Finally, the organisational structure must be appropriate. Too many good intentions about reducing the paper burden evaporate after the first flush of press releases.

Though Crews is right that agencies tend to be regulation-philes, in developing new rules they are giving expression to political representatives' broad intentions. Regulation is not simply some abstract body of laws developed by an impersonal bureaucracy. Governments and Parliaments must generally therefore impose disciplines on themselves if they are to reduce the burden they place on the electorate. In the Netherlands the organisational structure to facilitate this involves an independent watchdog body which reviews the calculations of the costs that departments themselves estimate before legislation proposals are sent to Parliament. The Cabinet is also obliged to consider the estimates of costs before endorsing new legislation and each government department has a body of officials with responsibilities designated to reducing the regulatory burden.

As in the US, the regulatory agency falls under the Minister for Finance. Such machinery in principle already exists within the Commonwealth, Victoria and to a lesser degree other states.

Confessing some initial scepticism about the practical outcomes of the Dutch approach, the UK Better Regulation Task Force found evidence that the Netherlands was in fact achieving its target reduction. The Task Force proposes to marry this with the sloganistic “One in one out” approach. Again the intent is for the government to place a discipline on itself by forcing a search for regulatory economies especially where new regulatory measures are proposed.

Over the past year or so, Victoria has adopted the most rigorous regulatory review machinery with the Victorian Competition and Efficiency Commission (VCEC). This is a statutory body, established under the State Owned Enterprises Act, which has the role of acting as the government's primary source of advice on regulatory reform policy. The three Commissioners are statutory appointments and are therefore independent of the government. This model clearly strengthens the Commission's role in assessing the adequacy of RIS's by granting ultimate authority for the function to these independent statutory appointees.

This model is probably superior to the Commonwealth government's Office of Regulation Review because of its independence and a more rigorous requirement it has in place for the conduct and publication of Regulation Impact Statements. The VCEC will normally insist that RIS's be undertaken independently and issued before any legislation is tabled. By contrast, Commonwealth Departments undertake in-house RIS's which are often simply a rubber stamp on a policy that has already been formulated.

Recommendations

1. General Regulation Review

We recommend that the Victorian system be generally adopted together with:

- Measures aimed at simplifying regulation and consolidating it to make it more accessible (a process that is also likely to make it more internally consistent).
- Sunsetting regulations and putting into place a more rigorous renewal machinery.
- Establishing clear Ministerial responsibilities for regulatory reform. The US lodges its own regulatory oversight body within the Office of Management and Budget (the equivalent to the NSW Finance Department). Some have called for it to be lodged directly within the Prime Minister's portfolio. Either way it must be given robust responsibilities for blocking regulations and for having them reviewed.
- Using regulatory budgets, a variation of the “one in one out” provisions under which departments are forced to hold or decrease the total costs of the regulations.

2. Building Regulations

Review the Role of the ABCB

Much of the impetus for cost imposing new regulatory pressures on the building industry derives from the make-up of the ABCB. In a number of very important areas including energy savings, regulations for houses to assist people with disabilities, the ABCB is taking a social policy approach and is being over-anxious to ensure uniformity even if this means raising standards (and hence prices) far above those merited on safety or quality grounds.

NSW should raise concerns about the regulatory intrusion agenda of the ABCB and seek to confine the organization to areas of safety regulation and facilitating design consistency.

Remove Social Regulatory Requirements on New Homes

- The Government should not proceed to regulate with the proposed “premises” standard to require buildings be more “useable” to the handicapped.
- No further regulations aimed at energy savings should be proceeded with and existing ones should be critically reviewed to determine their merit.

Remove Social Regulatory Requirements on Commercial Buildings

- NSW should abandon all plans to introduce energy savings requirements into commercial buildings.
- The Government should not proceed to regulate with the proposed “premises” standard to require buildings be more “useable” to the handicapped.

3. Review land use regulations

In order to reduce the affordability of buying a home for the consumer the NSW government should introduce the following measures:

- Relax restraints on where homes may be built. This might entail restricting area restraints only to areas of great natural beauty, for example, national parks and so on.
- Considerably curtail requirements on builders to set aside land for public use.
- Restraining the demands that can be placed on developers for expenditures on infrastructure by redefining infrastructure to mean such essential features as water and sanitation, and local roads, and by recognizing that much of the expenditure for these services is already funded out of general State and local charges.
- Immediately remove restrictions on land outside of the growth boundary to allow house building on the scale and to the extent that the builder(and developer) sees fit.
- Allow shopping centres to be built without reference to perceptions of “need” and without insistence of installing transport and other services that the owner does not consider appropriate to meet the target ed consumers.

- Train administrators in local authorities on how to expedite planning applications and introduce a system of performance based incentives to support this. Penalise councils which restrain development through delays.

4. Remove unnecessary credential testing for builders

The building industry has existed successfully for many years without requiring individuals be tested for their credentials in managing building work. Many successful builders have an aversion to school based learning and first entered the profession to avoid this.

Current regulatory measures discourage the entry of subcontractors into the industry and thus put at risk the ability of owner-builders to respond to consumer needs efficiently. The government should remove limitations on owner-builders to construct new houses and major extensions and also remove requirements for owner-builders to obtain credential by attending building courses that add cost and offer no safety or functionality gains.

5. Make employees and employers equally accountable for OHS

The NSW government should follow undertake the following measures:

- Participate in a national OHS review in order to try and reduce inconsistency in regulatory design, approaches, systems and administration between the States.
- As part of this review the OHS and workers compensation NSW OHS laws should be changed to recognize that both the employer and employee have 'control' over their working environment and that both can be at fault in any given circumstance.
- Provisions should be made in NSW that remove the requirement on employers, independent contractors and suppliers to 'ensure' safety and the law should be applied more practically to recognize that they do not necessarily control every situation.
- Requirements for employees to comply with statutory regulation should be introduced rather than them having to simply co-operate with employer obligations. This will increase the safety of the working environment by making everyone equally accountable for the safety of the conditions they work in.
- Look at reducing regulations in order to reduce operating costs, increase productivity and business success.
- Union special privileges that work against OHS should be reviewed and removed.
- OHS laws should remove criminal sanctions and leave these for the courts where justice can be more fairly applied.
- Workers compensation should be made payable to anyone who suffers losses from a claim including an employer.

6. Remove energy regulatory taxes

- Penalty costs on businesses as a result of the NSW Greenhouse Gas Abatement scheme should be removed.
- Consumer price caps on energy should be removed
- The Electricity Tariff Equalisation Fund should be abolished or allowed to expire at its due date in June 2007.

References

- 1 *The Benefits of Accessible Buildings and Transport: An Economist's Approach*, Dr Jack Frisch.
- 2 Scwochau S and Blanck P. D., "The economics of the Americans with Disabilities Act. Part III: does the ADA disable the disabled?", *Berkley Journal of Employment and Labor Law* vol 21 2000 p. 271-313
- 3 *Chartbook on Work and Disability*, National Institute on Disability and Rehabilitation, http://www.infouse.com/disabilitydata/workdisability_2_9.html
- 4 See <http://www.demographia.com/dhi-rank200502.htm>
- 5 <http://www.pm.gov.au/news/speeches/speech1681.html>
- 6 Based on 9,500 GWh at a penalty cost of \$40 per GWh
- 7 Based on:
 - benchmark of 7.27 tonnes CO₂ per capita totalling 52.054 million tonnes in 2010
 - 2010 business-as-usual emission level estimated at 71.406 million tonnes
 - Giving State gap of 19.352 million tonnes CO₂ less MRET credit estimated at 2.808 million tonnes
 - Giving 16.544 million tonnes
 - With penalty rate at \$13.36 per tonne CO₂ (\$10.5 escalated at 3.5 per cent per annum)
 - Gives total cost at \$221 million
- 8 Penalties under the NSW scheme are subject to indexation; annual inflation of 3.5 per cent is assumed.
- 9 <http://www.cei.org/gencon/005,04896.cfm>. See also *Making Sense of Regulation – 2001* Report of the US Office of Management and Budget to Congress. (p.3)
- 10 About half of new European regulations now come from EU legislation.

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Appendix: NSW Retail License Requirement

	2003	2004	2005	2006	2007	2008	2009
Calc of Electricity Sector Benchmark							
Emissions Benchmark (Tonne Co2 / capita)	8.65	8.305	7.96	7.615	7.27	7.27	7.27
NSW Population (k people)	Assumes 1% p.a. 6678	6752	6812	6880	6949	7019	7089
NSW Benchmark set by MEU (ktonnes CO2 eq)	57768	56076	54226	52394	50521	51026	51536
Calc of Total Emissions							
Total Electricity Purchased Assume 2% increase	63,178	65,671	66,611	67,943	69,302	70,688	72,102
Emission factor	0.897	0.906	0.913	0.930	0.930	0.930	0.930
No Measures Emissions (ktonnes CO2 eq)	56671	59498	60816	63187	64451	65740	67055
Calculation of REC Surrender under MRET							
Renewable Power Percentage	0.009	0.013	0.016	0.020	0.025	0.029	0.034
Number of RECS converted to CO2	499	744	967	1295	1602	1938	2302
State Gap (ktonnes CO2 eq)	- 1,596	2,678	5,623	9,498	12,328	12,776	13,217
Penalty under scheme (\$tonne CO2)	10.50	10.87	11.25	11.64	12.05	12.47	12.91
total penalty cost (\$millions)	-16.76	29.10	63.25	110.57	148.54	159.33	170.59
Total gap	-1097	3422	6590	10793	13930	14714	15518
NGAC proportion	1.45	0.78	0.85	0.88	0.88	0.87	0.85
MRET proportion	-0.45	0.22	0.15	0.12	0.12	0.13	0.15
Factor	- 0.31	0.28	0.17	0.14	0.13	0.15	0.17
credit for recs	499	744	967	1295	1602	1938	2302
renewable share	-0.017371458	0.052104209					