

**PLANNING LAW AND SUSTAINABLE BUILDING OUTCOMES:  
ASSESSING THE EFFECTIVENESS OF NSW PLANNING LEGISLATION  
IN PROMOTING ECOLOGICALLY SUSTAINABLE DEVELOPMENT**

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**ABSTRACT**

*The role of planning legislation in implementing ecologically sustainable development (ESD) outcomes in NSW has been questioned since the concept of ESD was first recognised across Australia in the early 1990s. Environmental planning legislation in NSW is now in a state of transition with a major review of the Environmental Planning and Assessment Act (1979) currently in progress and a significant overhaul is expected. Within this context, this paper examines the role of planning law in promoting sustainable buildings and development with an initial focus on the assessment of the performance of NSW legislation to date. A survey of the literature including relevant case law on this topic is provided. The analysis indicates that the current NSW planning framework has fallen short of ensuring sustainable outcomes in many cases. The impacts of recently announced policy changes are also explored and the merits and shortcomings of current and likely future planning regulation are examined. The paper concludes with a discussion of the legislative changes that would improve the planning system and promote more environmentally sound development outcomes in the NSW built environment.*

Keywords: property development, planning legislation, sustainable buildings

## INTRODUCTION

### Buildings and sustainability

Buildings have more impact on sustainability than any other aspect of our lives (Lowe, 2010). In Australia, buildings account for 23% of greenhouse gas emissions; 71% of electricity consumption; 40% of energy requirements, 40% of raw materials; 30% of landfill waste and 16% of water usage (API & PFA, 2011, 14). With increasing concerns about unsustainable resource use, climate change and population growth, the need to improve the environmental performance of buildings is widely accepted (API and PFA, 2011; Gurran, 2011; Bond, 2010; Wilkinson, James and Reed, 2009 and Warnock, 2007).

There are also economic imperatives for ensuring buildings become more sustainable. In contrast to other sectors, the building sector can reduce energy use and emissions with annual *savings* of \$38 billion by 2050 (CIE, 2007, 8-9). Moreover, office buildings with high environmental ratings (5 star NABERS or 4-6 Green Star ratings) achieve valuation premiums (of 9%-12% respectively) while major discounts apply to buildings with lower ratings (API & PFA, 2011, 13). Green Star rated buildings also show an average 5% increase in rental value and a 1.5% reduction in outgoings (GBCA, 2012a, 11).

### The Sydney context: Planning, housing and the sustainability imperative

Commonwealth legislation mandates disclosure of environmental performance in commercial buildings, however the residential sector remains 'the next frontier in the journey of transforming the built environment' (Perinotto, 2012, 1). Sydney requires 25,000 new dwellings annually although only 14,000 are produced (DPI, 2012, 1). The NSW cumulative shortfall will reach an estimated 155,700 dwellings (31% of the national shortage) by 2020 'in the absence of policy change' (HIA, 2011, 4).

Urban planning is perceived by developer groups as a regulatory tool to overcome such housing shortages by increasing land supply and streamlining zoning and approval processes for efficient development (eg HIA, 2011 and PCA, 2011). Others call for stronger planning regulation. Sperling (1997) criticises planning as an approvals system delivering land to the market and Day (1995) claims the prospect of windfall gains from zoning changes makes *all* land vulnerable – regardless of its development capability.

In response to housing demand and affordability concerns, the current NSW government is planning to house an extra 1.3 million residents in 570,000 new dwellings over the next 20 years in Sydney (NSW Government, 2012a, 6). Initially, 31 landowner nominated sites are being rezoned for rapid housing development (DPI, 2012, 1). Many are outside the two growth areas defined in the current Sydney Planning Strategy. Meanwhile various commentators suggest the Sydney preference for large houses partly reflects their high prices (Martin, 2009; Mant, 2010 and Quinn, 2012). Martin (2009) notes Australia has more dwellings than households and questions the concerns about housing shortages and affordability. Overinvestment in housing is demonstrated by renovations accounting for half of the \$250 billion spent annually on Australian housing and in the replacement of existing houses by 14% of new dwellings (Martin, 2009). Mant (2010) suggests claims about housing shortages and affordability at a time when new houses have never been bigger reflect demand issues (heavy subsidies distorting markets) rather than supply problems and argues for policies that promote smaller houses but better infrastructure (funded by higher rates and land tax). Quinn (2012, 399) agrees state taxes and levies make up 30% of Sydney house prices and notes this revenue is not directed into infrastructure for new services. Consequently while home buyers have been demanding larger houses, more recent purchasers are choosing 2-3 bedroom houses and smaller mortgages.

While debates about intervention in property development markets continue, the role of planning is generally recognised as providing a strong framework to legally control and balance land use change and development with protection of the environment (Gurran, 2011 and Thompson, 2007). How well the NSW planning system does this is debatable, however the impact of continuing urbanisation across the landscape reinforces the need for what Dovers refers to as a comprehensive planning regime underpinned by a non discretionary commitment to sustainable development so '[we] can see the city for the houses' (2007, 37).

## Overview of the paper

NSW planning legislation is currently under review with major reform anticipated. This paper examines the role of planning in NSW – particularly in the promotion and delivery of sustainable building outcomes. It analyses the implementation of ecologically sustainable development (ESD) principles under the NSW *Environmental Planning and Assessment Act* and the impact of continued regulatory reform under the Act including the introduction of complying development, streamlining of approval processes and the environmental standards achieved under the Building Sustainability Index (BASIX) policy. With projected increases in housing delivery in Sydney anticipated, the legislative impact on sustainable residential development is a major focus of this paper. The paper concludes with an assessment of the performance of current legislation and the likely impacts of proposed major planning system changes for implementing ecologically sustainable building outcomes in NSW.

## Sustainable building outcomes

The sustainability goal suffers from general fatigue with a difficult and seemingly unachievable agenda (Dovers, 2007) and is undermined by the ‘plethora of contradictory information as to what constitutes sustainable building’ (Warnock, 2007, 431). As Dovers suggests, like any higher order goal, sustainability requires a multi-generational change or shift in understanding and institutions. However, there is widespread agreement that sustainable development involves the ‘triple bottom line’ of environmental, economic and social considerations (Fisher, Coll, Pelly and Percy, 2008; Gurran, 2011 and Thompson, 2007).

The RICS sustainability policy notes particular areas of influence in the property cycle include greenfield management and the planning, procurement, occupation and use of buildings. This means reduced waste, energy consumption and use of greenfield sites while promoting sustainable design and construction, social inclusion and protection of the environment (Fisher et al, 2008). A simple vernacular based framework for green buildings includes conservation of energy, working with climate, minimising and re-using resources; respecting users and the site and contributing to a holistic approach to the built environment (Vale and Vale, 2001). This recognises cities as interacting systems rather than collections of buildings. An effective planning regime to regulate private sector development is the best means of achieving strategic objectives that encompass the social, economic and environmental goals of sustainability to guide the appropriate patterns of development and optimal building outcomes that reflect these principles.

## Promoting sustainability through regulatory and non-regulatory tools

An increasing range of rating tools, statutes, policies, codes, competitions, case studies, guidelines, financial and education initiatives involving numerous stakeholders with limited coordination is involved in delivering sustainable outcomes (Warnock, 2007 and Gurran, 2011). Various levels of the public, private and not-for-profit sectors are involved (Dauskardt, 2007). Leadership for sustainability ideally stems from the national level. The Council of Australian Governments (COAG) has instigated national environmental standards for buildings through legislation mandating the disclosure of NABERS (National Australian Built Environment Rating System) energy ratings (initially for office buildings) and the adoption of a 6 star NatHERS (Nationwide House Energy Rating Scheme) standard for residential buildings through the National Construction Code (incorporating the Building Code) across most of Australia (COAG, 2011).

Tools such as NABERS, Green Star and NatHERS provide information regarding the environmental performance of buildings and overcome barriers to investment in environmentally sound buildings (PCA, 2009). NABERS rates tenancies, base buildings or whole buildings on a scale of one to six while Green Star provides a ‘Design’ or ‘As Built’ rating for various categories of buildings based on design, location, materials, management systems and construction process criteria (RICS, 2011). Almost 50% of the Australian office market (10 million m<sup>2</sup>) is rated under NABERS (Dixon, 2009, 2) and since its release in 2003, 18% is rated under Green Star (CBCA, 2012a, 11). There are over 460 Green Star projects around the country (GBCA, 2012b, 2). While rating tools highlight best practice, mandating standards through well-drafted (preferably national) legislation is recognised as the best driver for implementing widespread change in the delivery of sustainable building outcomes. Warnock (2007, 433) suggests legislation is the most effective tool for securing an ‘environmental bottom-line’. The noticeable jump in (voluntary) Green Star ratings from under 20 buildings in 2007 to more than 80 in 2008 (Australian Government DIT, 2011, 120) demonstrates the legislative impact of mandatory disclosure in the Australian commercial building sector.

## **The role of planning legislation in sustainable building outcomes**

Modern town planning emerged to protect living conditions impacted by 18<sup>th</sup> century industrialisation and has evolved in response to the prevailing challenges over time to encompass the broader sustainability agenda (Gurran 2011 and Thompson, 2007). Planning creates a legal process to guide land use change through the regulation of development in line with strategic plans to obtain social, economic and environmental objectives (Gurran, 2011). Land use categories, urban boundaries, development standards, assessment criteria and conditions of consent are tools used to achieve this.

Consequently planning legislation provides a valuable tool for implementing sustainability policies. Legislation is recognised as the main driver for changing behaviour and addressing environmental issues (CIPS, 2011) and industry anticipates increasing sustainability requirements (Fisher et al, 2008). However, Sandercock (1990) notes that establishing a legislative basis for planning against real estate and development interests has historically been a struggle in Australia, resulting in a contracted scope of planning over the last century. Ongoing tensions between land development and environmental management mixed with population growth pressures and increased awareness of environmental impacts have exacerbated this conflict (McFarland, 2011). While the sustainability imperative is well recognised, Gurran (2011) observes the push for a market free of planning restraints continues.

## **CURRENT NSW PLANNING LEGISLATION – MAIN ISSUES**

In Australia, responsibility for landuse planning lies with the states and territories and some planning powers are delegated to local government.

### **The NSW Environmental Planning and Assessment (EP&A) Act 1979**

The *Environmental Planning and Assessment (EP&A) Act 1979* governs planning, development assessment and approval in NSW. When introduced, the legislation was considered revolutionary in terms of transparency, public participation, decision-making consistency and comprehensive environmental assessment. However substantial and increasingly numerous amendments, particularly in recent years, have resulted in a complex politicised approval process with reduced participation and poor environmental outcomes (EDO, 2010a). McFarland (2011) notes there have been 20 substantial amendments since 2005 and only 15 over the previous 25 years. The more recent modifications focus on simplification, efficiency and developer certainty mirroring legislative changes in other Australian jurisdictions (Thompson, 2007). Performance reporting covers approval statistics and timeframes and numbers of dwellings and jobs created, rather than benchmarking sustainable building outcomes. This reflects the economic rather than environmental focus characteristic of the neoliberalist agenda of the last two decades (Gurran, 2011 and Gleeson and Low, 2000). Gurran (2011) observes the retraction of earlier progressive environmental policies has brought the NSW planning system to its lowest point. As noted by Piracha (2010, 241), the succession of extensive planning reforms has ‘far reaching implications for the natural and built environment in the state’.

## **Environmental initiatives under the Act**

### **Objectives under the Act: Conflicts and implementation issues**

Conflicts undermine the objectives of the Act with the first object *encouraging* ‘the proper management, *development* and *conservation* of natural resources’ [italics added]. Kelly and Little (2011) observe that ongoing threats to remnant native vegetation from continued development on peripheral (cheaper) land demonstrate conflicts between other objectives promoting efficient development, affordable housing and protection of threatened ecological communities. Moreover, the general failure to implement the Act’s objects in practice ‘renders them meaningless’ (EDO, 2010a, 8).

### **Integrating ESD into the legislation**

Australia is signatory to international conventions that aim to achieve sustainable development which has evolved into *ecologically* sustainable development (ESD) in Australia through the 1992 *National Strategy on Ecologically Sustainable Development*. The ESD principles include the precautionary principle, intergenerational equity, the protection of biodiversity and appropriate pricing and full life cycle costing. The integration of these principles is through development assessment under the *EP&A Act*. While the concept of ESD is not prioritised and was inserted as one of ten objectives of the Act, a growing body of jurisprudence has generally moved ESD from an unworkable object to an internationally recognised tangible consideration in development in NSW (Higginson, 2008).

The requirement to consider ESD as part of the public interest was first established in *BGP Properties Pty Ltd v Lake Macquarie Council* [2004] NSW LEC 399 – where the court refused consent for a subdivision due to likely impacts on wetlands, bushland and threatened species. The courts also ruled ESD (including climate change) is a consideration under the regulations of the Act through a successful legal challenge to a concept plan approval for a large subdivision on flood prone land at Sandon Point, just south of Sydney under Part 3A of the Act in *Walker v the Minister for Planning and Ors* [2007] NSWLEC 741.

However an appeal (*Minister for Planning v Walker* [2008] NSWCA 224) overruled the earlier decision indicating ESD is not a *mandatory* consideration in strategic planning or assessment. Preston (2009) notes cases like this demonstrate the limitations and piecemeal results of relying on courts to interpret weakly structured legislation. Higginson suggests the introduction of Part 3A and the state's legal defence of its right to *not* consider ESD or climate change demonstrates a failure to integrate ESD and climate change into development assessment and is evidence the government has 'lost its way' (2008, 5). This example supports the widespread agreement that in NSW environmental assessment is often compromised to justify development and achieve short-term economic goals translated into growth and development (Farrier and Stein, 2011; Bates, 2010; EDO, 2010a and Higginson, 2008).

### **Consideration of ESD versus ESD as overarching goal**

Bates (2010) observes that State of Environment reports demonstrate current approaches to urban development fall well short of achieving ESD objectives. The reports highlight unsustainable resource management, species decline, stressed waterways and continual land clearing causing salinity, erosion, sedimentation and loss of biodiversity. Bates (2010, 214) argues that serious pursuit of ESD requires ESD to be the paramount object of legislation:

“ESD ... should be the outcome that decision makers strive to achieve, not part of a process that simply requires ESD to be considered on the way through to making a decision; and decision makers should therefore be instructed to do more than simply 'have regard to' it.”

Decision makers under the *National Parks and Wildlife Act 1974* are directed to achieve the objects of that Act by applying the principles of ESD (2010, 214). Like Bates, Higginson (2008, 9) suggests legislative reform is needed to 'steer away from a business as usual approach' and direct decision makers in the planning system to implement and enforce ESD principles.

### **The BASIX SEPP**

The *Building Sustainability Index (BASIX) SEPP 2004* mandates 40% savings in water and energy use above average consumption in 2002-3 for all new dwellings and renovations in NSW over \$50,000 (DOP, 2010, 1). A certificate outlining agreed materials, fixtures, landscaping, design, energy and water systems must accompany any development or complying development application for all detached and multiunit dwellings. The online tool allows a combination of rainwater tanks, solar hot water systems, laminated window glass, building design, construction type and other features to achieve the required points. Gurran (2011) describes BASIX as world class and reports genuine improvements in building performance. Use of rainwater tanks has risen from 12% to 96% since BASIX was launched while electric hot water system usage has dropped from 67% to under 1% with a corresponding increase in gas, followed by solar and heat pump hot water systems (DOP, 2008b, 7, 11).

However, BASIX has not been updated since its introduction. A review of the Australian Building Code has resulted in other states now requiring standard minimal energy ratings for residential buildings that exceed BASIX standards and achieve 6 star NatHERS scores. With BASIX in place this aspect of the code does not apply in NSW. Performance monitoring of the 42,570 BASIX housing approvals between 2005-8 indicates the average single BASIX dwelling is designed to achieve 4.8 NatHERS stars, with a requirement to achieve 4 stars (DOP, 2008b, 3, 13). More recent monitoring reports that over 46,000 multi-unit dwellings in 4,753 developments have achieved an average rating of 5.25 stars (DOP, 2011, 1). The different scores in dwelling types reflect the smaller average size of multi-unit dwellings and air conditioning preferences in larger detached houses. While baseline environmental performance has improved under BASIX, the SEPP overrides competing provisions in local planning instruments, which in cases like Leichhardt in Sydney, were more stringent. Performance gains are also undermined by increasing house sizes and air-conditioning usage (DOP 2008b).

BASIX does promote education and community awareness about sustainable options and ensures minimum standards are met throughout the state. However, it requires continual updating in line with new technologies and advances in other jurisdictions, to ensure the highest possible benchmark is reached for housing development in NSW. Unless BASIX becomes more effective than standardised national measures in delivering sustainable houses, why should NSW be exempt from demanding better performing buildings in line with the rest of Australia? The landscape of detached houses with BASIX certificates currently produced across suburban Sydney demonstrates the environmental performance of houses in NSW falls short of that required elsewhere in Australia.

### **Biobanking and biodiversity protection**

The conservation of biological diversity is a major principle of ESD however continued urbanisation contributes to NSW having the highest rate of mammal extinctions in a country that has one of the worst extinction rates in the world (DEC, 2006). The NSW *Threatened Species Conservation Act 1995* requires the preparation of a Species Impact Statement (SIS) for any development likely to have a significant effect on any threatened species. However a recently introduced Biobanking scheme under Part 4 of the *EP&A Act* allows the loss of biodiversity on development sites with the purchase of offsets as an alternative to preparing the SIS. The scheme has been criticised for being simplistic and unable to account for the complexity of natural systems given no two sites would have equal biodiversity value (EDO, 2006, 4). The recent approval by the Planning Assessment Commission (PAC) of the Warkworth mine extension allows the mining of a site that had been allocated as a biodiversity offset and severely impacts residents in nearby Bulga village who relied on the site as a buffer to the mine (NSW EDO, 2012b). This raises serious issues with the Biobanking scheme and its protection of important habitat. The EDO notes the PAC's approval stated that clear policy and further guidance for decision makers is necessary to ensure social impacts on the character and viability of villages and towns are adequately balanced against the economic benefits of mines in future, given that many other villages have been similarly impacted by coal mine approvals.

### **Initiatives to standardise and fast-track development**

#### **Standardised local environmental plans (LEPs)**

A standard LEP template was introduced in 2006 to overcome inconsistencies and standardise definitions and zones across council areas, rationalise plans, streamline assessment and reduce delays in local plan making. Ruming (2011) reports that while advantageous to the private sector, universal zones do not adequately cover the diverse nature of local areas. There are concerns that standardisation of regulations may impact important environmental gains made over the years by some councils (Gurran, 2011). The replacement of tree preservation orders (which were well enforced by the Land and Environment Court) with an *optional* clause covering the preservation of trees and vegetation in the standard LEP (Kelly and Little, 2011) demonstrates an example of potential environmental policy loss resulting from this initiative.

#### **Code Complying Development**

In terms of area, Australian houses are the biggest in the world – led by the Sydney average of 263m<sup>2</sup> (Martin, 2009, 1). Kelly and Little (2011) suggest this trend is backed by the *NSW Housing Code (2008)* and accompanying *SEPP (Exempt and Complying Development Codes) 2008* which allow minimal setbacks (0.9m side and 3m rear setbacks) and 50% building coverage on sites of between 450 and 600m<sup>2</sup> (DOP, 2009, 2). They also note that driveways, pools, verandas and terraces are excluded from the building coverage calculation leaving minimal backyard space. Development on larger lots allows larger setbacks and landscaped areas however, small sized lots maximise returns and therefore characterise most new suburbs. Some local variations of setbacks and landscaped area are possible under the code.

Code complying development must satisfy development standards relating to height, density and setbacks. The introduction of complying development in 1997 to provide certainty and make approvals easier (DOP, 2008a) was the first significant change in the NSW planning system (Piracha, 2010). Until the 2008 *Codes SEPP*, complying development was determined and managed at the local level. It initially included single storey detached houses in some fringe suburbs but was confined to minor development such as balconies in more established suburbs. The code now allows new homes, residential alterations and additions, minor commercial and industrial development and strata subdivision in all council areas across the state to bypass council approval and merits based assessment except in environmentally sensitive sites, critical habitat and heritage conservation areas.

The EDO (2008a) claims the uniform code reduces the character of communities and ignores the variety of environmental profiles and social fabric in different localities. This is supported by comments in a survey of planners claiming the code diminishes local character and rather than helping ‘mum and dads’ is more about delivering easier approvals to the ‘big end of town’ (Ruming, 2011a, 52). The EDO argues the code is based on the mistaken premise that housing is minor development and has minimal or no impact on communities or the environment (NSW EDO, 2012B). As noted by Draper (2005) new estates have no neighbours and no objectors to neighbouring development. The impact of the *Codes SEPP* is to shut out community involvement in the majority of developments (EDO, 2008b). While subdivision still requires merit assessment and council consent, the houses on each lot can be delivered through this ‘tick the box’ system. Approval is automatic within 10 days (often by private certification) if the minimum design standards of the SEPP are met. Kelly and Little observe ‘the resultant sprawl is therefore advancing across far-flung suburbia. It is not only encouraged but expected’ (2011, 174). Although a BASIX certificate is also required the environmental outcomes of such development are questionable. The houses are characterised by their size, multiple garages, air conditioning, reduced eaves, minimal setbacks and landscaping and limited solar access for neighbours.

While Gurrán (2011) suggests the housing code promotes affordability by allowing granny flats and self contained units to be delivered efficiently, others argue the code should set higher environmental benchmarks. The EDO (2008a) suggests the NSW government has missed a significant opportunity to implement mandatory best practice environmentally sustainable housing standards through complying development. Suggestions for inclusion in the code in addition to the BASIX requirements include greater heating and cooling requirements through improved energy performance; mechanical or natural ventilation; indoor environmental quality (IEQ) measures; use of sustainable and recycled building materials; geothermal systems for heating and cooling (especially for larger lots) and sustainable landscape architecture standards (EDO, 2008a). A codes system that encompasses high environmental standards is an obvious way to deliver more sustainable development efficiently and quickly.

The 2008 changes led to an immediate expansion in exempt and complying development from 11% (McFarland, 2011, 417) to 17% of development in NSW (Gurrán, 2011, 158). The current target for complying development is 30-40% (NSW Government 2012b). Meanwhile developer lobby groups are calling for a ‘Queensland style’ system (where 80% of development, including tall buildings, is code based) in order to promote growth, which the Urban Taskforce claims should be the main driver of the NSW planning system (Grennan, 2012, 14).

## **Streamlining approvals and conflicts between state and local planning powers**

As previously noted, the *EP&A Act* has been frequently modified to facilitate economic growth and investment in the development sector. A significant example is the recently repealed Part 3A (Major Projects) 2005 amendment that allowed ‘major’ development to bypass established assessment processes, local plans and general policies that apply to other development.

### **Part 3A of the Act and the Major Projects SEPP (both now repealed)**

Part 3A gave the Planning Minister unfettered freedom to bypass planning controls and assessment criteria when assessing projects of major significance. Schedules in the *Major Projects SEPP* outlined development categories deemed to be major projects although projects could be gazetted at the Minister’s discretion. Part 3A projects could also be approved under a concept plan – without details or full assessment. This contravenes basic principles of environmental impact assessment that require timely decision making *after* consideration of all relevant information. Tailored assessment requirements for each project replaced the assessment criteria outlined elsewhere in the Act. Requirements to obtain consent under other Acts were downgraded or removed for major projects – ignoring the checks and balances provided by this legislation. Moreover, ‘essential’ projects like Sydney’s desalination plant, were declared ‘critical infrastructure’. Such projects required no approval, had streamlined assessment with minimal public involvement and no legal review rights.

Supporters of fast-tracking development such as Garner (2010) note streamlined approval is only appropriate for infrastructure projects that address key areas of shortage constraining state development and growth. Garner warns unstructured models with imprecisely defined criteria reduce transparency and allow a potentially wide number of projects to avoid prudent environmental controls.

While countless apartment buildings, shopping centres and residential developments were approved through Part 3A, Ruddock (2010) reports that by 2010 only six projects had been refused. Often controversial projects (like the Balmain Leagues Club redevelopment) not approved at the local level, were scaled up and resubmitted under Part 3A. Ruddock (2010, 2) notes the Minister removed prohibitions and facilitated approval of the rezoning of land near the historic Catherine Hill Bay village on the central coast, despite its low ranking for development capability (98th out of 99 sites in the Lower Hunter area). While subsequent court action saw this decision overruled, a 700 lot subdivision was eventually approved by the PAC in 2011 (Harris, 2011).

Gurran (2011) claims this ability to override existing controls through the wide discretionary powers of the Minister seriously threatened the NSW strategic policy framework. Others have noted Part 3A undermined the principles of genuine public participation, transparency, accountability, consistency of decision making and the comprehensive environmental assessment outlined under Parts 4 and 5 that were a feature of the EP&A Act (Ruddock, 2010, EDO, 2010a). Part 3A generated community outrage and was repealed after the change of state government in 2011.

### **Current approval of state significant development and infrastructure**

Two new categories, state significant development and state significant infrastructure replace the Part 3A major projects, although both Gurran (2011) and Farrier and Stein (2011) observe the new provisions largely resemble Part 3A. The Minister can still 'call in' certain development and staged approval (similar to Part 3A concept plans) is available for infrastructure applications. Exemption from most concurrence requirements continues – limiting the role of other government agencies to contribute to appropriate decision making. However the repeal of Part 3A introduces a narrower range of categories and criteria for state significance meaning residential, tourist and coastal development are no longer developments determined at state level. Also state significant development now comes back under Part 4 of the Act (and therefore the Section 79C assessment criteria) reinstating clearer constraints on the Minister's approval powers (EDO, 2011). However, critical infrastructure remains basically unchanged and continues to have a separate streamlined process. Importantly, consideration of relevant environmental planning instruments (EPIs) is reinstated although EPIs can be amended to allow spot rezoning. Approval powers for projects under Part 4 have been delegated to the PAC and Joint Regional Planning Panels (JRPPs) rather than the Minister to re-establish more transparency and overcome a perception of political interference in decision making.

### **The Affordable Housing SEPP**

*SEPP Affordable Rental Housing 2009* allows higher densities for low cost housing projects in any residential zone. Reductions in parking, open space and landscaping requirements provide more incentive for low cost housing to be supplied by the market. Environmental performance is replaced with the social benefit of providing housing for people on low incomes. The *SEPP Housing for Seniors or People with a Disability (2004)* ensures housing development for these groups is not prohibited in residential areas under local plans due to community reluctance towards such housing. However, the EDO (2010) suggests both SEPPs discourage low emission housing and the *Affordable Housing SEPP* has created controversy as many projects are perceived as an overdevelopment of the site, creating traffic and parking impacts and little or no public participation is provided for in the approval process. Incentives that ensure environmental standards are provided for all are preferable to incentives that reduce quality, amenity and design in affordable housing. As noted by Mackillop (2012) sustainable design and construction principles such as orientation, well designed eaves for shading and cooling, the provision of natural light and landscaping with native drought resistant species *promote* affordability by reducing the long term construction and operating costs of development.

## **PROPOSED CHANGES TO THE NSW PLANNING SYSTEM**

The new government came to power in 2011 with an agenda 'localise' planning powers, provide investment certainty and implement a new planning system. A Green Paper released in July 2012 outlines a proposal for a hierarchical framework including state policies; regional *growth* plans, subregional delivery plans and local landuse plans. A strong evidence based strategic planning focus including early community participation at the plan making stage (and little or no participation at the individual project assessment stage) is the cornerstone of the proposed system. Building types, height and densities will be determined early – providing developer certainty for approval once local and regional strategies are set (NSW EDO, 2012a). Other policy drivers include further streamlining of assessment and approval processes; maximising code complying development; infrastructure provision and a delivery culture promising 'development results' (NSW Government, 2012b). Intensive code based development is targeted for urban activation precincts (high growth precincts in accessible centres). A new agency, Urbangrowth NSW, will use broad acquisition powers to assemble large sites and fast track urban renewal to encourage private investment.

The government has also flagged a ‘rebalancing’ of the 70:30 ratio of infill versus greenfield development that characterised the consolidation focus of the (soon to be replaced) current metropolitan strategy. Rather than a revised ratio, the market is likely to dictate where new housing is located. Established annual targets include 25,000 new dwellings and 50,000 serviced lots (NSW Government, 2012a, 13). However there is little detail on overall building sustainability measures in the new planning system.

## **DISCUSSION: CURRENT AND FUTURE ISSUES IN NSW PLANNING LEGISLATION**

Planning laws will continue to change as governments use planning to achieve objectives primarily focussed on economic growth and investment (Thompson, 2007). The NSW planning reform focus on streamlining and simplification is in line with principles outlined by the Commonwealth Development Assessment Forum (DAF) and parallels reform directions in other states and countries such as the UK. However the UK reforms promote planning education, 75% infill development and more reasonable assessment times (8 weeks compared to 10 days in Australia) (Piracha, 2010). Moreover successive reforms in NSW have had a decreasing regard for the objectives of the legislation that frame the planning system (McFarland, 2011).

### **Planning, neoliberalism and the development industry**

It is widely noted that like the rest of Australia, planning in NSW and the succession of reforms are dominated by – and are the outcome of – what Piracha (2010, 240) describes as the ‘ascendance of the neoliberal economic order of the past two to three decades’ (also Gleeson and Low, 2000, McFarland, 2011 and Steele, 2012). The Green Paper reforms are based on the state plan *NSW 2021* (NSW Government, 2012) which has the stated aim of making NSW the number one place for business. McFarland (2011) notes the neoliberalist approach promoting reduced participation, limited controls and centralised power reflects a perception that development control and the involvement of a conservative public results in supply deficits of land and stifles economic growth opportunities. Piracha (2010) observes that fast tracking of development means NSW will rapidly spread horizontally (through sprawl) and vertically (through high rise buildings in urban centres) in a way reminiscent of the 1960-70s building boom when there were few development controls and the *EP&A Act* was eventually implemented for the protection of amenity, heritage and the environment. Moreover the centralisation of planning erodes the distinction between the development of policies of state and regional significance at state level and the delegation of local planning to local councils who have the greatest experience and knowledge of local environment, character and impacts (McFarland, 2011). This principle of subsidiarity is consistent with best practice planning (Gurran, 2011) and the original intent of the *EPA&A Act*.

The overriding influence of the development industry on the planning reform agenda has been widely reported (Piracha, 2010, Gurran, 2011, McFarland, 2011 and Steele, 2012) and the evolution of the planning system reflects continuing tensions between land development, urban growth and environmental and social sustainability (McFarland, 2011). Government motives for planning reform to encourage investment were evident in comments on the reforms to streamline major project assessment that ‘the competitiveness of NSW to attract sustainable infrastructure and investment opportunities depends on having an efficient and clear development regime’ (Knowles, 2005 cited by Gurran, 2011, 23). Recent reforms extending complying development have been criticised by both the private and public sector and are found to be most advantageous to applicants of large developments seeking to minimise the controls of local government (Ruming, 2011b). There are also concerns that the pace of planning reform results in oversights, greater complexity and decreased rather than increased efficiency (Piracha, 2010). The Urban Taskforce argues that Western Australia and Queensland have reformed their planning systems to emphasise code assessable development and include deemed refusals to be more attractive to investors, however it provides no comment on the resulting quality of built outcomes or level of community satisfaction (McFarland, 2011). Meanwhile in arguing for more codified development, the Property Council of Australia suggests ‘NSW use the planning system as a micro-economic lever and help reposition NSW in the race for capital’ (2012, 1).

### **Planning and housing delivery: some viewpoints**

Industry and supply side interests have historically also heavily influenced housing policy in Australia with solutions always concerned with increasing the supply of houses. Steele (2012, 179) notes that within Australia, property and development lobby groups work as a powerful coalition to reinforce the ‘meta narrative’ that microeconomic reform increases the speed of housing supply and reduces affordability pressures.

Mackillop (2012, 6) suggests there is a 'near panicky' attitude in Australian governments of having to supply housing 'to the masses' cheaply in terms of short term cost house and land packaging despite the social and environmental impacts of continued greenfield development. This is evident in current NSW government policy directions for rapid housing delivery.

Mant (1991) lists numerous demand side issues including immigration and high household formation rates, significant overinvestment in housing which crowds out lower income households and a notable underinvestment in supporting infrastructure especially in new areas. He points out that new housing in new fringe suburbs are a poor solution for low income residents given the lack of accessible services, jobs and transport. These issues are now well recognised however current government policy continues to be based on rapid housing delivery, not in strategic defined growth centres, but where the market dictates. Mant (2010) also criticises the subdivision approach to land development as inefficient in using land and providing good environmental design outcomes. He observes subdivisions result in uniform streetscapes as developers flatten land and clear vegetation to receive concrete slabs for project homes that are designed for maximum size and standard sites – regardless of orientation, neighbouring development or context. Code based development emphasises this impact and along with policies to increase densities, results in large houses on small lots with minimal setbacks and rapidly disappearing backyards. Mant's suggestion is to build first and subdivide later. This allows maximum tree retention and use of the land, restoration of backyards and buildings that fit the site and the environment. This approach is less attractive to developers given that generally buildings must be completed before cash flow is generated while lot sales after subdivision provide early returns. However the construct first method is used effectively in higher density, strata and community title development.

Steele (2021) notes the growth led planning reform of recent decades in Australia has done little to improve housing affordability or equity. She suggests an alternative to current housing policy and the neoliberal concern for speed and efficiency in delivery – in the form of a 'slow housing movement' to provide more socially just and environmentally sustainable outcomes. Such an approach supports diverse alternatives to standardised development including eco villages, co-operatives and collective housing. Community based locally driven strategies that promote sustainability equity and place-based development sensitive to the local economy, history, culture, environment and social infrastructure are involved. An example of this approach may be the *Localism Act 2011* in the UK which allows a 'Community Right to Build' and provides for a citizen led landuse plan by referendum (Stein, 2012). Allowing for such approaches within the system would be in line with the current NSW government mandate to localise planning.

### **Issues with house trends, energy use and sustainability**

Gray, Gleeson and Burke (2010) note energy use in housing is largely influenced by building size and design. They suggest a complex relationship exists between urban density and energy use with medium density development up to seven stories generally having lower embodied and operational emissions than housing of lower or higher densities. This reflects the increasing size of detached housing and larger energy loads of lifts, foyers, air-conditioning, pools, dryers, car parks and public areas associated with higher density, high rise buildings. By 2020 Australia is expected to have 10 million households (61% increase from 1990) with a total residential floor area of 1682m<sup>2</sup> (145% increase from 1990). Over the same timeframe the number of new households is projected to increase by 177%, however the expected average floor area of new dwellings will increase by 280% (Australian Government DCCEE, 2008). This longitudinal study indicates improvements in building shell efficiency driven by original initiatives in Victoria and the ACT and expanded under the Building Code of Australia in 2005 have been outpaced by the rate of increase in average floor area of houses. For example, the average floor area of new Australian houses (248m<sup>2</sup>) increased 9% from 2000-1 to 2008-9 (ABS, 2010) and new houses in NSW remain the largest (269.5m<sup>2</sup>) with an increase of just over 8% over this period. Additions and extensions to existing housing mean substantial increases in existing house sizes as well. Jowsey and Kellet (2012) suggest the increasing house size of Australian houses should be addressed through planning policy.

### **BASIX and the National Construction (Building) Code**

BASIX has increased awareness and provides minimum baseline standards for residential buildings in NSW but legislation needs to promote higher levels of achievement. Dwellings approved in recent years across Sydney suburbs demonstrating poor design and performance have all been assessed through BASIX. When it was implemented, BASIX overrode local council development regulations and in some cases resulted in a lower environmental performance in development. BASIX also pre-dated the changes to the Building Code so BASIX, rather than that aspect of the code applies to NSW. The discrepancy between housing in NSW (BASIX assessed with a required equivalent of 4 NatHERS stars and an average performance of just over 5 stars) and other states (assessed under the Building Code with a 6 star requirement) demonstrates an obvious need to update and continually review BASIX if it is to deliver buildings of an appropriate environmental standard across NSW.

The EDO (2012b) suggests that BASIX minimum standards be strengthened to reflect technological advances, its coverage be extended to commercial and industrial buildings, BASIX targets for multi-unit dwellings be raised and the prohibition on consent authorities (local councils) to impose more stringent water and energy use limits on development be removed. Gurran (2011) notes the scope of BASIX could be extended to include more construction and resource use considerations. The recognised need to update BASIX simplifies implementation of such measures and would promote the mainstreaming of urban sustainability – a critical part of achieving ESD and triple bottom line outcomes.

### **Complying (Code based) development**

The NSW codes system mandates minimum room and lot sizes, setbacks, building heights and defined materials to enable a fast-tracked development process with no impact assessment required. Ruming (2011a) suggests the standardisation reforms to date fail to recognise the geography of development, assume issues and solutions are consistent across diverse development sites and promote movement of developers across locations despite a potential failure of acknowledgement of local conditions. In a survey of private sector responses to the *Codes SEPP*, Ruming found development applicants view the SEPP as ‘of most benefit to large developers operating in greenfield locations where it becomes the new design guideline for large development companies’ (2011b, 265). The responses suggest the code works well for ‘lower order developments’ where there are standard blocks, but applicants seeking flexibility or outcomes beyond the minimum criteria find it limiting. In its comparison of council approved development controls in Rouse Hill (north west Sydney) and the (state wide) *Codes SEPP*, the Property Council notes ‘a proposal that complies with local controls which were designed specifically for the precinct could potentially be more meritorious than general state wide controls’ (PCA, 2012, 38). This argument is used to suggest that proposals that comply with site specific development control plans should, like (lesser standard) complying development, not require merit assessment.

However the Land and Environment Court recognises it is not always appropriate to allow development at the maximum standards allowed, for example on sites at the interface of different zones (such as residential and industrial zones) [*Appwam Pty Ltd v Ashfield Council (2011)*] NSWLEC 1001. Meanwhile the property industry campaigns for ‘turbo-charging’ complying development (PCA, 2012, 1). However Warnock (2007) suggests codification should ideally *follow* progressively increasing legislative rating requirements accompanied by fiscal incentives that further stimulate change. This assumes a long term strategy rather than instant reform – which is what sustainability requires. Interestingly, Stein (2012) reports that ‘as of use’ or complying development rights is a trend that is diminishing globally in favour of development control.

### **ESD as the overarching objective**

A single overarching objective for a new planning Act is proposed in the independent review of the NSW planning system prepared for the government:

“The object of this Act is to provide an ecologically, economically and socially sustainable framework for land use planning and for development proposal assessment and determination together with the necessary ancillary legislative provisions to support this framework.” (Moore and Dyer, 2012, 14)

In response, the Government’s Green Paper notes the achievement of *sustainable development* will be the main objective but simultaneously emphasises the planning system will ‘support the achievement of the NSW Government’s priority to drive economic growth’ NSW Government, 2012, 17). Stein (2012) recommends new legislation should provide a functional and detailed definition of *sustainability* as occurs in UK planning policy.

To ensure *ecologically* sustainable development (with its balanced consideration of social, economic and environmental concerns) underpins all decisions, ESD should be the overarching objective of new planning legislation. The EDO (2012b) argues the challenge is to *embed* the concept of ESD throughout the system. It suggests this could occur if the Act requires the objects, content and implementation of strategic plans to be consistent with ESD. In addition, a state planning policy on sustainability should require minimum standards of energy and water efficiency (in line with an updated BASIX); climate change mitigation and adaptation and outcomes measured against agreed ESD indicators and targets. Finally, all decisions, powers and functions under the legislation should be exercised to achieve ESD (NCC, EDO and TEC, 2012).

## **Public participation**

The Green paper proposes a public participation charter to set the standards of community participation, however participation is focussed at the strategic planning stage. The extension of complying development removes community consultation for a potentially large proportion of development applications in localities and as noted by NCC *et al* (2012) this is exacerbated by inadequate enforcement of breaches. Full participation includes appeal rights and in recent reforms, appeal rights for third party objectors have been eroded and are far less than developer rights of review particularly for state significant development and infrastructure. Equity in appeal rights is important to ensure public accountability in sound decision making, reduced corruption risks and community engagement (NCC *et al*, 2012). The *EPA&A Act* provides open standing for anyone to bring a court action for a breach of the legislation. This significant right should continue to apply in any future legislation (Moore and Dyer, 2012 and Stein, 2012). It notable that public participation is generally the only way concerns can be voiced for the protection of local flora and fauna (McFarland, 2011) and environmentally sensitive sites.

## **Streamlined assessment and fast tracked approval**

Interagency involvement in strategic planning and concurrence in development assessment is important for ensuring all relevant issues are considered. Moreover the planning system should foster natural resource management. Neither of these currently occur in state significant development due to exemptions from approval and permit requirements under other legislation (NCC *et al*, 2012). In addition, concept or in-principle approvals still apply for state infrastructure projects. Contrary to principles of quality environmental impact assessment (EIA), concept plans provide approval before full assessment. Environmental groups argue concept approvals are inappropriate in larger scale projects where the full impacts of development are unknown. Interestingly in a review of international best planning practice, Stein (2012) found only two countries where similar 'outline approvals' operate (Singapore and Scotland) and in both cases, in-principle approval does not give authorisation to develop without final approval (as occurred under Part 3A). The new NSW government has already implemented more streamlined assessment processes for development in riparian zones, bushfire prone land and Aboriginal heritage sites (NSW DPI, 2012).

## **Strategic assessment and biodiversity certification**

Prior strategic assessment of heritage significance and land capability including species and habitat (eg biodiversity certification) instead of species impact assessment at the development assessment stage can be valuable, particularly for consideration of the cumulative impacts of development. However resourcing issues currently render this impractical. Industry contribution to strategic assessment may overcome this. In any case, early assessment is unlikely to consider all potential developments that may occur on a site. Built and natural landscapes change over time, so ongoing review is necessary.

## **SUGGESTIONS FOR FUTURE LEGISLATION**

### **Links between legislation and rating tools**

Programs, incentives and initiatives can increase demand for green design and products. However, in Australia, improved built outcomes result from stronger links between legislation and assessment tools as shown by recent mandatory disclosure legislation and requirements under the building code. The Green Building Council suggests its new community assessment tool could provide a framework and benchmarks to inform the development of the new metropolitan planning strategy for Sydney. The *Green Star – Communities* tool assesses development projects for a range of issues including lot size and housing diversity; density mix (with increased density near centres); affordable and key worker housing; shared equity or social housing programs and plans for climate adaptation and disaster resilience (GBCA, 2012b). As NSW Landcom played a key role in the development of the tool, capitalisation of this investment of knowledge and resources is appropriate.

### **Environmental assessment and a 'maintain or improve' test**

Environmental groups have called for improved environmental impact assessment processes and objective decision making tools designed to meet prescribed environmental standards for biodiversity, native vegetation, catchment health and water quality, energy and water use, climate change and pollution in the development process. Consideration of the cumulative impacts of development, integration with other environmental and natural resource legislation, full recognition of the review role of the Land and Environment Court and regular review of planning legislation are further suggestions (NCC *et al*, 2012).

The EDO (2012b) also suggests a meaningful ‘maintain or improve’ test be applied to key developments, to provide transparency and accountability. Similar decision making tests are used in the *Native Vegetation Act, 2003* and in biodiversity certification. However the integrity of the process used in the certification of land in the Sydney growth centres is questionable. In that case, 1,867 ha of habitat for 28 threatened plant and animal species (including 12% of the remaining Cumberland Plain Woodland) was rezoned by the previous state government. This occurred after legislation was enacted to stop court action questioning the use of a comparison of ‘unconstrained development’ with development outlined in the plan in order to satisfy the ‘maintain or improve’ test (EDO, 2010b, 5). The use of the test this way sets a poor precedent for the application of such tests and for ongoing biodiversity certification in NSW.

### **Fast tracking ‘environmentally friendly’ development**

Fast tracking of development is difficult to justify given it bypasses public and relevant agency involvement. Piracha (2010) suggests where new technologies are involved or where the environmental, economic or social effects of development are not clearly understood, a slower pace of development is appropriate. However it is also worthwhile to question why mediocre development under complying codes encouraging large houses and wasted land (due to minimal setbacks) is fast tracked, when higher quality development designed for climate and site compatibility is not. Well-designed eco-friendly development could be promoted through fast track incentives (NCC *et al* 2012). In the meantime, approval processes for such development should be at least as easy as it is for other development.

### **Other measures: Education and incentives**

Mobbs (2010) observes that few tertiary programs for future building industry professionals teach students about rainwater tanks, solar panels or energy efficient design unless in a very general way. He suggests more information and training is needed to raise awareness and knowledge for citizens about living, renovating or building more sustainably. Mobbs argues the decisions of government (such as continued road construction and coal fired power station approvals) also have an impact on public perception and behaviour and are the main cause of environmental decline in our cities. One of main benefits of BASIX in NSW is that it has increased awareness of sustainability issues amongst the population. Other suggestions from Gray, Gleeson and Burke (2010) include building code requirements for visible meters providing ongoing energy information to households. This could be combined with price changes as consumption increases and financial incentives including linking use to reductions in rates or stamp duty or increased energy costs in general as triggers for necessary behaviour change and innovation.

### **The role of planning in promoting sustainable building outcomes**

There is a recognised need for both planning and non planning policy for effective progress towards reduced environmental impacts of development. Gray *et al* (2010) argue that planning must play a more deliberate role in the design of buildings and density in urban areas to better shape energy use. Their suggestions range from strategic consolidation around already established transit to the development of model projects and the use of energy assessments to ensure location, use and site suitability of developments. They suggest building codes could further institutionalise thermal efficiency, energy efficient design and standards for fixtures such as air-conditioners and hot water systems. Requirements for a mix of dwelling sizes, cycling, walking, car-parking and common use facilities in medium density developments are also suggested.

## **CONCLUSION**

In its overhaul of the NSW planning system, the current government should ensure this once in a generation opportunity to bring NSW planning legislation back in line with world’s best practice, is not lost. Some notable shortcomings of current system are apparent. There is a minimal focus on ESD as the legislation does not clearly articulate a full definition of ESD or indicate ways ESD should underpin strategic planning and decision-making. The need for more guidance for decision makers is apparent, starting with specific assessment criteria and how consideration of each aspect relates to ESD. Currently planning for climate change and the mitigation of greenhouse gas emissions is missing. Most importantly, for quality ESD outcomes, development should meet appropriately prescribed environmental standards rather than a low minimum baseline. While code based development is losing favour globally and is not recommended by environmental groups and others (eg Stein) if it is used, appropriate environmental performance standards must apply. This means the inclusion of different climate zones or areas (eg coastal, significant environmental sites) as already demonstrated in the Building Code and BASIX. Moreover, BASIX should be updated, strengthened and extended.

There is no accounting for cumulative impacts of development currently although properly implemented upfront strategic assessment could assist in this. Requirements to monitor sustainable outcomes are also needed, and are currently missing. Best practice planning systems have inbuilt specific indicators to measure policy performance, and periodic reviews of the fulfilment of the goals (Stein, 2012). The current NSW system has no such indicators and the NSW reform agenda has moved planning away from the objects and the original intent of the Act.

While encouraging public involvement at the strategic planning stage is a positive initiative, restricting further participation is problematic and removes important checks on compliance, relevance and design quality. This is particularly important in infill precincts undergoing redevelopment at high densities. Participation plays a crucial role in environmental protection, the retention of amenity and character and promoting accountability to ensure sound transparent decision making and public confidence in the planning system. Most importantly, participation in all stages of planning and development allows ownership of local projects and provides the best opportunities for education and awareness of environmentally responsive buildings and cities.

### **Legislation and strong planning policy**

The planning process can be simplified to create certainty for all stakeholders and still produce ecologically sustainable built outcomes. The current government focus on providing more resources for strategic planning is a good start. From past experience in NSW, the lessons are that legislation is only effective if applied consistently – without exceptions. As Stein (2012) notes, political influence and decision making outside the formal process must be absent. Regulation is also only meaningful if it *adds value* to the outcome. Sustainable results and relative certainty require performance criteria to be articulated clearly to ensure any new development meets agreed benchmarks and is a positive addition to landscape – and inappropriate development should be refused. Flexibility and expedited processing should be available for more *innovative* projects rather than developments satisfying minimal standards. In that way, innovation is more likely to become the standard approach.

Policy to date has been industry led and planning has assumed a passive role associated with regulating development initiated by the private sector. Policy reliance on rapid housing delivery on the city fringe with low up front costs but long term social, environmental and economic issues overlooks the evidence that sustainably designed infill housing can be both affordable and environmentally sound (MacKillop, 2012). Proactive management of urban change to increase the standard of built outcomes is required rather than what Gurrans calls reactive ‘tinkering around the edges of private development’ (2011, 8) to promote investment, development certainty and (often low quality) housing supply. As the urgency of the sustainability imperative increases, strong government policy is required to effect the well recognised changes required for buildings, city form and future communities. Planning regulation is the major tool to deliver the significant paradigm shift required.

### **Planning and ecologically sustainable development at the crossroads**

A decade ago, Gleeson and Low (2000) warned neoliberalism could result in the gradual demise of planning. Since then, rather than being abolished, landuse planning has been used as a tool to foster rapid economic growth and indirectly promote poor development outcomes by fast tracking *unsustainable* development. While tax regimes, financial incentives, consumption and other issues also affect building investment and outcomes, the influence of urban planning can be substantial. A narrow focus on growth and housing delivery with no evidence-based policy does nothing to increase sustainability in cities and buildings. Instead it creates massive future problems in equity, efficiency, affordability, liveability and the environment.

Moreover reduced public participation and agency involvement in development control means less checks and balances for increasing the sustainability of development, the protection of built and natural heritage and the best use of land and individual sites. While planning is currently being used to stimulate economic activity, it also delivers the landscapes that current and future generations share. If the new planning system in NSW is to promote more sustainable built outcomes, it should reflect this reality, and provide for the environmental, economic, social and geographical impacts of policy change. This means balancing public interest goals against private sector profit – which is the reason planning originally evolved a century ago.

## References

- Australian Bureau of Statistics (ABS) 2010. Average floor area of new residential dwellings – Feature Article. *8731.0 Building Approvals Australia*, February 2010.
- Australian Government Department of Infrastructure and Transport (DPI), Major Cities Unit. 2011. *State of Australian Cities 2011*, Commonwealth of Australia, Canberra.
- Australian Government Department of Climate Change and Energy Efficiency. 2008. *Energy use in the Australian Residential Sector 1986-2020: Executive Summary*. <http://www.climatechange.gov.au/what-you-need-to-know/buildings/publications/energy-use.aspx>
- Australian Property Institute (API) & Property Funds Association (PFA). 2010. *Building Better Returns: A Study of the Financial Performance of Green Office Building in Australia*. University of Western Sydney and University of Masstricht Netherlands <http://www.api.org.au/folder/news/building-better-returns-research-report>
- Bates, G. 2010. *Environmental Law in Australia* (7<sup>th</sup> ed) LexisNexis Butterworths, Sydney
- Bond, S. 2010. *Best of the Best in Green Design: Drivers and barriers to Sustainable Development in Australia*. 16<sup>th</sup> Pacific Rim Real Estate Society Conference, Sydney 24-27 January, 2010.
- Centre for International Economics (CIE) 2007 *The Buildings Sector and Greenhouse: Key Facts*. [www.TheCIE.com.au](http://www.TheCIE.com.au) [www.yourbuilding.org/library/carbonfootprint.pdf](http://www.yourbuilding.org/library/carbonfootprint.pdf)
- Chartered Institute of Purchasing and Supply (CIPS) 2011 *Guide to Sustainable Procurement* <http://www.ekobai.com/analysis/details/1> [date accessed 1/11/11]
- Council of Australian Governments (COAG) 2011 *National Partnership Agreement on Energy Efficiency: Annual Report to COAG 2010-11*.
- Dauskardt, R. 2007. Urban Governance: Setting the Scene. *The Urban F[actor]: Challenges Facing Sustainable Urban Development*. BTC 4<sup>th</sup> International Seminar Proceedings 18-19 December 2007 Belgian Technical Cooperation, Brussels
- Day, P. 1995. *Land: The elusive quest for social justice, Taxation reform and a sustainable planetary environment*. Brisbane. Australian Academic Press.
- Department of Environment and Conservation NSW. 2006. *State of Environment Report*. <http://www.environment.nsw.gov.au/soe/soe2006/index.htm>
- Department of Planning (DOP) (NSW) 2011. *Multi-Dwellings Summary: BASIX Building Sustainability Index*.
- Department of Planning (DOP) (NSW) 2010. *BASIX Water and Energy Monitoring Project – Electricity Consumption 2007-08 and 2008-09*.
- Department of Planning (DOP) (NSW). 2009. *Overview of the NSW Housing Code*.

Department of Planning (DOP) (NSW). 2008a. *NSW Housing Code: Guide to Complying development for detached Housing*. December.

Department of Planning (DOP) (NSW). 2008b. *Single Dwelling Outcomes: 05-08 - BASIX Building Sustainability Index Ongoing Monitoring Program*.

Department of Planning and Infrastructure (DPI) (NSW) 2012. *Review of Potential Housing Sites – Frequently Asked Questions*.

<http://www.planning.nsw.gov.au/HousingDelivery/HousingDeliveryOverview/ReviewofPotentialHousingSites/tabid/561/Default.aspx>

Dixon, L. 2009. *Dealing with Disclosure*. Property Council of Australia

<http://www.propertyoz.com.au/nsw/Article/NewsDetail>

Dovers, S. 2007. *Still settling Cities: Sustainability, Governance and Change*. Keynote address: State of Australian Cities Conference, Adelaide, 28 November to 1<sup>st</sup> December, 2007, pp 28-39.

Draper, M. 2005. *Planning Issues Update*. Australian Property Institute Seminar, 21 July 2005

Environmental Defenders Office (EDO) 2011. *Changes in Environmental Planning and Assessment Amendment (Part 3A Repeal) Bill 2011*.

Environmental Defenders Office (EDO) for the Nature Conservation Council of NSW and the Total Environment Centre. 2010a. *The state of planning in NSW: With reference to social and environmental impacts and public participation. Recommendations for Reform*.

Environmental Defenders Office (EDO) 2010b. *Submission on the proposed Sydney growth Centres strategic Assessment*, 25<sup>th</sup> June, 2012.

Environmental Defenders Office (EDO) 2008a. *Submission on the NSW Complying Development Planning Codes*, 4 July.

Environmental Defenders Office (EDO) 2008b. *Submission on the Discussion Paper: Improving the NSW Planning System*, 8 February.

Environmental Defenders Office (EDO) 2006. *Submission on Biobanking – A biodiversity Offsets and Banking Scheme*, March.

Farrier, D and Stein, P. 2011. *The Environmental law Handbook: Planning and Landuse in NSW* (5<sup>th</sup> Ed) Redfern Legal Centre Publishing.

Fisher, R; Coll, L; Pelly, L and Percy, J. 2008. *Surveying Sustainability: A Short Guide for the Property Professional*. The Appraisal journal, Winter 76: 1, pp 15-22

- Garner, G. 2010. Ramifications of development projects deemed 'state significant'. *Property Management*, 28:4 pp 212-227
- Gleeson, B and Low, N. 2000 *Australian urban planning: New challenges, new agendas*. Allen and Unwin, Sydney.
- Gray, R; Gleeson, B and Burke, M. 2010. Urban consolidation, household greenhouse emissions and the role of planning. *Practice Review*, 28: 3, pp 335-346
- Green Building Council Australia (GBCA) 2012a. *Evolution: A year in green building 2012*. Wingrove Design, Sydney.
- Green Building Council Australia (GBCA) 2012b. *Submission re: the Metropolitan Strategy for Sydney*, 5 July, 2012.
- Grennan, H. 2012. 'Taskforce seeks approval system based on codes'. *The Sydney Morning Herald*, 13 March, 2012, p 14.
- Gurran, N. 2011. *Australian Urban land use planning: Principles, systems and practice*. (2<sup>nd</sup> ed) Sydney University Press.
- Harris, M. 2011. Catherine Hill Bay housing approved. *Newcastle Herald* 18 May, 2012  
<http://www.theherald.com.au/story/470619/catherine-hill-bay-housing-approved/>
- HIA (Housing Industry Association) 2011. *Australia Housing to 2020: The State of Australian Housing to the year 2020*. <http://economics.hia.com.au>
- Higginson, S. 2008. *Are we there yet? Are we there yet? Are we there yet?* EPLA conference, Bangalow.
- Jowsey, E and Kellet, J. 2012. The contribution of housing to carbon emissions and the potential for reduction: An Australian and UK comparison. *18<sup>th</sup> Annual Pacific Rim Real Estate Society Conference, Adelaide, Australia*, 15-18 January, 2012.
- Knowles, C. 2005. *Second reading speech to NSW Legislative Assembly for Environmental Assessment Amendment (Infrastructure and other Planning Reform) Bill*, 27 May, 2005.
- Lowe, I. 2010. Foreward in Mobbs, M. *Sustainable House*, University of NSW Press, Sydney.
- MacKillop, F. 2012. Balancing the need for affordable housing with the challenges of sustainable development in South East Queensland and beyond. *18<sup>th</sup> Annual Pacific Rim Real Estate Society Conference, Adelaide, Australia*, 15-18 January, 2012.
- Mant, J. 1991. Housing – A problem of supply or demand? *Housing Tomorrow's children Seminar, Housing Industry Association (SA)*, Friday 22 February, 1991.
- Mant, J. 2010. *Australian cities: The things we don't talk about*. <http://johnmant.com/article/view/19/Urban-Strategic-Planning>

Martin, P. 2009. "Australia trumping even the US when it comes to McMansions", *Sydney Morning Herald*, 30 November, p 1. <http://www.smh.com.au/national/home-truths-australia-trumps-us-when-it-comes-to-mcmansions-20091129-jyva.html>

McFarland. 2011. The best planning system in Australia or a system in need of review? An analysis of the NSW planning system. *Planning Perspectives*, 26:3, 403-422.

Mobbs, M. 2010. *Sustainable House*, University of NSW Press, Sydney.

Moore, T and Dyer, R. 2012. *The Way Ahead for Planning in NSW: Recommendations for the NSW Planning System Review*. Volume 1 - Major Issues. Prepared for the NSW Government.

Nature Conservation Council (NCC), Environmental Defenders Office (EDO) and Total Environment Centre (TEC) 2012. *Planning for Ecologically Sustainable development: Submission on the NSW Planning System Review Issues paper*, March, 2012

NSW DPI (Department of Planning and Infrastructure). 2012. *Planning Circular 12-003. Initiatives to improve housing supply*, 6 June.

NSW EDO (Environmental Defenders Office). 2012a. *Preliminary Briefing Note – Key issues summary – NSW Government Planning Review Green Paper*, July 2012

NSW EDO (Environmental Defenders Office). 2012b. *Submission on: A New Planning Sydney for NSW – Green Paper*, September, 2012

NSW Government, 2012a. *Sydney over the next 20 years: A discussion paper*. May 2012.

NSW Government. 2012b. *A new planning system for NSW – Green Paper*, July 2012, Sydney.

Perinotto, T. 2012. 'GBCA is 10 years old and successful – What's next?' *The Fifth Estate*. [www.thefifthestate.com.au/archives/31450](http://www.thefifthestate.com.au/archives/31450)

Piracha, A. 2010. The NSW (Australia) planning reforms and their implications for planning, education and natural and built environment. *Local Economy*, 25 pp 240-250. <http://lec.sagepub.com/>

Preston, B. 2009. *Climate Change Litigation in the Land and Environment Court of NSW and other courts*. Australasian Conference of Planning and Environment Courts and Tribunals (ACPECT) Conference 19-21 August, 2009 Environment Court, Christchurch, New Zealand.

Property Council of Australia (PCA) 2011. *Priority 1# - Deliver Economic Development: Submission to the co-chairs of the NSW planning system review*, November 2011.

Property Council of Australia (PCA) 2009. *Mandatory disclosure scheme gets green light*. <http://www.propertyoz.com.au/nsw/Article/NewsDetail>

- Quinn, M. 2012. Australian house prices 'blatantly unfair'. *Australia and New Zealand Property Journal*, 3: 6 pp 398-399.
- Royal Institution of Chartered Surveyors (RICS). 2011. *Sustainability and the valuation of commercial property (Australia)*, RICS Oceania, Sydney.
- Ruming, K. 2011a. Cutting red tape of cutting local capacity? Responses by local government planners to NSW planning changes. *Australian Planner* 48: 1, 46-57
- Ruming, K. 2011b. Creating Australia's best planning system? Private sector responses to NSW planning changes. *Australian Planner* 48: 4, pp 257-269
- Ruddock, K. 2010. Why major projects legislation is bad for the environment and public participation – the NSW experience. *The Australian Environment Review* 25: 9-10, pp 5-10.
- Sperling, K. 1997. Beyond Development Control: Creating a Planning Framework for sustainability. *Australian Environmental Law News*, 3, pp26-31
- Steele, W. 2012. Do we need a 'Slow Housing Movement?' *Housing, Theory and Society*, 29: 2, 172-189
- Stein, L. 2012. *A Review of International Best Practice in Planning Law*. Prepared for the NSW Department of Planning, 24 May, 2012.
- Stein, P. 2000. 'Are Decision Makers too Cautious with the Precautionary Principle?' *Environmental and Planning Law Journal* 17:3.
- Thompson, S. 2007. (ed) *Planning Australia: An overview of urban and regional planning*. Cambridge University Press, Melbourne.
- Vale, B and R. 1991. 'Principles of Green Architecture' from *Green Architecture: Design for an energy conscious future*, Boston, Little Brown in Wheeler, M and Beatley, T (eds) 2004. *The Sustainable Urban Development Reader* (2<sup>nd</sup> Ed) Routledge, London and New York. pp 262-266
- Warnock, A. C. 2007. An Overview of integrating instruments to achieve sustainable construction and buildings. *Management of Environmental Quality: An International Journal* 18: 4, pp 427-441.
- Wilkinson, S; James, K and Reed, R. 2009. Using building adaption to deliver sustainability in Australia. *Structural Survey*, 27:1, pp 46-61